

TABLE 1

THE COEFFICIENTS OF THE BASIS

$$\begin{aligned}
C_1 := & \frac{18\,417\,424\,215\,502}{38\,127\,987\,424\,935} k_1 - \frac{28\,334\,498\,573\,896}{114\,383\,962\,274\,805} k_0 - \frac{107\,671\,096\,184\,192}{114\,383\,962\,274\,805} k_2 \\
& - \frac{209\,675\,293\,954\,496}{114\,383\,962\,274\,805} k_3 - \frac{45\,335\,198\,968\,832}{12\,709\,329\,141\,645} k_4 + \frac{793\,365\,986\,394\,688}{114\,383\,962\,274\,805} k_5 \\
& - \frac{1541\,396\,781\,480\,064}{114\,383\,962\,274\,805} k_6 + \frac{997\,374\,392\,702\,336}{38\,127\,987\,424\,935} k_7 \\
& - \frac{1160\,581\,116\,485\,632}{11\,243\,129\,609\,856\,512} k_8 - \frac{7253\,632\,032\,075\,776}{114\,383\,962\,274\,805} k_9 - \frac{38\,127\,987\,424\,935}{81\,240\,679\,255\,343\,104} k_{10} \\
& + \frac{42071\,065\,921\,073\,152}{114\,383\,962\,274\,805} k_{11} - \frac{5802\,905\,676\,218\,368}{4236\,443\,047\,215} k_{13} - \frac{114\,383\,962\,274\,805}{116\,058\,114\,037\,743\,616} k_{12} \\
& - \frac{301\,751\,095\,868\,358\,656}{114\,383\,962\,274\,805} k_{14} + \frac{22\,876\,792\,454\,961}{2135\,469\,305\,775\,652\,864} k_{15} \\
& - \frac{371\,385\,965\,610\,532\,864}{38\,127\,987\,424\,935} k_{16} + \frac{114\,383\,962\,274\,805}{2599\,701\,770\,647\,109\,632} k_{17} \\
& - \frac{4085\,245\,634\,374\,795\,264}{114\,383\,962\,274\,805} k_{18} + \frac{38\,127\,987\,424\,935}{5645\,066\,713\,755\,025\,408} k_{19} \\
& - \frac{14\,855\,438\,705\,987\,944\,448}{114\,383\,962\,274\,805} k_{20} + \frac{22\,876\,792\,454\,961}{101\,016\,983\,456\,639\,352\,832} k_{21} \\
& - \frac{1188\,435\,098\,630\,881\,280}{2541\,865\,828\,329} k_{22} + \frac{114\,383\,962\,274\,805}{118\,843\,510\,084\,950\,032\,384} k_{23} \\
& - \frac{38\,029\,923\,207\,190\,937\,600}{22\,876\,792\,454\,961} k_{24} + \frac{38\,127\,987\,424\,935}{1235\,972\,505\,893\,039\,243\,264} k_{25} \\
& - \frac{665\,523\,656\,771\,294\,461\,952}{114\,383\,962\,274\,805} k_{26} + \frac{114\,383\,962\,274\,805}{4183\,291\,560\,781\,252\,919\,296} k_{27} \\
& - \frac{760\,598\,465\,401\,170\,427\,904}{38\,127\,987\,424\,935} k_{28} + \frac{114\,383\,962\,274\,805}{1521\,196\,931\,775\,150\,948\,352} k_{29} \\
& - \frac{7605\,984\,657\,570\,084\,683\,776}{114\,383\,962\,274\,805} k_{30} + \frac{12\,709\,329\,141\,645}{8518\,702\,820\,057\,405\,194\,240} k_{31} \\
& - \frac{24\,339\,150\,911\,769\,669\,533\,696}{114\,383\,962\,274\,805} k_{32} + \frac{22\,876\,792\,454\,961}{121\,695\,754\,590\,699\,825\,135\,616} k_{33} \\
& - \frac{24\,339\,150\,916\,545\,673\,166\,848}{38\,127\,987\,424\,935} k_{34} + \frac{114\,383\,962\,274\,805}{97\,356\,603\,680\,201\,465\,921\,536} k_{35} \\
& - \frac{194\,713\,207\,354\,355\,617\,890\,304}{114\,383\,962\,274\,805} k_{36} + \frac{38\,127\,987\,424\,935}{389\,426\,414\,726\,853\,177\,638\,912} k_{37} \\
& - \frac{389\,426\,414\,726\,853\,177\,638\,912}{114\,383\,962\,274\,805} k_{38} + \frac{38\,127\,987\,424\,935}{114\,383\,962\,274\,805} k_{39}, \\
\\
C_2 := & \frac{3421\,696\,150\,439\,201\,408\,807\,116\,377\,861\,659\,048\,899\,694\,096}{26\,346\,340\,452\,266\,547\,090\,021\,365\,976\,060\,757\,579\,035} k_0 \\
& - \frac{8289\,836\,637\,201\,121\,493\,572\,738\,437\,465\,679\,522\,715\,636\,696}{32\,733\,332\,077\,058\,437\,293\,662\,909\,242\,984\,577\,598\,195} k_1 \\
& + \frac{533\,100\,267\,403\,058\,105\,481\,908\,968\,201\,105\,804\,200\,659\,335\,652}{1080\,199\,958\,542\,928\,430\,690\,876\,005\,018\,491\,060\,740\,435} k_2 \\
& - \frac{94\,376\,602\,979\,574\,504\,616\,313\,373\,219\,835\,757\,653\,111\,682\,584}{98\,199\,996\,231\,175\,311\,880\,988\,727\,728\,953\,732\,794\,585} k_3 \\
& + \frac{224\,463\,273\,313\,412\,152\,062\,519\,920\,376\,760\,356\,140\,541\,757\,712}{120\,022\,217\,615\,880\,936\,743\,430\,667\,224\,276\,784\,526\,715} k_4 \\
& - \frac{3928\,107\,304\,948\,954\,464\,388\,142\,155\,823\,725\,302\,598\,118\,351\,584}{1080\,199\,958\,542\,928\,430\,690\,876\,005\,018\,491\,060\,740\,435} k_5 \\
& + \frac{7631\,751\,374\,499\,544\,200\,992\,733\,037\,700\,550\,926\,225\,830\,054\,336}{1080\,199\,958\,542\,928\,430\,690\,876\,005\,018\,491\,060\,740\,435} k_6 \\
& - \frac{4938\,192\,089\,051\,423\,780\,965\,490\,003\,926\,869\,468\,864\,346\,904\,576}{360\,066\,652\,847\,642\,810\,230\,292\,001\,672\,830\,353\,580\,145} k_7 \\
& + \frac{28\,731\,299\,550\,427\,612\,103\,558\,338\,566\,162\,468\,811\,313\,959\,057\,664}{1080\,199\,958\,542\,928\,430\,690\,876\,005\,018\,491\,060\,740\,435} k_8 \\
& - \frac{11\,133\,378\,619\,263\,833\,302\,287\,287\,888\,190\,080\,563\,644\,493\,589\,504}{216\,039\,991\,708\,585\,686\,138\,175\,201\,003\,698\,212\,148\,087} k_9 \\
& + \frac{35\,914\,124\,705\,598\,787\,651\,039\,181\,967\,936\,666\,813\,766\,558\,708\,736}{360\,066\,652\,847\,642\,810\,230\,292\,001\,672\,830\,353\,580\,145} k_{10} \\
& - \frac{18\,936\,538\,541\,913\,653\,938\,620\,800\,000\,177\,697\,992\,390\,791\,938\,528}{98\,199\,996\,231\,175\,311\,880\,988\,727\,728\,953\,732\,794\,585} k_{11} \\
& + \frac{402\,238}{1080\,199\,958\,542\,928\,430\,690\,876\,005\,018\,491\,060\,740\,435} k_{12} \\
& - \frac{2611\,936\,364\,981\,826\,047\,865\,914\,008\,486\,678\,347\,126\,679\,023\,616}{3637\,036\,887\,450\,937\,477\,073\,656\,582\,553\,841\,955\,355} k_{13} \\
& + \frac{1494\,027\,604\,260\,212\,231\,878\,941\,724\,178\,547\,747\,007\,274\,304\,984\,576}{1080\,199\,958\,542\,928\,430\,690\,876\,005\,018\,491\,060\,740\,435} k_{14} \\
& - \frac{2873\,130\,141\,891\,130\,554\,167\,207\,564\,2016\,941\,127\,859\,933\,710\,067\,712}{1080\,199\,958\,542\,928\,430\,690\,876\,005\,018\,491\,060\,740\,435} k_{15} \\
& + \frac{1838\,803\,212\,496\,144\,519\,728\,397\,390\,841\,755\,200\,075\,463\,688\,961\,792}{360\,066\,652\,847\,642\,810\,230\,292\,001\,672\,830\,353\,580\,145} k_{16} \\
& - \frac{10\,573\,118\,489\,256\,710\,916\,425\,648\,930\,299\,878\,183\,578\,790\,781\,845\,504}{1080\,199\,958\,542\,928\,430\,690\,876\,005\,018\,491\,060\,740\,435} k_{17} \\
& + \frac{4045\,367\,080\,026\,880\,189\,620\,290\,037\,143\,248\,392\,957\,677\,169\,526\,784}{216\,039\,991\,708\,585\,686\,138\,175\,201\,003\,698\,212\,148\,087} k_{18} \\
& - \frac{313\,942\,013\,263\,043\,837\,890\,973\,095\,285\,452\,403\,908\,453\,744\,215\,168}{8782\,113\,484\,088\,849\,030\,007\,121\,992\,020\,252\,526\,345} k_{19} \\
& + \frac{1793\,954\,363\,504\,824\,977\,088\,315\,566\,945\,075\,036\,342\,488\,307\,134\,464}{26\,346\,340\,452\,266\,547\,090\,021\,365\,976\,060\,757\,579\,035} k_{20}
\end{aligned}$$

$$\begin{aligned}
& -2540\,891\,728\,230\,523\,359\,904\,644\,862\,807\,736\,060\,543\,233\,427\,247\,104\,k_{21} \\
& + \frac{19\,639\,999\,246\,235\,062\,376\,197\,745\,545\,790\,746\,558\,917}{29\,420\,851\,614\,750\,136\,026\,863\,927\,240\,991\,515\,587\,615\,450\,617\,493\,504}\,k_{22} \\
& -45\,468\,588\,892\,023\,712\,890\,427\,154\,897\,502\,922\,917\,582\,881\,120\,786\,432\,k_{23} \\
& + \frac{98\,199\,996\,231\,175\,311\,880\,988\,727\,728\,953\,732\,794\,585}{941\,467\,252\,934\,626\,054\,591\,745\,946\,989\,922\,315\,023\,998\,825\,643\,966\,464}\,k_{24} \\
& -588\,417\,033\,393\,483\,601\,044\,237\,098\,546\,528\,038\,390\,159\,329\,582\,620\,672\,k_{25} \\
& + \frac{360\,066\,652\,847\,642\,810\,230\,292\,001\,672\,830\,353\,580\,145}{659\,027\,077\,693\,390\,634\,385\,832\,976\,464\,510\,382\,015\,920\,656\,291\,555\,328}\,k_{26} \\
& -6119\,537\,152\,290\,749\,406\,696\,660\,719\,857\,862\,788\,392\,017\,058\,642\,753\,536\,k_{27} \\
& + \frac{1080\,199\,958\,542\,928\,430\,690\,876\,005\,018\,491\,060\,740\,435}{753\,173\,803\,592\,778\,749\,128\,928\,831\,672\,430\,468\,864\,211\,518\,322\,339\,840}\,k_{28} \\
& -20\,712\,279\,604\,123\,033\,804\,978\,011\,195\,284\,469\,813\,481\,450\,090\,727\,821\,312\,k_{29} \\
& + \frac{1080\,199\,958\,542\,928\,430\,690\,876\,005\,018\,491\,060\,740\,435}{37\,658\,690\,197\,257\,161\,959\,775\,297\,376\,592\,346\,654\,476\,497\,792\,067\,704\,832}\,k_{30} \\
& -684\,703\,458\,249\,487\,001\,320\,805\,230\,307\,861\,906\,034\,061\,089\,579\,137\,024\,k_{31} \\
& + \frac{10\,911\,110\,692\,352\,812\,431\,220\,969\,747\,661\,525\,866\,065}{24\,101\,561\,733\,716\,326\,999\,445\,819\,531\,888\,519\,571\,954\,649\,005\,564\,731\,392}\,k_{32} \\
& -19\,171\,696\,835\,749\,042\,541\,201\,795\,263\,255\,676\,935\,784\,300\,145\,970\,069\,504\,k_{33} \\
& + \frac{98\,199\,996\,231\,175\,311\,880\,988\,727\,728\,953\,732\,794\,585}{24\,101\,561\,738\,445\,709\,171\,492\,070\,164\,292\,613\,961\,212\,772\,611\,881\,228\,288}\,k_{34} \\
& -120\,507\,808\,700\,122\,190\,921\,595\,093\,582\,726\,033\,447\,027\,457\,389\,657\,798\,656\,k_{35} \\
& + \frac{216\,039\,991\,708\,585\,686\,138\,175\,201\,003\,698\,212\,148\,087}{964\,062\,469\,646\,706\,229\,813\,265\,449\,173\,832\,781\,498\,613\,216\,879\,842\,824\,192}\,k_{36} \\
& -482\,031\,234\,838\,323\,821\,062\,750\,329\,869\,389\,184\,446\,856\,441\,464\,719\,290\,368\,k_{37} \\
& + \frac{360\,066\,652\,847\,642\,810\,230\,292\,001\,672\,830\,353\,580\,145}{385\,624\,987\,647\,339\,312\,647\,300\,132\,229\,956\,712\,565\,970\,924\,064\,317\,440}\,k_{38} \\
& -47\,027\,437\,545\,932\,602\,355\,200\,886\,496\,046\,218\,594\,189\,536\,938\,312\,941\,568\,k_{39} \\
& - \frac{26\,346\,340\,452\,266\,547\,090\,021\,365\,976\,060\,757\,579\,035}{186\,843\,385\,451\,879\,640\,891\,392}\,k_{40}, \\
& -204\,013\,529\,487\,852\,257\,783\,052\,093\,375\,945\,k_{40}, \\
C_3 := & \frac{40}{19\,683}\,k_0 - \frac{26}{6561}\,k_1 + \frac{152}{19\,683}\,k_2 - \frac{296}{19\,683}\,k_3 + \frac{64}{2187}\,k_4 - \frac{1120}{19\,683}\,k_5 \\
& + \frac{2176}{19\,683}\,k_6 - \frac{1408}{6561}\,k_7 + \frac{8192}{19\,683}\,k_8 - \frac{15\,872}{19\,683}\,k_9 + \frac{10\,240}{6561}\,k_{10} - \frac{59\,392}{19\,683}\,k_{11} \\
& + \frac{114\,688}{19\,683}\,k_{12} - \frac{8192}{729}\,k_{13} + \frac{425\,984}{19\,683}\,k_{14} - \frac{20\,971\,520}{19\,683}\,k_{20} + \frac{819\,200}{19\,683}\,k_{15} \\
& + \frac{524\,288}{6561}\,k_{16} - \frac{3014\,656}{19\,683}\,k_{17} + \frac{5767\,168}{19\,683}\,k_{18} - \frac{3670\,016}{6561}\,k_{19} - \frac{39\,845\,888}{19\,683}\,k_{21} \\
& + \frac{8388\,608}{6561}\,k_{22} - \frac{142\,606\,336}{19\,683}\,k_{23} + \frac{268\,435\,456}{19\,683}\,k_{24} - \frac{167\,772\,160}{6561}\,k_{25} + \\
& + \frac{10\,737\,418\,240}{19\,683}\,k_{30} + \frac{939\,524\,096}{19\,683}\,k_{26} - \frac{1744\,830\,464}{19\,683}\,k_{27} + \frac{6561}{1073\,741\,824}\,k_{28} \\
& - \frac{5905\,580\,032}{19\,683}\,k_{29} - \frac{2147\,483\,648}{19\,683}\,k_{31} + \frac{34\,359\,738\,368}{19\,683}\,k_{32} - \frac{60\,129\,542\,144}{19\,683}\,k_{33} \\
& + \frac{34\,359\,738\,368}{19\,683}\,k_{34} - \frac{2187}{171\,798\,691\,840}\,k_{35} + \frac{19\,683}{274\,877\,906\,944}\,k_{36} \\
& - \frac{137\,438\,953\,472}{6561}\,k_{37} + \frac{549\,755\,813\,888}{19\,683}\,k_{38} - \frac{549\,755\,813\,888}{19\,683}\,k_{39}, \\
C_4 := & -\frac{112\,915\,757\,594\,739\,247\,238\,635\,895\,961\,229\,597\,234\,348\,163\,072}{869\,429\,234\,924\,796\,053\,970\,705\,077\,210\,005\,000\,108\,155}\,k_0 \\
& + \frac{273\,564\,087\,245\,507\,109\,090\,323\,158\,906\,654\,931\,593\,887\,481\,856}{1080\,199\,958\,542\,928\,430\,690\,876\,005\,018\,491\,060\,740\,435}\,k_1 \\
& -17\,592\,275\,269\,697\,513\,422\,240\,086\,796\,796\,924\,838\,284\,984\,582\,144\,k_2 \\
& + \frac{35\,646\,598\,631\,916\,638\,212\,798\,908\,165\,610\,205\,004\,434\,355}{3114\,421\,958\,037\,397\,498\,152\,147\,211\,954\,765\,936\,879\,515\,385\,856}\,k_3 \\
& -7407\,273\,891\,088\,767\,068\,088\,423\,370\,272\,104\,488\,795\,419\,705\,344\,k_4 \\
& + \frac{3960\,733\,481\,324\,070\,941\,533\,212\,018\,401\,333\,889\,281\,595}{129\,627\,293\,318\,873\,022\,734\,577\,432\,713\,987\,822\,366\,716\,682\,010\,624}\,k_5 \\
& -251\,847\,314\,997\,852\,280\,408\,724\,901\,800\,190\,452\,072\,416\,515\,457\,024\,k_6 \\
& + \frac{35\,646\,598\,631\,916\,638\,212\,798\,908\,165\,610\,205\,004\,434\,355}{5256\,775\,100\,551\,933\,319\,644\,593\,774\,179\,636\,222\,684\,888\,363\,712}\,k_7 \\
& -948\,131\,076\,747\,597\,648\,358\,568\,668\,876\,126\,637\,227\,859\,917\,181\,952\,k_8 \\
& + \frac{35\,646\,598\,631\,916\,638\,212\,798\,908\,165\,610\,205\,004\,434\,355}{1837\,003\,983\,371\,527\,721\,006\,858\,998\,165\,610\,205\,004\,434\,355}\,k_9 \\
& -1185\,163\,876\,764\,101\,790\,720\,129\,536\,520\,113\,119\,936\,275\,891\,810\,432\,k_{10} \\
& + \frac{11\,882\,190\,543\,972\,212\,737\,599\,636\,055\,203\,401\,668\,144\,785}{624\,904\,579\,972\,334\,202\,783\,730\,310\,628\,993\,090\,866\,681\,439\,671\,552}\,k_{11} \\
& -13\,273\,835\,254\,414\,298\,661\,446\,051\,402\,761\,973\,471\,323\,722\,394\,640\,128\,k_{12} \\
& + \frac{35\,646\,598\,631\,916\,638\,212\,798\,908\,165\,610\,205\,004\,434\,355}{17\,238\,744\,128\,579\,284\,594\,592\,005\,490\,999\,266\,280\,035\,056\,615\,424}\,k_{13} \\
& - \frac{24\,004\,443\,523\,176\,187\,348\,686\,133\,444\,855\,356\,905\,343}{49\,302\,816\,902\,926\,589\,764\,152\,755\,013\,911\,368\,603\,349\,739\,458\,527\,232}\,k_{14} \\
& - \frac{35\,646\,598\,631\,916\,638\,212\,798\,908\,165\,610\,205\,004\,434\,355}{35\,646\,598\,631\,916\,638\,212\,798\,908\,165\,610\,205\,004\,434\,355}\,k_{14}
\end{aligned}$$

$$\begin{aligned}
& + \frac{94\,813\,109\,626\,586\,289\,098\,470\,401\,061\,705\,507\,266\,792\,009\,573\,072\,896}{35\,646\,598\,631\,916\,638\,212\,798\,908\,165\,610\,205\,004\,434\,355} k_{15} \\
& - \frac{60\,680\,390\,273\,713\,341\,997\,337\,915\,888\,354\,153\,154\,727\,353\,077\,727\,232}{11\,882\,199\,543\,972\,212\,737\,599\,636\,055\,203\,401\,668\,144\,785} k_{16} \\
& + \frac{11\,255\,233\,698\,328\,343\,835\,277\,202\,501\,163\,992\,119\,453\,782\,463\,479\,808}{1149\,890\,278\,448\,923\,813\,316\,093\,811\,793\,877\,580\,788\,205} k_{17} \\
& - \frac{667\,484\,295\,079\,177\,588\,177\,430\,462\,060\,856\,455\,322\,097\,547\,367\,940\,096}{35\,646\,598\,631\,916\,638\,212\,798\,908\,165\,610\,205\,004\,434\,355} k_{18} \\
& + \frac{10\,360\,066\,677\,421\,433\,624\,807\,764\,248\,833\,725\,365\,656\,699\,332\,984\,832}{289\,809\,744\,974\,932\,017\,990\,235\,025\,736\,668\,333\,369\,385} k_{19} \\
& - \frac{59\,200\,381\,079\,893\,309\,534\,559\,334\,491\,029\,855\,679\,355\,502\,779\,695\,104}{869\,429\,234\,924\,796\,053\,970\,705\,077\,210\,005\,000\,108\,155} k_{20} \\
& + \frac{83\,849\,267\,101\,822\,301\,891\,135\,132\,366\,978\,948\,023\,288\,539\,426\,848\,768}{648\,119\,975\,125\,757\,058\,414\,525\,603\,011\,094\,636\,444\,261} k_{21} \\
& - \frac{970\,886\,251\,468\,190\,134\,626\,244\,061\,738\,047\,519\,172\,145\,550\,031\,060\,992}{3960\,733\,181\,324\,070\,912\,533\,212\,018\,401\,133\,889\,381\,595} k_{22} \\
& + \frac{1500\,460\,571\,535\,362\,818\,395\,202\,067\,889\,627\,318\,565\,048\,221\,726\,408\,704}{3240\,599\,875\,628\,785\,292\,072\,628\,015\,055\,473\,182\,221\,305} k_{23} \\
& - \frac{31\,068\,360\,088\,648\,520\,991\,942\,906\,532\,066\,437\,224\,690\,173\,649\,681\,907\,712}{35\,646\,598\,631\,916\,638\,212\,798\,908\,165\,610\,205\,004\,434\,355} k_{24} \\
& + \frac{19\,417\,725\,065\,613\,602\,607\,549\,333\,230\,201\,079\,439\,745\,466\,872\,540\,168\,192}{11\,882\,199\,543\,972\,212\,737\,599\,636\,055\,203\,401\,668\,144\,785} k_{25} \\
& - \frac{108\,739\,260\,415\,729\,767\,689\,524\,592\,714\,782\,209\,004\,868\,052\,526\,341\,029\,888}{35\,646\,598\,631\,916\,638\,212\,798\,908\,165\,610\,205\,004\,434\,355} k_{26} \\
& + \frac{6514\,333\,575\,720\,397\,130\,324\,272\,524\,388\,421\,008\,713\,757\,940\,796\,882\,944}{1149\,890\,278\,448\,923\,813\,316\,093\,811\,793\,877\,580\,788\,205} k_{27} \\
& - \frac{124\,273\,440\,560\,031\,546\,524\,088\,306\,807\,591\,823\,252\,876\,905\,414\,505\,005\,056}{11\,882\,199\,543\,972\,212\,737\,599\,636\,055\,203\,401\,668\,144\,785} k_{28} \\
& + \frac{136\,700\,784\,651\,157\,314\,331\,017\,436\,685\,262\,249\,817\,407\,060\,566\,403\,448\,832}{7129\,319\,726\,383\,327\,642\,559\,781\,633\,122\,041\,000\,886\,871} k_{29} \\
& - \frac{248\,546\,881\,236\,343\,152\,982\,319\,370\,036\,247\,723\,971\,413\,870\,553\,765\,773\,312}{7129\,319\,726\,383\,327\,642\,559\,781\,633\,122\,041\,000\,886\,871} k_{30} \\
& + \frac{4519\,034\,205\,072\,901\,529\,945\,344\,475\,900\,279\,124\,362\,027\,971\,281\,682\,432}{72\,013\,330\,569\,528\,562\,046\,058\,400\,334\,566\,070\,716\,029} k_{31} \\
& - \frac{3976\,750\,101\,014\,325\,748\,210\,460\,177\,217\,693\,157\,303\,369\,117\,540\,573\,773\,824}{35\,646\,598\,631\,916\,638\,212\,798\,908\,165\,610\,205\,004\,434\,355} k_{32} \\
& + \frac{632\,664\,788\,867\,398\,329\,008\,640\,562\,837\,257\,303\,772\,450\,362\,481\,995\,415\,552}{3240\,599\,875\,628\,785\,292\,072\,628\,015\,055\,473\,182\,221\,305} k_{33} \\
& - \frac{3976\,750\,101\,794\,672\,318\,184\,358\,955\,048\,763\,054\,139\,787\,820\,182\,768\,975\,872}{11\,882\,199\,543\,972\,212\,737\,599\,636\,055\,203\,401\,668\,144\,785} k_{34} \\
& + \frac{19\,883\,750\,510\,275\,810\,542\,202\,340\,003\,662\,405\,301\,600\,436\,856\,696\,622\,546\,944}{35\,646\,598\,631\,916\,638\,212\,798\,908\,165\,610\,205\,004\,434\,355} k_{35} \\
& - \frac{31\,814\,000\,817\,950\,341\,169\,604\,409\,595\,375\,363\,675\,687\,594\,092\,072\,315\,912\,192}{35\,646\,598\,631\,916\,638\,212\,798\,908\,165\,610\,205\,004\,434\,355} k_{36} \\
& + \frac{513\,129\,045\,466\,748\,482\,113\,273\,494\,178\,626\,066\,177\,391\,236\,033\,148\,878\,848}{383\,296\,759\,482\,974\,604\,438\,697\,937\,264\,625\,860\,262\,735} k_{37} \\
& - \frac{63\,628\,001\,638\,864\,876\,502\,565\,153\,845\,810\,932\,498\,086\,162\,204\,682\,625\,220\,608}{35\,646\,598\,631\,916\,638\,212\,798\,908\,165\,610\,205\,004\,434\,355} k_{38} \\
& + \frac{1551\,902\,478\,996\,704\,304\,852\,906\,613\,974\,287\,410\,919\,410\,605\,209\,128\,271\,872}{869\,429\,234\,924\,796\,053\,970\,705\,077\,210\,005\,000\,108\,155} k_{39} \\
& - \frac{904\,805\,784\,278\,358\,048\,254\,902\,403\,072}{2244\,148\,824\,366\,374\,835\,613\,573\,027\,135\,395} k_{40}, \\
C_6 & := - \frac{72\,464\,256\,594\,719\,795\,070\,323\,251\,171\,771\,312}{68\,004\,509\,829\,284\,085\,927\,684\,031\,125\,315} k_0 \\
& - \frac{105\,330\,200\,699\,269\,774\,207\,393\,015\,519\,098\,016}{50\,694\,270\,963\,648\,136\,782\,455\,368\,657\,053} k_1 \\
& - \frac{11\,288\,938\,069\,253\,893\,103\,867\,699\,322\,624\,067\,484}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_2 \\
& + \frac{1998\,497\,531\,205\,689\,680\,096\,370\,477\,605\,190\,864}{253\,471\,354\,818\,240\,683\,912\,276\,843\,285\,265} k_3 \\
& - \frac{42\,778\,444\,772\,160\,123\,697\,310\,867\,875\,640\,591\,696}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_4 \\
& + \frac{16\,636\,028\,364\,148\,601\,129\,748\,952\,813\,631\,890\,304}{557\,636\,980\,600\,129\,504\,607\,009\,055\,227\,583} k_5 \\
& - \frac{161\,606\,997\,516\,769\,748\,327\,995\,680\,887\,880\,034\,496}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_6 \\
& + \frac{313\,707\,593\,464\,546\,720\,570\,029\,301\,023\,607\,997\,696}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_7 \\
& - \frac{608\,402\,521\,341\,313\,128\,348\,750\,484\,681\,175\,920\,896}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_8 \\
& + \frac{1178\,779\,820\,819\,185\,357\,798\,407\,469\,520\,663\,474\,176}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_9 \\
& - \frac{2281\,509\,234\,262\,575\,788\,229\,738\,345\,842\,080\,449\,536}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{10} \\
& + \frac{400\,992\,537\,711\,646\,942\,337\,235\,113\,018\,181\,122\,048}{253\,471\,354\,818\,240\,683\,912\,276\,843\,285\,265} k_{11} \\
& - \frac{8517\,634\,574\,073\,090\,473\,072\,627\,494\,797\,079\,912\,448}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{12} \\
& + \frac{1493\,351\,153\,354\,818\,240\,683\,912\,276\,843\,285\,265}{31\,636\,924\,703\,713\,406\,217\,184\,162\,473\,074\,046\,359\,552} k_{13} \\
& - \frac{31\,636\,924\,703\,713\,406\,217\,184\,162\,473\,074\,046\,359\,552}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{14} \\
& + \frac{60\,840\,246\,943\,146\,437\,280\,325\,217\,555\,566\,027\,368\,448}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{15} \\
& - \frac{23\,362\,654\,830\,984\,537\,438\,064\,622\,664\,145\,469\,071\,360}{557\,636\,980\,600\,129\,504\,607\,009\,055\,227\,583} k_{16} \\
& + \frac{223\,892\,108\,833\,116\,589\,133\,564\,002\,442\,158\,409\,187\,328}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{17} \\
& - \frac{428\,315\,338\,687\,037\,889\,260\,500\,957\,496\,189\,706\,708\,992}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{18}
\end{aligned}$$

$$\begin{aligned}
& + \frac{19\,943\,729\,740\,901\,889\,698\,289\,864\,215\,751\,692\,294\,144}{68\,004\,509\,829\,284\,085\,927\,684\,031\,125\,315} k_{19} \\
& - \frac{7597\,611\,330\,274\,388\,159\,102\,075\,389\,904\,604\,999\,680}{13\,600\,901\,965\,856\,817\,185\,536\,806\,225\,063} k_{20} \\
& + \frac{53\,804\,902\,059\,024\,311\,499\,840\,968\,524\,195\,885\,256\,704}{50\,694\,270\,963\,648\,136\,782\,455\,368\,657\,053} k_{21} \\
& - \frac{5607\,037\,162\,069\,304\,762\,995\,314\,339\,416\,307\,471\,202\,304}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{22} \\
& + \frac{962\,824\,563\,197\,897\,154\,609\,867\,322\,556\,643\,403\,618\,304}{253\,471\,354\,818\,240\,683\,912\,276\,843\,285\,265} k_{23} \\
& - \frac{19\,936\,132\,132\,287\,025\,115\,991\,835\,174\,274\,340\,491\,165\,696}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{24} \\
& + \frac{7476\,049\,549\,652\,856\,678\,221\,168\,164\,615\,262\,354\,038\,784}{557\,636\,980\,600\,129\,504\,607\,009\,055\,227\,583} k_{25} \\
& - \frac{69\,776\,462\,463\,694\,086\,020\,859\,273\,416\,806\,169\,224\,103\,936}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{26} \\
& + \frac{129\,584\,858\,861\,459\,555\,102\,689\,581\,740\,249\,189\,872\,777\,216}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{27} \\
& - \frac{239\,233\,585\,590\,750\,798\,694\,374\,655\,113\,605\,169\,947\,611\,136}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{28} \\
& + \frac{438\,594\,906\,916\,795\,150\,284\,548\,010\,820\,744\,639\,599\,333\,376}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{29} \\
& - \frac{797\,445\,285\,303\,740\,901\,243\,908\,418\,399\,373\,448\,193\,038\,336}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{30} \\
& + \frac{130\,491\,046\,686\,115\,570\,249\,817\,753\,810\,315\,734\,796\,761\,088}{253\,471\,354\,818\,240\,683\,912\,276\,843\,285\,265} k_{31} \\
& - \frac{2551\,824\,912\,973\,525\,373\,663\,450\,792\,104\,382\,886\,120\,071\,168}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{32} \\
& + \frac{405\,972\,145\,245\,847\,831\,309\,269\,633\,927\,889\,220\,976\,459\,776}{253\,471\,354\,818\,240\,683\,912\,276\,843\,285\,265} k_{33} \\
& - \frac{7655\,474\,738\,922\,408\,300\,791\,016\,823\,068\,565\,897\,057\,789\,952}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{34} \\
& + \frac{12\,759\,124\,564\,871\,418\,334\,141\,023\,559\,287\,009\,601\,069\,570\,048}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{35} \\
& - \frac{4082\,919\,860\,759\,000\,547\,206\,208\,744\,508\,746\,642\,837\,557\,248}{557\,636\,980\,600\,129\,504\,607\,009\,055\,227\,583} k_{36} \\
& + \frac{6124\,379\,791\,138\,632\,057\,366\,037\,569\,708\,871\,683\,266\,564\,096}{557\,636\,980\,600\,129\,504\,607\,009\,055\,227\,583} k_{37} \\
& - \frac{40\,829\,198\,607\,591\,287\,324\,291\,561\,717\,402\,308\,144\,921\,911\,296}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{38} \\
& + \frac{995\,834\,112\,380\,264\,247\,672\,932\,603\,038\,933\,975\,503\,945\,728}{68\,004\,509\,829\,284\,085\,927\,684\,031\,125\,315} k_{39} \\
& + \frac{125\,869\,983\,312\,621\,290\,123\,717\,912\,920\,064}{68\,004\,509\,829\,284\,085\,927\,684\,031\,125\,315} k_{40},
\end{aligned}$$

$$\begin{aligned}
C_{12} := & \frac{680\,517\,509\,537\,350\,748\,109\,722\,636\,351\,700\,992}{748\,049\,608\,122\,124\,945\,204\,524\,342\,378\,465} k_0 \\
& - \frac{1082\,465\,267\,277\,363\,724\,769\,340\,097\,225\,031\,680}{557\,636\,980\,600\,129\,504\,607\,009\,055\,227\,583} k_1 \\
& + \frac{40\,168\,925\,381\,838\,808\,214\,641\,897\,590\,203\,875\,328}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_2 \\
& - \frac{21\,690\,492\,653\,770\,125\,698\,871\,719\,957\,877\,489\,664}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_3 \\
& + \frac{467\,726\,747\,368\,113\,007\,683\,070\,689\,538\,973\,106\,176}{30\,670\,033\,933\,007\,122\,753\,385\,498\,037\,517\,065} k_4 \\
& - \frac{20\,277\,257\,747\,189\,488\,396\,479\,044\,000\,938\,983\,424}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_5 \\
& + \frac{1775\,454\,231\,085\,530\,158\,989\,410\,147\,747\,858\,743\,296}{30\,670\,033\,933\,007\,122\,753\,385\,498\,037\,517\,065} k_6 \\
& - \frac{3448\,800\,173\,207\,285\,940\,960\,783\,393\,735\,102\,693\,376}{30\,670\,033\,933\,007\,122\,753\,385\,498\,037\,517\,065} k_7 \\
& + \frac{2230\,215\,455\,887\,938\,373\,730\,910\,748\,377\,698\,271\,232}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_8 \\
& - \frac{12\,964\,965\,339\,535\,879\,986\,302\,915\,932\,673\,971\,060\,736}{30\,670\,033\,933\,007\,122\,753\,385\,498\,037\,517\,065} k_9 \\
& + \frac{25\,095\,126\,290\,049\,628\,202\,835\,942\,541\,987\,325\,935\,616}{1470\,264\,327\,184\,688\,104\,573\,145\,696\,363\,516\,788\,736} k_{10} \\
& - \frac{93\,692\,659\,241\,485\,686\,246\,772\,332\,083\,498\,888\,613\,888}{929\,394\,967\,666\,882\,507\,678\,348\,495\,379\,305} k_{11} \\
& + \frac{16\,426\,744\,155\,409\,913\,406\,484\,822\,609\,043\,297\,140\,736}{30\,670\,033\,933\,007\,122\,753\,385\,498\,037\,517\,065} k_{12} \\
& - \frac{38\,667\,187\,988\,650\,262\,637\,032\,344\,582\,280\,306\,769\,408}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{13} \\
& + \frac{669\,240\,743\,237\,026\,466\,824\,220\,175\,506\,490\,568\,736\,768}{3407\,781\,548\,111\,909\,528\,153\,944\,226\,390\,783} k_{14} \\
& - \frac{256\,988\,609\,747\,836\,829\,769\,518\,646\,624\,649\,516\,663\,296}{30\,670\,033\,933\,007\,122\,753\,385\,498\,037\,517\,065} k_{15} \\
& + \frac{820\,936\,063\,924\,193\,205\,805\,520\,877\,093\,607\,803\,413}{94\,340\,067\,86\,601\,424\,530\,877\,093\,607\,803\,413} k_{16} \\
& - \frac{4711\,459\,673\,784\,718\,313\,016\,297\,092\,517\,797\,080\,072\,192}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{17} \\
& + \frac{219\,380\,614\,043\,758\,815\,833\,359\,212\,612\,878\,345\,437\,184}{748\,049\,608\,122\,124\,945\,204\,524\,342\,378\,465} k_{18} \\
& - \frac{27\,857\,855\,971\,548\,279\,472\,551\,294\,294\,362\,559\,610\,880}{49\,869\,973\,874\,808\,329\,680\,301\,622\,825\,231} k_{19} \\
& + \frac{591\,852\,810\,827\,564\,681\,613\,835\,291\,580\,498\,667\,634\,688}{557\,636\,980\,600\,129\,504\,607\,009\,055\,227\,583} k_{20} \\
& - \frac{61\,677\,292\,529\,333\,380\,673\,397\,073\,312\,353\,940\,253\,179\,904}{30\,670\,033\,933\,007\,122\,753\,385\,498\,037\,517\,065} k_{21} \\
& + \frac{30\,670\,033\,933\,007\,122\,753\,385\,498\,037\,517\,065}{30\,670\,033\,933\,007\,122\,753\,385\,498\,037\,517\,065} k_{22}
\end{aligned}$$

$$\begin{aligned}
& - \frac{392\,261\,117\,314\,449\,400\,665\,319\,231\,393\,172\,005\,322\,752}{103\,266\,107\,518\,542\,500\,853\,149\,825\,042\,145} k_{23} \\
& + \frac{219\,297\,037\,677\,323\,897\,017\,035\,951\,018\,691\,947\,214\,667\,776}{82\,236\,388\,827\,558\,137\,721\,736\,935\,628\,217\,669\,135\,630\,336} k_{24} \\
& - \frac{82\,236\,388\,827\,558\,137\,721\,736\,935\,628\,217\,669\,135\,630\,336}{6134\,006\,786\,601\,424\,550\,677\,099\,607\,503\,413} k_{25} \\
& + \frac{255\,846\,542\,358\,257\,576\,345\,492\,674\,278\,338\,186\,300\,096\,512}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{26} \\
& - \frac{1425\,430\,733\,484\,428\,428\,852\,874\,089\,883\,733\,307\,761\,360\,896}{30\,670\,033\,933\,007\,122\,753\,385\,498\,037\,517\,065} k_{27} \\
& + \frac{2631\,564\,427\,954\,342\,914\,229\,682\,265\,403\,864\,760\,698\,535\,936}{1608\,178\,260\,285\,699\,353\,556\,155\,240\,270\,860\,543\,524\,339\,712} k_{28} \\
& - \frac{1608\,178\,260\,285\,699\,353\,556\,155\,240\,270\,860\,543\,524\,339\,712}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{29} \\
& + \frac{8771\,881\,415\,339\,555\,878\,515\,700\,339\,522\,273\,507\,400\,482\,816}{30\,670\,033\,933\,007\,122\,753\,385\,498\,037\,517\,065} k_{30} \\
& - \frac{1435\,398\,776\,591\,428\,356\,380\,006\,622\,156\,613\,575\,479\,656\,448}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{31} \\
& + \frac{3118\,891\,168\,243\,441\,707\,437\,814\,027\,199\,607\,240\,195\,571\,712}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_{32} \\
& - \frac{4465\,685\,081\,211\,625\,067\,936\,994\,639\,159\,477\,323\,013\,554\,176}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{33} \\
& + \frac{84\,210\,061\,524\,311\,769\,463\,237\,376\,492\,898\,027\,939\,112\,681\,472}{30\,670\,033\,933\,007\,122\,753\,385\,498\,037\,517\,065} k_{34} \\
& - \frac{46\,783\,367\,511\,000\,279\,673\,850\,036\,013\,296\,744\,939\,106\,861\,056}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{35} \\
& + \frac{44\,912\,032\,809\,050\,652\,770\,943\,972\,391\,618\,054\,474\,573\,021\,184}{6134\,006\,786\,601\,424\,550\,677\,099\,607\,503\,413} k_{36} \\
& - \frac{67\,368\,049\,212\,216\,556\,338\,286\,593\,078\,424\,135\,444\,324\,155\,392}{6134\,006\,786\,601\,424\,550\,677\,099\,607\,503\,413} k_{37} \\
& + \frac{149\,706\,776\,025\,752\,000\,330\,060\,088\,715\,142\,251\,213\,186\,138\,112}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{38} \\
& - \frac{10\,954\,154\,343\,472\,207\,351\,401\,581\,970\,792\,650\,107\,474\,935\,808}{748\,049\,608\,122\,124\,945\,204\,524\,342\,378\,465} k_{39} \\
& + \frac{1359\,835\,368\,148\,529\,126\,996\,007\,330\,173\,157\,376}{748\,049\,608\,122\,124\,945\,204\,524\,342\,378\,465} k_{40},
\end{aligned}$$

$$\begin{aligned}
r_1 := & - \frac{2087\,384\,308\,077\,748\,685\,748\,255\,103\,258\,112}{1356\,799\,812\,335\,801\,909\,221\,638\,220\,483\,520} k_0 \\
& + \frac{7932\,060\,500\,567\,072\,347\,260\,498\,159\,696\,832}{15\,446\,644\,236\,069\,305\,689\,730\,062\,425\,734\,656} k_1 \\
& - \frac{15\,446\,644\,236\,069\,305\,689\,730\,062\,425\,734\,656}{3339\,814\,990\,380\,299\,358\,092\,234\,100\,743\,296} k_2 \\
& + \frac{3339\,814\,990\,380\,299\,358\,092\,234\,100\,743\,296}{58\,446\,762\,659\,319\,135\,213\,677\,892\,370\,013\,504} k_3 \\
& - \frac{58\,446\,762\,659\,319\,135\,213\,677\,892\,370\,013\,504}{113\,553\,710\,892\,965\,452\,881\,232\,992\,504\,462\,848} k_4 \\
& + \frac{113\,553\,710\,892\,965\,452\,881\,232\,992\,504\,462\,848}{73\,475\,930\,923\,148\,679\,310\,115\,152\,290\,572\,800} k_5 \\
& - \frac{73\,475\,930\,923\,148\,679\,310\,115\,152\,290\,572\,800}{427\,496\,327\,204\,904\,105\,437\,956\,374\,780\,657\,664} k_6 \\
& + \frac{427\,496\,327\,204\,904\,105\,437\,956\,374\,780\,657\,664}{828\,274\,137\,194\,128\,648\,422\,963\,240\,585\,352\,192} k_7 \\
& - \frac{828\,274\,137\,194\,128\,648\,422\,963\,240\,585\,352\,192}{534\,370\,412\,987\,626\,687\,259\,893\,230\,374\,182\,912} k_8 \\
& + \frac{534\,370\,412\,987\,626\,687\,259\,893\,230\,374\,182\,912}{3099\,348\,405\,276\,195\,996\,015\,586\,359\,692\,754\,944} k_9 \\
& - \frac{3099\,348\,405\,276\,195\,996\,015\,586\,359\,692\,754\,944}{5984\,948\,662\,008\,319\,539\,665\,618\,010\,427\,080\,704} k_{10} \\
& + \frac{5984\,948\,662\,008\,319\,539\,665\,618\,010\,427\,080\,704}{427\,496\,334\,114\,614\,832\,433\,378\,603\,367\,751\,680} k_{11} \\
& - \frac{427\,496\,334\,114\,614\,832\,433\,378\,603\,367\,751\,680}{22\,229\,809\,425\,894\,646\,202\,629\,572\,235\,857\,756\,160} k_{12} \\
& + \frac{22\,229\,809\,425\,894\,646\,202\,629\,572\,235\,857\,756\,160}{42\,749\,633\,600\,552\,189\,110\,034\,626\,068\,504\,641\,536} k_{13} \\
& - \frac{42\,749\,633\,600\,552\,189\,110\,034\,626\,068\,504\,641\,536}{27\,359\,765\,555\,163\,932\,445\,630\,921\,938\,145\,640\,448} k_{14} \\
& + \frac{27\,359\,765\,555\,163\,932\,445\,630\,921\,938\,145\,640\,448}{157\,318\,652\,201\,129\,861\,647\,537\,501\,779\,966\,033\,920} k_{15} \\
& - \frac{157\,318\,652\,201\,129\,861\,647\,537\,501\,779\,966\,033\,920}{300\,957\,422\,039\,315\,997\,988\,201\,161\,723\,955\,904\,512} k_{16} \\
& + \frac{300\,957\,422\,039\,315\,997\,988\,201\,161\,723\,955\,904\,512}{191\,518\,359\,723\,959\,839\,214\,895\,194\,968\,955\,027\,456} k_{17} \\
& - \frac{191\,518\,359\,723\,959\,839\,214\,895\,194\,968\,955\,027\,456}{1094\,390\,628\,215\,103\,112\,974\,411\,400\,060\,371\,730\,432} k_{18} \\
& + \frac{1094\,390\,628\,215\,103\,112\,974\,411\,400\,060\,371\,730\,432}{2079\,342\,195\,626\,943\,300\,509\,188\,826\,648\,889\,655\,296} k_{19} \\
& - \frac{2079\,342\,195\,626\,943\,300\,509\,188\,826\,648\,889\,655\,296}{437\,756\,252\,078\,608\,302\,947\,554\,047\,011\,525\,230\,592} k_{20} \\
& + \frac{437\,756\,252\,078\,608\,302\,947\,554\,047\,011\,525\,230\,592}{7441\,856\,290\,714\,866\,557\,219\,185\,415\,474\,540\,183\,552} k_{21} \\
& - \frac{7441\,856\,290\,714\,866\,557\,219\,185\,415\,474\,540\,183\,552}{14\,008\,200\,085\,300\,752\,766\,310\,965\,008\,116\,983\,267\,328} k_{22} \\
& + \frac{14\,008\,200\,085\,300\,752\,766\,310\,965\,008\,116\,983\,267\,328}{8755\,125\,057\,915\,363\,131\,291\,456\,949\,300\,597\,096\,448} k_{23} \\
& - \frac{8755\,125\,057\,915\,363\,131\,291\,456\,949\,300\,597\,096\,448}{49\,028\,700\,346\,099\,151\,530\,977\,377\,443\,759\,448\,391\,680} k_{24} \\
& + \frac{49\,028\,700\,346\,099\,151\,530\,977\,377\,443\,759\,448\,391\,680}{2541\,865\,828\,329} k_{25} \\
& - \frac{2541\,865\,828\,329}{2541\,865\,828\,329} k_{26}
\end{aligned}$$

$$\begin{aligned}
& + \frac{91\,053\,300\,676\,687\,692\,234\,275\,635\,913\,588\,280\,918\,016}{2541\,865\,828\,329} k_{27} \\
& - \frac{56\,032\,800\,433\,824\,282\,241\,226\,879\,413\,575\,378\,534\,400}{847\,288\,609\,443} k_{28} \\
& + \frac{308\,180\,402\,465\,208\,488\,440\,999\,265\,572\,390\,631\,899\,136}{2541\,865\,828\,329} k_{29} \\
& - \frac{560\,328\,004\,600\,366\,425\,548\,203\,120\,982\,730\,311\,991\,296}{2541\,865\,828\,329} k_{30} \\
& + \frac{112\,065\,600\,939\,309\,390\,107\,194\,497\,779\,262\,927\,405\,056}{282\,429\,536\,481} k_{31} \\
& - \frac{1793\,049\,615\,276\,994\,738\,483\,383\,692\,304\,304\,455\,024\,640}{2541\,865\,828\,329} k_{32} \\
& + \frac{3137\,836\,827\,080\,231\,324\,984\,402\,034\,315\,217\,038\,475\,264}{2541\,865\,828\,329} k_{33} \\
& - \frac{1793\,049\,615\,628\,812\,930\,883\,311\,520\,682\,241\,771\,438\,080}{847\,288\,609\,443} k_{34} \\
& + \frac{8965\,248\,078\,731\,271\,968\,963\,940\,111\,040\,399\,315\,828\,736}{2541\,865\,828\,329} k_{35} \\
& - \frac{14\,344\,396\,926\,650\,385\,681\,410\,377\,516\,837\,809\,076\,305\,920}{2541\,865\,828\,329} k_{36} \\
& + \frac{7172\,198\,463\,547\,926\,643\,329\,748\,926\,479\,651\,531\,915\,264}{847\,288\,609\,443} k_{37} \\
& - \frac{28\,688\,793\,854\,637\,174\,178\,568\,116\,042\,040\,100\,115\,185\,664}{2541\,865\,828\,329} k_{38} \\
& + \frac{28\,688\,793\,854\,637\,174\,178\,568\,116\,042\,040\,100\,115\,185\,664}{2541\,865\,828\,329} k_{39},
\end{aligned}$$

$$\begin{aligned}
r_2 := & \frac{128\,851\,307\,743\,399\,645\,148\,782\,839\,811\,072}{156\,905\,298\,045} k_0 \\
& - \frac{83\,753\,350\,779\,219\,345\,278\,839\,288\,079\,104}{52\,301\,766\,015} k_1 \\
& + \frac{489\,634\,977\,441\,732\,724\,807\,440\,349\,720\,064}{156\,905\,298\,045} k_2 \\
& - \frac{953\,499\,699\,294\,725\,005\,616\,188\,302\,573\,632}{156\,905\,298\,045} k_3 \\
& + \frac{206\,162\,098\,405\,264\,401\,080\,270\,954\,810\,624}{17\,433\,922\,005} k_4 \\
& - \frac{3607\,836\,742\,318\,360\,027\,719\,755\,626\,824\,256}{156\,905\,298\,045} k_5 \\
& + \frac{7009\,511\,421\,090\,056\,950\,283\,246\,444\,169\,088}{156\,905\,298\,045} k_6 \\
& - \frac{4535\,566\,234\,964\,324\,800\,497\,743\,585\,524\,352}{52\,301\,766\,015} k_7 \\
& + \frac{5277\,749\,823\,326\,047\,232\,745\,693\,860\,872\,192}{31\,381\,059\,609} k_8 \\
& - \frac{51\,128\,201\,613\,140\,070\,224\,223\,699\,705\,734\,144}{156\,905\,298\,045} k_9 \\
& + \frac{32\,985\,936\,641\,559\,997\,193\,638\,330\,190\,200\,832}{52\,301\,766\,015} k_{10} \\
& - \frac{191\,318\,433\,135\,121\,686\,522\,605\,351\,021\,584\,384}{156\,905\,298\,045} k_{11} \\
& + \frac{369\,442\,492\,641\,460\,922\,560\,701\,378\,134\,130\,688}{156\,905\,298\,045} k_{12} \\
& - \frac{26\,388\,749\,543\,156\,994\,917\,274\,312\,575\,574\,016}{5811\,307\,335} k_{13} \\
& + \frac{1372\,214\,979\,450\,018\,429\,213\,366\,474\,208\,182\,272}{156\,905\,298\,045} k_{14} \\
& - \frac{527\,774\,993\,197\,600\,748\,982\,082\,636\,718\,276\,608}{31\,381\,059\,609} k_{15} \\
& + \frac{1688\,879\,981\,368\,785\,287\,638\,702\,200\,117\,526\,528}{52\,301\,766\,015} k_{16} \\
& - \frac{9711\,059\,908\,854\,348\,939\,077\,657\,327\,297\,363\,968}{156\,905\,298\,045} k_{17} \\
& + \frac{18\,577\,679\,852\,619\,342\,711\,604\,791\,198\,349\,262\,848}{156\,905\,298\,045} k_{18} \\
& - \frac{11\,822\,159\,921\,298\,476\,806\,592\,285\,112\,788\,844\,544}{52\,301\,766\,015} k_{19} \\
& + \frac{67\,555\,199\,625\,650\,323\,422\,056\,900\,134\,453\,641\,216}{156\,905\,298\,045} k_{20} \\
& - \frac{25\,670\,975\,882\,663\,916\,504\,764\,115\,796\,684\,177\,408}{31\,381\,059\,609} k_{21} \\
& + \frac{5404\,415\,979\,836\,852\,605\,169\,611\,680\,511\,950\,848}{3486\,784\,401} k_{22} \\
& - \frac{459\,375\,358\,618\,141\,306\,576\,310\,530\,656\,880\,820\,224}{156\,905\,298\,045} k_{23} \\
& + \frac{172\,941\,311\,586\,697\,171\,872\,264\,688\,813\,714\,964\,480}{31\,381\,059\,609} k_{24} \\
& - \frac{540\,441\,598\,992\,527\,910\,071\,686\,638\,266\,627\,391\,488}{52\,301\,766\,015} k_{25} \\
& + \frac{3026\,472\,955\,702\,180\,355\,518\,778\,281\,823\,414\,779\,904}{156\,905\,298\,045} k_{26} \\
& - \frac{5620\,592\,634\,112\,917\,469\,038\,744\,665\,928\,004\,272\,128}{156\,905\,298\,045} k_{27} \\
& + \frac{3458\,826\,237\,451\,324\,694\,302\,624\,387\,458\,167\,472\,128}{52\,301\,766\,015} k_{28} \\
& - \frac{19\,023\,544\,310\,869\,643\,657\,805\,785\,586\,393\,533\,120\,512}{156\,905\,298\,045} k_{29} \\
& + \frac{34\,588\,262\,390\,693\,769\,586\,731\,608\,476\,184\,479\,793\,152}{156\,905\,298\,045} k_{30}
\end{aligned}$$

$$\begin{aligned}
& - \frac{6917\ 652\ 479\ 326\ 171\ 718\ 590\ 025\ 034\ 529\ 194\ 901\ 504}{17\ 433\ 922\ 005} k_{31} \\
& + \frac{110\ 682\ 439\ 684\ 530\ 186\ 637\ 572\ 701\ 900\ 002\ 392\ 276\ 992}{156\ 905\ 298\ 045} k_{32} \\
& - \frac{38\ 738\ 853\ 893\ 850\ 894\ 595\ 042\ 176\ 989\ 374\ 795\ 743\ 232}{31\ 381\ 059\ 609} k_{33} \\
& + \frac{110\ 682\ 439\ 706\ 247\ 430\ 565\ 610\ 666\ 869\ 894\ 189\ 940\ 736}{52\ 301\ 766\ 015} k_{34} \\
& - \frac{553\ 412\ 198\ 567\ 484\ 637\ 357\ 958\ 654\ 502\ 067\ 693\ 944\ 832}{156\ 905\ 298\ 045} k_{35} \\
& + \frac{885\ 459\ 517\ 749\ 972\ 504\ 514\ 113\ 452\ 237\ 668\ 879\ 433\ 728}{156\ 905\ 298\ 045} k_{36} \\
& - \frac{442\ 729\ 758\ 888\ 735\ 297\ 721\ 765\ 464\ 605\ 495\ 375\ 429\ 632}{52\ 301\ 766\ 015} k_{37} \\
& + \frac{1770\ 919\ 035\ 582\ 439\ 281\ 816\ 479\ 335\ 395\ 303\ 373\ 144\ 064}{156\ 905\ 298\ 045} k_{38} \\
& - \frac{1770\ 919\ 035\ 582\ 439\ 281\ 816\ 479\ 335\ 395\ 303\ 373\ 144\ 064}{156\ 905\ 298\ 045} k_{39},
\end{aligned}$$

$$\begin{aligned}
r_3 := & \frac{34\ 519\ 675\ 346\ 214\ 631\ 253\ 236\ 965\ 919\ 817\ 728}{38\ 127\ 987\ 424\ 935} k_0 \\
& - \frac{22\ 437\ 789\ 176\ 035\ 670\ 970\ 523\ 810\ 644\ 115\ 456}{12\ 709\ 329\ 141\ 645} k_1 \\
& + \frac{131\ 174\ 768\ 473\ 249\ 428\ 671\ 367\ 600\ 336\ 551\ 936}{38\ 127\ 987\ 424\ 935} k_2 \\
& - \frac{255\ 445\ 603\ 477\ 047\ 477\ 101\ 251\ 429\ 636\ 702\ 208}{38\ 127\ 987\ 424\ 935} k_3 \\
& + \frac{55\ 231\ 482\ 171\ 039\ 871\ 171\ 046\ 495\ 933\ 136\ 896}{4236\ 443\ 047\ 215} k_4 \\
& - \frac{966\ 550\ 943\ 417\ 206\ 258\ 344\ 954\ 598\ 144\ 589\ 824}{38\ 127\ 987\ 424\ 935} k_5 \\
& + \frac{1877\ 870\ 414\ 008\ 287\ 713\ 271\ 305\ 756\ 886\ 433\ 792}{38\ 127\ 987\ 424\ 935} k_6 \\
& - \frac{1215\ 092\ 626\ 542\ 566\ 765\ 394\ 376\ 730\ 448\ 232\ 448}{12\ 709\ 329\ 141\ 645} k_7 \\
& + \frac{1413\ 925\ 971\ 498\ 497\ 566\ 888\ 273\ 556\ 386\ 349\ 056}{7625\ 597\ 484\ 987} k_8 \\
& - \frac{13\ 697\ 407\ 902\ 392\ 768\ 800\ 596\ 386\ 371\ 310\ 452\ 736}{38\ 127\ 987\ 424\ 935} k_9 \\
& + \frac{8837\ 037\ 387\ 717\ 351\ 089\ 060\ 525\ 769\ 802\ 907\ 648}{12\ 709\ 329\ 141\ 645} k_{10} \\
& - \frac{51\ 254\ 817\ 013\ 277\ 216\ 639\ 060\ 211\ 511\ 387\ 488\ 256}{38\ 127\ 987\ 424\ 935} k_{11} \\
& + \frac{98\ 974\ 819\ 346\ 824\ 343\ 698\ 138\ 221\ 374\ 416\ 617\ 472}{38\ 127\ 987\ 424\ 935} k_{12} \\
& - \frac{7069\ 629\ 971\ 766\ 598\ 882\ 982\ 398\ 834\ 858\ 000\ 384}{1412\ 147\ 682\ 405} k_{13} \\
& + \frac{367\ 620\ 759\ 390\ 662\ 422\ 565\ 717\ 133\ 285\ 159\ 600\ 128}{38\ 127\ 987\ 424\ 935} k_{14} \\
& - \frac{141\ 392\ 600\ 060\ 693\ 737\ 982\ 949\ 443\ 884\ 785\ 074\ 176}{7625\ 597\ 484\ 987} k_{15} \\
& + \frac{452\ 456\ 321\ 034\ 408\ 553\ 979\ 425\ 504\ 994\ 862\ 825\ 472}{12\ 709\ 329\ 141\ 645} k_{16} \\
& - \frac{2601\ 623\ 850\ 229\ 530\ 705\ 229\ 575\ 880\ 977\ 669\ 947\ 392}{38\ 127\ 987\ 424\ 935} k_{17} \\
& + \frac{4977\ 019\ 546\ 798\ 110\ 111\ 395\ 978\ 142\ 580\ 046\ 036\ 992}{38\ 127\ 987\ 424\ 935} k_{18} \\
& - \frac{3167\ 194\ 261\ 094\ 526\ 405\ 777\ 020\ 313\ 572\ 019\ 798\ 016}{12\ 709\ 329\ 141\ 645} k_{19} \\
& + \frac{18\ 098\ 252\ 940\ 730\ 663\ 833\ 710\ 838\ 948\ 878\ 555\ 807\ 744}{38\ 127\ 987\ 424\ 935} k_{20} \\
& - \frac{6877\ 336\ 124\ 152\ 151\ 767\ 310\ 311\ 096\ 230\ 879\ 428\ 608}{7625\ 597\ 484\ 987} k_{21} \\
& + \frac{1447\ 860\ 237\ 879\ 531\ 911\ 775\ 278\ 672\ 935\ 582\ 171\ 136}{847\ 288\ 609\ 443} k_{22} \\
& - \frac{123\ 068\ 120\ 308\ 696\ 029\ 637\ 061\ 134\ 067\ 947\ 458\ 789\ 376}{38\ 127\ 987\ 424\ 935} k_{23} \\
& + \frac{46\ 331\ 527\ 674\ 269\ 277\ 887\ 092\ 218\ 090\ 813\ 151\ 772\ 672}{7625\ 597\ 484\ 987} k_{24} \\
& - \frac{144\ 786\ 024\ 058\ 193\ 617\ 174\ 260\ 583\ 777\ 098\ 040\ 082\ 432}{12\ 709\ 329\ 141\ 645} k_{25} \\
& + \frac{810\ 801\ 735\ 085\ 910\ 069\ 144\ 406\ 821\ 323\ 430\ 697\ 107\ 456}{38\ 127\ 987\ 424\ 935} k_{26} \\
& - \frac{1505\ 774\ 651\ 434\ 911\ 980\ 066\ 317\ 669\ 056\ 052\ 295\ 892\ 992}{38\ 127\ 987\ 424\ 935} k_{27} \\
& + \frac{926\ 630\ 555\ 016\ 909\ 348\ 927\ 840\ 148\ 528\ 210\ 978\ 537\ 472}{12\ 709\ 329\ 141\ 645} k_{28} \\
& - \frac{5096\ 468\ 053\ 902\ 185\ 175\ 547\ 912\ 621\ 459\ 689\ 667\ 821\ 568}{38\ 127\ 987\ 424\ 935} k_{29} \\
& + \frac{9266\ 305\ 554\ 503\ 393\ 899\ 781\ 767\ 803\ 548\ 359\ 205\ 060\ 608}{38\ 127\ 987\ 424\ 935} k_{30} \\
& - \frac{1853\ 261\ 111\ 218\ 754\ 121\ 447\ 252\ 883\ 597\ 053\ 915\ 037\ 696}{4236\ 443\ 047\ 215} k_{31} \\
& + \frac{29\ 652\ 177\ 783\ 601\ 563\ 476\ 566\ 376\ 120\ 731\ 296\ 300\ 269\ 568}{38\ 127\ 987\ 424\ 935} k_{32} \\
& - \frac{10\ 378\ 262\ 225\ 403\ 107\ 184\ 350\ 356\ 332\ 717\ 534\ 847\ 369\ 216}{7625\ 597\ 484\ 987} k_{33} \\
& + \frac{29\ 652\ 177\ 789\ 418\ 993\ 230\ 770\ 001\ 915\ 991\ 474\ 206\ 408\ 704}{12\ 709\ 329\ 141\ 645} k_{34} \\
& - \frac{148\ 260\ 888\ 956\ 804\ 632\ 714\ 328\ 360\ 832\ 989\ 266\ 758\ 729\ 728}{38\ 127\ 987\ 424\ 935} k_{35}
\end{aligned}$$

$$\begin{aligned}
& + \frac{237\,217\,422\,342\,137\,232\,673\,903\,959\,657\,729\,931\,966\,676\,992}{38\,127\,987\,424\,935} k_{36} \\
& - \frac{118\,608\,711\,174\,751\,593\,180\,345\,600\,720\,732\,139\,414\,355\,968}{12\,709\,329\,141\,645} k_{37} \\
& + \frac{474\,434\,844\,706\,372\,326\,408\,169\,644\,666\,662\,904\,519\,458\,816}{38\,127\,987\,424\,935} k_{38} \\
& - \frac{474\,434\,844\,706\,372\,326\,408\,169\,644\,666\,662\,904\,519\,458\,816}{38\,127\,987\,424\,935} k_{39}, \\
\\
r_4 := & \frac{6586\,161\,000\,903\,978\,429\,184}{22\,876\,792\,454\,961} k_0 - \frac{4281\,160\,581\,419\,953\,686\,112}{7625\,597\,484\,987} k_1 \\
& + \frac{25\,028\,389\,289\,705\,479\,118\,432}{22\,876\,792\,454\,961} k_2 - \frac{48\,739\,501\,843\,112\,088\,007\,424}{22\,876\,792\,454\,961} k_3 \\
& + \frac{10\,538\,270\,772\,501\,053\,322\,560}{2541\,865\,828\,329} k_4 - \frac{184\,419\,739\,550\,886\,350\,197\,792}{22\,876\,792\,454\,961} k_5 \\
& + \frac{358\,301\,210\,109\,744\,603\,714\,304}{22\,876\,792\,454\,961} k_6 - \frac{231\,841\,960\,572\,006\,434\,701\,568}{7625\,597\,484\,987} k_7 \\
& + \frac{1348\,898\,685\,476\,782\,724\,120\,576}{22\,876\,792\,454\,961} k_8 - \frac{2613\,491\,213\,316\,375\,761\,951\,744}{22\,876\,792\,454\,961} k_9 \\
& + \frac{1686\,123\,369\,407\,833\,995\,229\,184}{7625\,597\,484\,987} k_{10} - \frac{9779\,515\,573\,954\,318\,485\,796\,864}{22\,876\,792\,454\,961} k_{11} \\
& + \frac{18\,884\,581\,852\,686\,022\,562\,037\,760}{22\,876\,792\,454\,961} k_{12} - \frac{1348\,898\,707\,278\,531\,259\,506\,688}{847\,288\,609\,443} k_{13} \\
& + \frac{70\,142\,732\,942\,363\,307\,471\,405\,056}{22\,876\,792\,454\,961} k_{14} - \frac{134\,889\,871\,324\,530\,555\,077\,918\,720}{22\,876\,792\,454\,961} k_{15} \\
& + \frac{86\,329\,517\,808\,034\,287\,006\,515\,200}{7625\,597\,484\,987} k_{16} - \frac{496\,394\,728\,213\,287\,610\,201\,145\,344}{22\,876\,792\,454\,961} k_{17} \\
& + \frac{949\,624\,698\,830\,975\,285\,883\,043\,840}{22\,876\,792\,454\,961} k_{18} - \frac{604\,306\,627\,300\,008\,127\,012\,274\,176}{7625\,597\,484\,987} k_{19} \\
& + \frac{3453\,180\,731\,281\,721\,303\,742\,021\,632}{22\,876\,792\,454\,961} k_{20} - \frac{6561\,043\,395\,804\,005\,866\,472\,996\,864}{22\,876\,792\,454\,961} k_{21} \\
& + \frac{1381\,272\,295\,013\,695\,842\,276\,081\,664}{2541\,865\,828\,329} k_{22} - \frac{23\,481\,629\,032\,205\,203\,963\,994\,177\,536}{22\,876\,792\,454\,961} k_{23} \\
& + \frac{44\,200\,713\,499\,716\,781\,338\,995\,458\,048}{22\,876\,792\,454\,961} k_{24} - \frac{27\,625\,445\,951\,846\,224\,361\,481\,568\,256}{7625\,597\,484\,987} k_{25} \\
& + \frac{154\,702\,497\,399\,045\,774\,519\,666\,999\,296}{22\,876\,792\,454\,961} k_{26} - \frac{287\,304\,638\,133\,875\,012\,048\,789\,700\,608}{22\,876\,792\,454\,961} k_{27} \\
& + \frac{176\,802\,854\,291\,141\,400\,497\,852\,776\,448}{7625\,597\,484\,987} k_{28} - \frac{972\,415\,698\,851\,121\,041\,266\,809\,241\,600}{22\,876\,792\,454\,961} k_{29} \\
& + \frac{1768\,028\,543\,738\,567\,675\,192\,157\,405\,184}{22\,876\,792\,454\,961} k_{30} - \frac{353\,605\,708\,808\,414\,733\,769\,860\,186\,112}{2541\,865\,828\,329} k_{31} \\
& + \frac{5657\,691\,341\,717\,361\,723\,959\,869\,964\,288}{22\,876\,792\,454\,961} k_{32} - \frac{9900\,959\,849\,095\,608\,494\,145\,564\,311\,552}{22\,876\,792\,454\,961} k_{33} \\
& + \frac{5657\,691\,342\,827\,554\,700\,758\,368\,649\,216}{7625\,597\,484\,987} k_{34} - \frac{28\,288\,456\,715\,990\,757\,465\,067\,035\,295\,744}{22\,876\,792\,454\,961} k_{35} \\
& + \frac{45\,261\,530\,747\,732\,117\,499\,239\,892\,779\,008}{22\,876\,792\,454\,961} k_{36} - \frac{22\,630\,765\,374\,568\,914\,734\,931\,226\,132\,480}{7625\,597\,484\,987} k_{37} \\
& + \frac{90\,523\,061\,499\,681\,370\,910\,347\,464\,015\,872}{22\,876\,792\,454\,961} k_{38} - \frac{90\,523\,061\,499\,681\,370\,910\,347\,464\,015\,872}{22\,876\,792\,454\,961} k_{39}, \\
\\
r_5 := & - \frac{11\,173\,613\,778\,112\,275\,226\,654\,605\,100\,957\,696}{4236\,443\,047\,215} k_0 \\
& + \frac{7262\,849\,020\,606\,129\,872\,970\,583\,217\,928\,192}{1412\,147\,682\,405} k_1 \\
& - \frac{42\,459\,733\,053\,262\,377\,997\,546\,296\,968\,640\,512}{4236\,443\,047\,215} k_2 \\
& + \frac{82\,684\,743\,868\,135\,610\,903\,345\,338\,008\,313\,856}{4236\,443\,047\,215} k_3 \\
& - \frac{17\,877\,782\,567\,342\,015\,047\,298\,286\,460\,669\,952}{470\,715\,894\,135} k_4 \\
& + \frac{312\,861\,196\,683\,151\,409\,869\,212\,869\,867\,112\,448}{4236\,443\,047\,215} k_5 \\
& - \frac{607\,844\,613\,822\,624\,601\,137\,499\,346\,916\,081\,664}{4236\,443\,047\,215} k_6 \\
& + \frac{393\,311\,222\,557\,723\,785\,218\,977\,319\,296\,434\,176}{1412\,147\,682\,405} k_7 \\
& - \frac{457\,671\,242\,757\,983\,510\,055\,917\,535\,458\,492\,416}{847\,288\,609\,443} k_8 \\
& + \frac{4433\,690\,181\,533\,953\,034\,420\,067\,400\,508\,833\,792}{4236\,443\,047\,215} k_9 \\
& - \frac{2860\,445\,288\,551\,320\,740\,115\,183\,399\,040\,188\,416}{1412\,147\,682\,405} k_{10} \\
& + \frac{16\,590\,582\,726\,849\,286\,060\,616\,230\,043\,437\,760\,512}{4236\,443\,047\,215} k_{11} \\
& - \frac{32\,036\,987\,427\,409\,440\,856\,393\,549\,623\,369\,662\,464}{4236\,443\,047\,215} k_{12} \\
& + \frac{2288\,356\,250\,778\,157\,178\,191\,826\,748\,724\,215\,808}{156\,905\,298\,045} k_{13} \\
& - \frac{118\,994\,525\,318\,460\,867\,501\,909\,443\,350\,061\,121\,536}{4236\,443\,047\,215} k_{14} \\
& + \frac{45\,767\,125\,217\,996\,074\,698\,855\,439\,161\,339\,412\,480}{847\,288\,609\,443} k_{15} \\
& - \frac{146\,454\,800\,969\,564\,040\,147\,018\,541\,689\,506\,627\,584}{1412\,147\,682\,405} k_{16} \\
& + \frac{842\,115\,106\,961\,018\,345\,598\,959\,441\,038\,246\,150\,144}{4236\,443\,047\,215} k_{17} \\
& - \frac{1611\,002\,815\,656\,702\,989\,089\,039\,811\,157\,755\,428\,864}{4236\,443\,047\,215} k_{18} \\
& + \frac{1025\,183\,611\,271\,536\,981\,930\,004\,859\,453\,096\,067\,072}{1412\,147\,682\,405} k_{19}
\end{aligned}$$

$$\begin{aligned}
& - \frac{5858\,192\,070\,944\,708\,847\,223\,761\,875\,590\,864\,437\,248}{4236\,443\,047\,215} k_{20} \\
& + \frac{2226\,112\,989\,119\,612\,195\,498\,543\,811\,413\,653\,061\,632}{847\,288\,609\,443} k_{21} \\
& - \frac{468\,655\,366\,524\,054\,517\,485\,356\,117\,951\,887\,966\,208}{94\,143\,178\,827} k_{22} \\
& + \frac{39\,835\,706\,183\,334\,359\,238\,084\,698\,044\,118\,075\,441\,152}{4236\,443\,047\,215} k_{23} \\
& - \frac{14\,996\,971\,748\,880\,209\,030\,902\,110\,522\,406\,546\,178\,048}{847\,288\,609\,443} k_{24} \\
& + \frac{46\,865\,536\,739\,885\,954\,265\,630\,777\,993\,391\,404\,744\,704}{1412\,147\,682\,405} k_{25} \\
& - \frac{262\,447\,005\,859\,906\,657\,958\,069\,639\,972\,442\,249\,101\,312}{4236\,443\,047\,215} k_{26} \\
& + \frac{487\,401\,582\,492\,884\,243\,326\,222\,209\,599\,129\,658\,589\,184}{4236\,443\,047\,215} k_{27} \\
& - \frac{299\,939\,435\,473\,379\,530\,553\,459\,359\,447\,705\,708\,396\,544}{1412\,147\,682\,405} k_{28} \\
& + \frac{1649\,666\,895\,527\,388\,351\,371\,648\,015\,970\,184\,028\,225\,536}{4236\,443\,047\,215} k_{29} \\
& - \frac{2999\,394\,356\,136\,868\,470\,911\,180\,561\,557\,972\,578\,205\,696}{4236\,443\,047\,215} k_{30} \\
& + \frac{599\,878\,871\,330\,339\,100\,297\,037\,096\,618\,185\,522\,675\,712}{470\,715\,894\,135} k_{31} \\
& - \frac{9598\,061\,942\,613\,137\,357\,122\,560\,580\,750\,471\,149\,387\,776}{4236\,443\,047\,215} k_{32} \\
& + \frac{3359\,321\,680\,284\,460\,621\,428\,801\,143\,594\,565\,555\,453\,952}{847\,288\,609\,443} k_{33} \\
& - \frac{9598\,061\,944\,496\,320\,264\,131\,368\,193\,987\,230\,625\,169\,408}{1412\,147\,682\,405} k_{34} \\
& + \frac{47\,990\,309\,725\,624\,755\,419\,300\,582\,751\,324\,517\,156\,519\,936}{4236\,443\,047\,215} k_{35} \\
& - \frac{76\,784\,495\,564\,641\,331\,994\,291\,165\,804\,668\,757\,332\,721\,664}{4236\,443\,047\,215} k_{36} \\
& + \frac{38\,392\,247\,783\,512\,896\,839\,121\,951\,247\,331\,470\,801\,371\,136}{1412\,147\,682\,405} k_{37} \\
& - \frac{153\,568\,991\,136\,436\,049\,040\,440\,541\,679\,320\,067\,475\,505\,152}{4236\,443\,047\,215} k_{38} \\
& + \frac{153\,568\,991\,136\,436\,049\,040\,440\,541\,679\,320\,067\,475\,505\,152}{4236\,443\,047\,215} k_{39}, \\
\\
r_6 := & \frac{32\,473\,258\,214\,057\,172\,878\,847\,666\,945\,499\,136}{12\,709\,329\,141\,645} k_0 \\
& - \frac{21\,107\,618\,027\,179\,822\,863\,168\,273\,231\,045\,632}{4236\,443\,047\,215} k_1 \\
& + \frac{123\,398\,383\,234\,150\,504\,632\,356\,177\,255\,990\,272}{12\,709\,329\,141\,645} k_2 \\
& - \frac{240\,302\,116\,327\,689\,667\,241\,286\,993\,529\,255\,936}{12\,709\,329\,141\,645} k_3 \\
& + \frac{51\,957\,214\,658\,812\,217\,456\,150\,578\,690\,988\,032}{1412\,147\,682\,405} k_4 \\
& - \frac{909\,251\,261\,626\,984\,363\,054\,265\,352\,056\,112\,128}{12\,709\,329\,141\,645} k_5 \\
& + \frac{1766\,545\,317\,380\,679\,363\,668\,289\,805\,323\,137\,024}{12\,709\,329\,141\,645} k_6 \\
& - \frac{1143\,058\,740\,148\,465\,185\,273\,762\,922\,665\,496\,576}{4236\,443\,047\,215} k_7 \\
& + \frac{1330\,104\,721\,515\,103\,668\,075\,133\,840\,940\,466\,176}{2541\,865\,828\,329} k_8 \\
& - \frac{12\,885\,389\,539\,999\,350\,082\,470\,514\,852\,791\,672\,832}{12\,709\,329\,141\,645} k_9 \\
& + \frac{8313\,154\,571\,410\,248\,373\,786\,216\,917\,372\,829\,696}{4236\,443\,047\,215} k_{10} \\
& - \frac{48\,216\,296\,668\,940\,718\,872\,095\,535\,342\,819\,213\,312}{12\,709\,329\,141\,645} k_{11} \\
& + \frac{93\,107\,331\,768\,357\,381\,401\,988\,397\,750\,990\,536\,704}{12\,709\,329\,141\,645} k_{12} \\
& - \frac{6650\,523\,715\,070\,656\,743\,188\,588\,527\,806\,906\,368}{470\,715\,894\,135} k_{13} \\
& + \frac{345\,827\,233\,991\,622\,226\,397\,950\,889\,451\,119\,968\,256}{12\,709\,329\,141\,645} k_{14} \\
& - \frac{133\,010\,474\,889\,750\,017\,134\,469\,253\,897\,805\,365\,248}{2541\,865\,828\,329} k_{15} \\
& + \frac{425\,633\,520\,437\,658\,975\,040\,101\,825\,908\,282\,753\,024}{4236\,443\,047\,215} k_{16} \\
& - \frac{2447\,392\,746\,544\,822\,403\,012\,037\,841\,127\,078\,887\,424}{12\,709\,329\,141\,645} k_{17} \\
& + \frac{4681\,968\,739\,321\,336\,166\,969\,965\,756\,392\,579\,006\,464}{12\,709\,329\,141\,645} k_{18} \\
& - \frac{2979\,434\,656\,097\,146\,777\,280\,306\,249\,162\,012\,229\,632}{4236\,443\,047\,215} k_{19} \\
& + \frac{17\,025\,340\,910\,981\,218\,460\,939\,905\,127\,202\,577\,973\,248}{12\,709\,329\,141\,645} k_{20} \\
& - \frac{6469\,629\,552\,452\,432\,558\,881\,216\,485\,211\,416\,559\,616}{2541\,865\,828\,329} k_{21} \\
& + \frac{1362\,027\,275\,344\,488\,477\,648\,684\,757\,880\,733\,171\,712}{282\,429\,536\,481} k_{22} \\
& - \frac{115\,772\,318\,487\,955\,76\,611\,368\,10\,506\,197\,974\,515\,712}{12\,709\,329\,141\,645} k_{23} \\
& + \frac{43\,584\,872\,869\,472\,130\,812\,622\,065\,167\,479\,819\,206\,656}{2541\,865\,828\,329} k_{24}
\end{aligned}$$

$$\begin{aligned}
& -136\,202\,727\,788\,699\,786\,273\,325\,673\,721\,322\,268\,524\,544 \overline{k_{25}} \\
& +762\,735\,275\,955\,443\,006\,742\,811\,629\,466\,308\,503\,928\,832 \overline{k_{26}} \\
& -1416\,508\,370\,159\,418\,807\,727\,776\,759\,557\,972\,908\,048\,384 \overline{k_{27}} \\
& +871\,697\,458\,830\,350\,925\,163\,763\,667\,106\,706\,766\,168\,064 \overline{k_{28}} \\
& -4794\,336\,024\,798\,654\,029\,834\,864\,295\,439\,245\,693\,157\,376 \overline{k_{29}} \\
& +8716\,974\,592\,381\,364\,417\,597\,065\,306\,653\,471\,996\,379\,136 \overline{k_{30}} \\
& -1743\,394\,918\,775\,528\,855\,429\,476\,735\,036\,755\,575\,570\,432 \overline{k_{31}} \\
& +27\,894\,318\,704\,267\,288\,545\,020\,005\,542\,202\,703\,553\,232\,896 \overline{k_{32}} \\
& -9763\,011\,547\,568\,509\,869\,722\,291\,321\,250\,613\,223\,751\,680 \overline{k_{33}} \\
& +27\,894\,318\,709\,740\,522\,344\,412\,127\,994\,202\,373\,643\,829\,248 \overline{k_{34}} \\
& -139\,471\,593\,557\,837\,793\,053\,538\,021\,502\,531\,450\,097\,893\,376 \overline{k_{35}} \\
& +223\,154\,549\,703\,124\,678\,864\,159\,602\,997\,292\,635\,724\,447\,744 \overline{k_{36}} \\
& -111\,577\,274\,855\,027\,408\,155\,033\,709\,488\,963\,559\,270\,383\,616 \overline{k_{37}} \\
& +446\,309\,099\,427\,039\,770\,066\,042\,653\,936\,488\,719\,897\,853\,952 \overline{k_{38}} \\
& -446\,309\,099\,427\,039\,770\,066\,042\,653\,936\,488\,719\,897\,853\,952 \overline{k_{39}}, \\
& \quad \quad \quad 12\,709\,329\,141\,645
\end{aligned}$$

$$\begin{aligned}
r_7 := & \frac{9214\,534\,665\,812\,931\,495\,780\,278\,905\,864\,192}{114\,383\,962\,274\,805} k_0 \\
& -5989\,447\,561\,676\,625\,655\,773\,346\,266\,087\,424 \overline{k_1} \\
& +35\,015\,231\,979\,146\,292\,673\,985\,442\,159\,263\,744 \overline{k_2} \\
& -68\,187\,557\,175\,000\,075\,292\,048\,857\,069\,780\,992 \overline{k_3} \\
& +14\,743\,255\,650\,383\,988\,042\,256\,071\,287\,373\,824 \overline{k_4} \\
& -258\,006\,974\,810\,097\,192\,419\,997\,625\,599\,655\,936 \overline{k_5} \\
& +501\,270\,695\,866\,474\,098\,703\,436\,228\,023\,287\,808 \overline{k_6} \\
& -324\,351\,628\,019\,591\,893\,187\,426\,198\,006\,792\,192 \overline{k_7} \\
& +377\,427\,350\,424\,646\,866\,405\,077\,853\,562\,470\,400 \overline{k_8} \\
& -3656\,327\,470\,639\,677\,595\,817\,327\,112\,375\,762\,944 \overline{k_9} \\
& +2358\,920\,956\,862\,332\,284\,482\,792\,313\,451\,446\,272 \overline{k_{10}} \\
& -13\,681\,741\,592\,854\,326\,405\,912\,344\,279\,577\,001\,984 \overline{k_{11}} \\
& +26\,419\,914\,875\,823\,519\,212\,490\,359\,229\,317\,644\,288 \overline{k_{12}} \\
& -1887\,136\,781\,749\,380\,898\,110\,924\,645\,178\,802\,176 \overline{k_{13}} \\
& +98\,131\,112\,880\,572\,522\,242\,117\,380\,737\,148\,649\,472 \overline{k_{14}} \\
& -37\,742\,735\,802\,385\,585\,501\,894\,001\,600\,134\,905\,856 \overline{k_{15}} \\
& +120\,776\,754\,793\,206\,417\,157\,872\,266\,076\,359\,753\,728 \overline{k_{16}} \\
& -694\,466\,341\,211\,626\,987\,142\,538\,810\,268\,674\,162\,688 \overline{k_{17}} \\
& +1328\,544\,306\,870\,460\,415\,632\,279\,898\,262\,536\,716\,288 \overline{k_{18}} \\
& -845\,437\,287\,277\,448\,828\,770\,823\,103\,088\,703\,832\,064 \overline{k_{19}} \\
& +4831\,070\,218\,446\,945\,926\,990\,091\,326\,905\,112\,723\,456 \overline{k_{20}} \\
& -1835\,806\,684\,806\,116\,200\,528\,269\,977\,256\,661\,614\,592 \overline{k_{21}} \\
& +386\,485\,618\,181\,183\,564\,484\,484\,981\,309\,605\,150\,720 \overline{k_{22}} \\
& -32\,851\,277\,569\,339\,378\,817\,578\,666\,413\,118\,764\,089\,344 \overline{k_{23}} \\
& +12\,367\,539\,798\,520\,645\,310\,797\,918\,978\,414\,645\,575\,680 \overline{k_{24}} \\
& -38\,648\,561\,890\,860\,618\,940\,911\,724\,361\,092\,199\,088\,128 \overline{k_{25}} \\
& +216\,431\,946\,685\,734\,179\,511\,824\,564\,385\,691\,492\,941\,824 \overline{k_{26}} \\
& -401\,945\,043\,995\,972\,288\,592\,611\,500\,958\,224\,763\,322\,368 \overline{k_{27}} \\
& +247\,350\,796\,382\,669\,271\,376\,386\,677\,640\,300\,842\,713\,088 \overline{k_{28}} \\
& -1360\,429\,380\,457\,105\,212\,443\,921\,844\,549\,354\,501\,701\,632 \overline{k_{29}}, \\
& \quad \quad \quad 114\,383\,962\,274\,805
\end{aligned}$$

$$\begin{aligned}
& + \frac{2473\ 507\ 964\ 993\ 461\ 225\ 415\ 890\ 467\ 653\ 243\ 216\ 330\ 752}{114\ 383\ 962\ 274\ 805} k_{30} \\
& - \frac{494\ 701\ 593\ 084\ 316\ 573\ 846\ 962\ 731\ 319\ 923\ 618\ 873\ 344}{12\ 709\ 329\ 141\ 645} k_{31} \\
& + \frac{7915\ 225\ 490\ 453\ 169\ 675\ 551\ 946\ 086\ 679\ 730\ 121\ 080\ 832}{114\ 383\ 962\ 274\ 805} k_{32} \\
& - \frac{2770\ 328\ 921\ 966\ 181\ 596\ 376\ 494\ 588\ 989\ 144\ 626\ 626\ 560}{22\ 876\ 792\ 454\ 961} k_{33} \\
& + \frac{7915\ 225\ 492\ 019\ 197\ 043\ 254\ 984\ 008\ 880\ 404\ 872\ 298\ 496}{38\ 127\ 987\ 424\ 935} k_{34} \\
& - \frac{39\ 576\ 127\ 462\ 709\ 787\ 987\ 822\ 059\ 108\ 802\ 823\ 330\ 988\ 032}{114\ 383\ 962\ 274\ 805} k_{35} \\
& + \frac{63\ 321\ 803\ 943\ 364\ 067\ 424\ 676\ 469\ 968\ 467\ 168\ 034\ 029\ 568}{114\ 383\ 962\ 274\ 805} k_{36} \\
& - \frac{31\ 660\ 901\ 972\ 673\ 476\ 480\ 109\ 394\ 868\ 544\ 749\ 575\ 340\ 032}{38\ 127\ 987\ 424\ 935} k_{37} \\
& + \frac{126\ 643\ 607\ 892\ 676\ 791\ 455\ 979\ 899\ 242\ 801\ 329\ 418\ 010\ 624}{114\ 383\ 962\ 274\ 805} k_{38} \\
& - \frac{126\ 643\ 607\ 892\ 676\ 791\ 455\ 979\ 899\ 242\ 801\ 329\ 418\ 010\ 624}{114\ 383\ 962\ 274\ 805} k_{39}, \\
\\
r_8 &:= \frac{393\ 586\ 982\ 032\ 626\ 320\ 224\ 542\ 959\ 599\ 616}{38\ 127\ 987\ 424\ 935} k_0 \\
& - \frac{255\ 831\ 539\ 678\ 124\ 865\ 960\ 165\ 341\ 396\ 992}{12\ 709\ 329\ 141\ 645} k_1 \\
& + \frac{1495\ 630\ 548\ 122\ 141\ 403\ 121\ 218\ 425\ 454\ 592}{38\ 127\ 987\ 424\ 935} k_2 \\
& - \frac{2912\ 543\ 715\ 455\ 529\ 897\ 419\ 801\ 872\ 039\ 936}{38\ 127\ 987\ 424\ 935} k_3 \\
& + \frac{629\ 739\ 185\ 171\ 772\ 756\ 872\ 786\ 316\ 623\ 872}{4236\ 443\ 047\ 215} k_4 \\
& - \frac{11\ 020\ 435\ 797\ 938\ 724\ 782\ 290\ 334\ 413\ 488\ 128}{38\ 127\ 987\ 424\ 935} k_5 \\
& + \frac{21\ 411\ 132\ 512\ 199\ 532\ 418\ 314\ 087\ 027\ 441\ 664}{38\ 127\ 987\ 424\ 935} k_6 \\
& - \frac{13\ 854\ 262\ 276\ 850\ 943\ 880\ 973\ 246\ 116\ 397\ 056}{12\ 709\ 329\ 141\ 645} k_7 \\
& + \frac{16\ 121\ 323\ 444\ 490\ 193\ 748\ 947\ 932\ 826\ 042\ 368}{7625\ 597\ 484\ 987} k_8 \\
& - \frac{156\ 175\ 321\ 471\ 443\ 047\ 508\ 360\ 942\ 019\ 674\ 112}{38\ 127\ 987\ 424\ 935} k_9 \\
& + \frac{100\ 758\ 272\ 272\ 359\ 100\ 116\ 586\ 040\ 714\ 592\ 256}{12\ 709\ 329\ 141\ 645} k_{10} \\
& - \frac{584\ 397\ 981\ 053\ 200\ 864\ 742\ 062\ 767\ 611\ 052\ 032}{38\ 127\ 987\ 424\ 935} k_{11} \\
& + \frac{1128\ 492\ 656\ 343\ 274\ 885\ 319\ 456\ 963\ 610\ 804\ 224}{38\ 127\ 987\ 424\ 935} k_{12} \\
& - \frac{80\ 606\ 618\ 521\ 127\ 330\ 231\ 875\ 400\ 093\ 401\ 088}{1412\ 147\ 682\ 405} k_{13} \\
& + \frac{4191\ 544\ 172\ 945\ 153\ 496\ 953\ 647\ 145\ 886\ 416\ 896}{38\ 127\ 987\ 424\ 935} k_{14} \\
& - \frac{1612\ 132\ 377\ 596\ 258\ 960\ 213\ 475\ 327\ 966\ 445\ 568}{7625\ 597\ 484\ 987} k_{15} \\
& + \frac{5158\ 823\ 617\ 958\ 877\ 027\ 672\ 864\ 025\ 135\ 284\ 224}{12\ 709\ 329\ 141\ 645} k_{16} \\
& - \frac{29\ 663\ 235\ 852\ 471\ 295\ 538\ 329\ 043\ 431\ 571\ 062\ 784}{38\ 127\ 987\ 424\ 935} k_{17} \\
& + \frac{56\ 747\ 059\ 974\ 790\ 345\ 254\ 739\ 673\ 923\ 488\ 579\ 584}{38\ 127\ 987\ 424\ 935} k_{18} \\
& - \frac{36\ 111\ 765\ 484\ 976\ 067\ 145\ 611\ 159\ 735\ 382\ 310\ 912}{12\ 709\ 329\ 141\ 645} k_{19} \\
& + \frac{206\ 352\ 945\ 860\ 665\ 253\ 318\ 877\ 893\ 515\ 477\ 516\ 288}{38\ 127\ 987\ 424\ 935} k_{20} \\
& - \frac{78\ 414\ 119\ 503\ 832\ 395\ 503\ 045\ 820\ 949\ 221\ 867\ 520}{7625\ 597\ 484\ 987} k_{21} \\
& + \frac{16\ 508\ 235\ 699\ 005\ 841\ 772\ 034\ 663\ 491\ 236\ 265\ 984}{847\ 288\ 609\ 443} k_{22} \\
& - \frac{1403\ 200\ 035\ 438\ 717\ 174\ 141\ 703\ 870\ 525\ 296\ 607\ 232}{38\ 127\ 987\ 424\ 935} k_{23} \\
& + \frac{528\ 263\ 543\ 082\ 950\ 655\ 034\ 983\ 582\ 582\ 603\ 513\ 856}{7625\ 597\ 484\ 987} k_{24} \\
& - \frac{1650\ 823\ 573\ 009\ 832\ 582\ 947\ 216\ 486\ 209\ 991\ 737\ 344}{12\ 709\ 329\ 141\ 645} k_{25} \\
& + \frac{9244\ 612\ 012\ 997\ 724\ 138\ 213\ 174\ 505\ 616\ 370\ 040\ 832}{38\ 127\ 987\ 424\ 935} k_{26} \\
& - \frac{17\ 168\ 565\ 173\ 451\ 750\ 971\ 810\ 324\ 718\ 858\ 465\ 705\ 984}{38\ 127\ 987\ 424\ 935} k_{27} \\
& + \frac{10\ 565\ 270\ 879\ 281\ 146\ 012\ 048\ 473\ 765\ 655\ 246\ 536\ 704}{12\ 709\ 329\ 141\ 645} k_{28} \\
& - \frac{58\ 108\ 989\ 851\ 110\ 615\ 699\ 195\ 340\ 499\ 101\ 487\ 988\ 736}{38\ 127\ 987\ 424\ 935} k_{29} \\
& + \frac{105\ 652\ 708\ 842\ 684\ 839\ 512\ 718\ 352\ 621\ 382\ 607\ 568\ 896}{38\ 127\ 987\ 424\ 935} k_{30} \\
& - \frac{21\ 130\ 541\ 772\ 196\ 982\ 474\ 627\ 832\ 562\ 637\ 405\ 683\ 712}{4236\ 443\ 047\ 215} k_{31} \\
& + \frac{338\ 088\ 668\ 402\ 346\ 429\ 163\ 650\ 824\ 128\ 204\ 254\ 478\ 336}{38\ 127\ 987\ 424\ 935} k_{32} \\
& - \frac{118\ 331\ 033\ 953\ 968\ 591\ 606\ 454\ 917\ 509\ 737\ 386\ 868\ 736}{7625\ 597\ 484\ 987} k_{33} \\
& + \frac{338\ 088\ 668\ 469\ 286\ 876\ 537\ 316\ 652\ 340\ 231\ 628\ 914\ 688}{12\ 709\ 329\ 141\ 645} k_{34}
\end{aligned}$$

$$\begin{aligned}
& - \frac{1690\,443\,342\,458\,161\,947\,547\,978\,038\,201\,346\,986\,868\,736}{38\,127\,987\,424\,935} k_{35} \\
& + \frac{2704\,709\,348\,062\,509\,069\,483\,659\,936\,747\,762\,109\,906\,944}{38\,127\,987\,424\,935} k_{36} \\
& - \frac{1352\,354\,674\,073\,633\,998\,472\,998\,550\,886\,646\,751\,952\,896}{12\,709\,329\,141\,645} k_{37} \\
& + \frac{5409\,418\,696\,379\,294\,921\,354\,331\,368\,572\,118\,401\,810\,432}{38\,127\,987\,424\,935} k_{38} \\
& - \frac{5409\,418\,696\,379\,294\,921\,354\,331\,368\,572\,118\,401\,810\,432}{38\,127\,987\,424\,935} k_{39},
\end{aligned}$$

$$\begin{aligned}
r_9 := & \frac{179\,838\,488\,635\,126\,351\,551\,576\,832}{38\,127\,987\,424\,935} k_0 \\
& - \frac{116\,895\,039\,019\,082\,356\,934\,718\,304}{12\,709\,329\,141\,645} k_1 \\
& + \frac{683\,386\,400\,559\,137\,704\,456\,978\,784}{38\,127\,987\,424\,935} k_2 \\
& - \frac{1330\,805\,107\,205\,857\,819\,552\,138\,112}{38\,127\,987\,424\,935} k_3 \\
& + \frac{287\,741\,646\,596\,028\,188\,135\,338\,304}{4236\,443\,047\,215} k_4 \\
& - \frac{5035\,478\,843\,653\,384\,607\,230\,746\,016}{38\,127\,987\,424\,935} k_5 \\
& + \frac{9783\,216\,089\,325\,568\,954\,380\,487\,168}{38\,127\,987\,424\,935} k_6 \\
& - \frac{6330\,316\,322\,833\,851\,114\,702\,966\,272}{12\,709\,329\,141\,645} k_7 \\
& + \frac{7366\,186\,298\,162\,138\,461\,906\,567\,168}{7625\,597\,484\,987} k_8 \\
& - \frac{71\,359\,930\,042\,090\,571\,665\,157\,494\,784}{38\,127\,987\,424\,935} k_9 \\
& + \frac{46\,038\,664\,706\,507\,874\,621\,560\,348\,672}{12\,709\,329\,141\,645} k_{10} \\
& - \frac{267\,024\,256\,154\,801\,691\,665\,880\,408\,064}{38\,127\,987\,424\,935} k_{11} \\
& + \frac{515\,633\,047\,861\,590\,009\,235\,578\,093\,568}{38\,127\,987\,424\,935} k_{12} \\
& - \frac{36\,830\,932\,086\,095\,360\,703\,430\,230\,016}{1412\,147\,682\,405} k_{13} \\
& + \frac{1915\,208\,472\,951\,602\,704\,694\,260\,662\,272}{38\,127\,987\,424\,935} k_{14} \\
& - \frac{736\,618\,644\,980\,296\,558\,020\,806\,705\,152}{7625\,597\,484\,987} k_{15} \\
& + \frac{2357\,179\,668\,314\,800\,031\,460\,688\,396\,288}{12\,709\,329\,141\,645} k_{16} \\
& - \frac{13\,553\,783\,115\,120\,302\,625\,811\,234\,029\,568}{38\,127\,987\,424\,935} k_{17} \\
& + \frac{25\,928\,976\,431\,808\,812\,432\,339\,016\,613\,888}{38\,127\,987\,424\,935} k_{18} \\
& - \frac{16\,500\,257\,750\,390\,224\,373\,775\,717\,105\,664}{12\,709\,329\,141\,645} k_{19} \\
& + \frac{94\,287\,187\,250\,293\,851\,593\,228\,372\,934\,656}{38\,127\,987\,424\,935} k_{20} \\
& - \frac{35\,829\,131\,189\,890\,622\,074\,671\,251\,587\,072}{7625\,597\,484\,987} k_{21} \\
& + \frac{7542\,974\,993\,681\,232\,058\,952\,393\,424\,896}{847\,288\,609\,443} k_{22} \\
& - \frac{641\,152\,874\,926\,326\,014\,188\,112\,538\,763\,264}{38\,127\,987\,424\,935} k_{23} \\
& + \frac{241\,375\,200\,121\,512\,826\,414\,639\,194\,570\,752}{7625\,597\,484\,987} k_{24} \\
& - \frac{754\,297\,500\,776\,276\,498\,192\,746\,674\,126\,848}{12\,709\,329\,141\,645} k_{25} \\
& + \frac{4224\,066\,006\,223\,152\,733\,677\,064\,766\,357\,504}{38\,127\,987\,424\,935} k_{26} \\
& - \frac{7844\,694\,014\,480\,926\,781\,448\,600\,890\,114\,048}{38\,127\,987\,424\,935} k_{27} \\
& + \frac{4827\,504\,010\,410\,643\,728\,681\,803\,058\,249\,728}{12\,709\,329\,141\,645} k_{28} \\
& - \frac{26\,551\,272\,064\,080\,374\,485\,196\,038\,243\,090\,432}{38\,127\,987\,424\,935} k_{29} \\
& + \frac{48\,275\,040\,126\,891\,410\,115\,246\,048\,959\,004\,672}{38\,127\,987\,424\,935} k_{30} \\
& - \frac{9655\,008\,026\,995\,694\,633\,733\,402\,329\,268\,224}{4236\,443\,047\,215} k_{31} \\
& + \frac{154\,480\,128\,453\,303\,013\,393\,871\,656\,830\,369\,792}{38\,127\,987\,424\,935} k_{32} \\
& - \frac{54\,068\,044\,964\,609\,655\,319\,989\,876\,768\,636\,928}{7625\,597\,484\,987} k_{33} \\
& + \frac{154\,480\,128\,483\,618\,517\,027\,351\,651\,923\,521\,536}{12\,709\,329\,141\,645} k_{34} \\
& - \frac{772\,400\,642\,468\,675\,790\,353\,935\,452\,866\,609\,152}{38\,127\,987\,424\,935} k_{35} \\
& + \frac{1235\,841\,028\,008\,501\,331\,639\,623\,955\,385\,417\,728}{38\,127\,987\,424\,935} k_{36} \\
& - \frac{617\,920\,514\,023\,441\,759\,206\,913\,154\,442\,330\,112}{12\,709\,329\,141\,645} k_{37} \\
& + \frac{2471\,682\,056\,132\,149\,223\,601\,854\,971\,268\,562\,944}{38\,127\,987\,424\,935} k_{38} \\
& - \frac{2471\,682\,056\,132\,149\,223\,601\,854\,971\,268\,562\,944}{38\,127\,987\,424\,935} k_{39},
\end{aligned}$$

$$\begin{aligned}
r_{10} := & -\frac{534\,759\,759\,758\,335\,890\,415\,616}{295\,245}k_0 \\
& + \frac{347\,593\,846\,519\,102\,424\,738\,432}{98\,415}k_1 \\
& - \frac{2032\,087\,117\,220\,905\,975\,940\,992}{295\,245}k_2 \\
& + \frac{3957\,222\,306\,995\,590\,240\,002\,496}{295\,245}k_3 \\
& - \frac{855\,615\,639\,148\,580\,630\,996\,992}{32\,805}k_4 \\
& + \frac{14\,973\,273\,768\,902\,819\,985\,270\,848}{295\,245}k_5 \\
& - \frac{29\,090\,932\,043\,347\,518\,083\,537\,024}{295\,245}k_6 \\
& + \frac{18\,823\,544\,351\,920\,995\,533\,981\,056}{98\,415}k_7 \\
& - \frac{21\,903\,760\,794\,567\,851\,929\,321\,472}{59\,049}k_8 \\
& + \frac{212\,192\,683\,528\,251\,217\,412\,196\,352}{295\,245}k_9 \\
& - \frac{136\,898\,505\,989\,032\,587\,222\,071\,296}{98\,415}k_{10} \\
& + \frac{794\,011\,337\,294\,218\,415\,110\,510\,592}{295\,245}k_{11} \\
& - \frac{1533\,263\,276\,475\,797\,885\,935\,222\,784}{295\,245}k_{12} \\
& + \frac{109\,518\,805\,749\,190\,969\,043\,222\,528}{10\,935}k_{13} \\
& - \frac{5694\,977\,912\,324\,055\,810\,953\,445\,376}{295\,245}k_{14} \\
& + \frac{2190\,376\,124\,717\,863\,583\,821\,070\,336}{59\,049}k_{15} \\
& - \frac{7009\,203\,612\,179\,259\,061\,377\,695\,744}{98\,415}k_{16} \\
& + \frac{40\,302\,920\,836\,709\,144\,067\,911\,450\,624}{295\,245}k_{17} \\
& - \frac{77\,101\,239\,974\,115\,859\,789\,364\,854\,784}{295\,245}k_{18} \\
& + \frac{49\,064\,425\,501\,022\,348\,205\,020\,413\,952}{98\,415}k_{19} \\
& - \frac{280\,368\,146\,034\,659\,910\,913\,682\,833\,408}{295\,245}k_{20} \\
& + \frac{106\,539\,895\,597\,155\,532\,501\,403\,303\,936}{59\,049}k_{21} \\
& - \frac{22\,429\,451\,723\,608\,854\,574\,403\,682\,304}{65\,61}k_{22} \\
& + \frac{1906\,503\,397\,892\,480\,469\,781\,773\,811\,712}{295\,245}k_{23} \\
& - \frac{717\,742\,456\,123\,473\,842\,526\,641\,717\,248}{59\,049}k_{24} \\
& + \frac{2242\,945\,176\,571\,712\,538\,845\,605\,003\,264}{98\,415}k_{25} \\
& - \frac{12\,560\,492\,994\,411\,835\,509\,941\,764\,882\,432}{295\,245}k_{26} \\
& + \frac{23\,326\,629\,855\,508\,285\,070\,543\,750\,692\,864}{295\,245}k_{27} \\
& - \frac{14\,354\,849\,146\,335\,159\,754\,206\,534\,959\,104}{98\,415}k_{28} \\
& + \frac{78\,951\,670\,325\,245\,487\,475\,027\,687\,243\,776}{295\,245}k_{29} \\
& - \frac{143\,548\,491\,530\,897\,046\,598\,979\,573\,252\,096}{295\,245}k_{30} \\
& + \frac{28\,709\,698\,311\,136\,365\,534\,170\,140\,639\,232}{32\,805}k_{31} \\
& - \frac{459\,355\,173\,042\,101\,065\,298\,742\,152\,790\,016}{295\,245}k_{32} \\
& + \frac{160\,774\,310\,582\,541\,569\,000\,500\,342\,292\,480}{59\,049}k_{33} \\
& - \frac{459\,355\,173\,132\,762\,877\,762\,452\,070\,596\,608}{98\,415}k_{34} \\
& + \frac{2296\,775\,865\,815\,135\,968\,960\,508\,716\,711\,936}{295\,245}k_{35} \\
& - \frac{3674\,841\,385\,479\,542\,382\,829\,162\,289\,168\,384}{295\,245}k_{36} \\
& + \frac{1837\,420\,692\,797\,169\,293\,631\,105\,643\,053\,056}{98\,415}k_{37} \\
& - \frac{7349\,682\,771\,303\,473\,378\,957\,471\,569\,149\,952}{295\,245}k_{38} \\
& + \frac{7349\,682\,771\,303\,473\,378\,957\,471\,569\,149\,952}{295\,245}k_{39},
\end{aligned}$$

$$\begin{aligned}
r_{11} := & \frac{127\,297\,305\,281\,775\,452\,050\,973\,664\,477\,184}{12\,709\,329\,141\,645}k_0 \\
& + \frac{82\,743\,248\,679\,789\,820\,929\,407\,344\,181\,248}{4236\,443\,047\,215}k_1 \\
& - \frac{483\,729\,763\,456\,601\,069\,059\,828\,034\,306\,048}{12\,709\,329\,141\,645}k_2 \\
& + \frac{942\,000\,070\,001\,350\,353\,914\,871\,167\,320\,064}{12\,709\,329\,141\,645}k_3
\end{aligned}$$

$$\begin{aligned}
& - \frac{203\,675\,691\,791\,498\,041\,781\,607\,011\,975\,168}{1412\,147\,682\,405} k_4 \\
& + \frac{3564\,324\,623\,481\,061\,652\,904\,466\,324\,652\,032}{12\,709\,329\,141\,645} k_5 \\
& - \frac{6924\,973\,586\,404\,909\,673\,720\,670\,507\,237\,376}{12\,709\,329\,141\,645} k_6 \\
& + \frac{4480\,865\,281\,554\,924\,758\,673\,078\,955\,802\,624}{4236\,443\,047\,215} k_7 \\
& - \frac{5214\,097\,803\,668\,036\,388\,120\,407\,874\,469\,888}{2541\,865\,828\,329} k_8 \\
& + \frac{50\,511\,572\,665\,639\,946\,749\,527\,970\,889\,596\,928}{12\,709\,329\,141\,645} k_9 \\
& - \frac{32\,588\,111\,511\,210\,471\,859\,378\,796\,430\,884\,864}{4236\,443\,047\,215} k_{10} \\
& + \frac{189\,011\,047\,367\,993\,905\,271\,337\,949\,497\,131\,008}{12\,709\,329\,141\,645} k_{11} \\
& - \frac{364\,986\,851\,145\,794\,959\,221\,338\,923\,583\,143\,936}{12\,709\,329\,141\,645} k_{12} \\
& + \frac{26\,070\,489\,435\,620\,928\,779\,631\,040\,871\,268\,352}{470\,715\,894\,135} k_{13} \\
& - \frac{1355\,665\,453\,832\,161\,351\,314\,345\,427\,975\,798\,784}{12\,709\,329\,141\,645} k_{14} \\
& + \frac{521\,409\,791\,029\,517\,992\,141\,868\,185\,981\,812\,736}{2541\,865\,828\,329} k_{15} \\
& - \frac{1668\,511\,334\,412\,900\,434\,091\,690\,436\,115\,562\,496}{4236\,443\,047\,215} k_{16} \\
& + \frac{9593\,940\,188\,776\,250\,018\,404\,751\,775\,530\,745\,856}{12\,709\,329\,141\,645} k_{17} \\
& - \frac{18\,353\,624\,735\,821\,501\,169\,810\,203\,947\,172\,888\,576}{12\,709\,329\,141\,645} k_{18} \\
& + \frac{11\,679\,579\,392\,360\,520\,340\,897\,359\,436\,529\,532\,928}{4236\,443\,047\,215} k_{19} \\
& - \frac{66\,740\,453\,745\,686\,394\,654\,403\,494\,571\,956\,764\,672}{12\,709\,329\,141\,645} k_{20} \\
& + \frac{25\,361\,372\,448\,175\,319\,400\,480\,953\,221\,941\,035\,008}{2541\,865\,828\,329} k_{21} \\
& - \frac{5339\,236\,309\,399\,957\,117\,150\,487\,717\,693\,358\,080}{282\,429\,536\,481} k_{22} \\
& + \frac{453\,835\,086\,629\,689\,461\,354\,184\,155\,838\,491\,394\,048}{12\,709\,329\,141\,645} k_{23} \\
& - \frac{170\,855\,562\,131\,801\,484\,989\,127\,103\,203\,579\,527\,168}{2541\,865\,828\,329} k_{24} \\
& + \frac{533\,923\,631\,944\,871\,026\,393\,499\,184\,609\,326\,268\,416}{4236\,443\,047\,215} k_{25} \\
& - \frac{2989\,972\,340\,230\,084\,010\,050\,305\,668\,892\,430\,696\,448}{12\,709\,329\,141\,645} k_{26} \\
& + \frac{5552\,805\,776\,799\,488\,819\,770\,945\,370\,427\,685\,339\,136}{12\,709\,329\,141\,645} k_{27} \\
& - \frac{3417\,111\,248\,331\,219\,941\,875\,278\,165\,761\,721\,368\,576}{4236\,443\,047\,215} k_{28} \\
& + \frac{18\,794\,111\,870\,690\,218\,422\,669\,300\,847\,162\,188\,365\,824}{12\,709\,329\,141\,645} k_{29} \\
& - \frac{34\,171\,112\,499\,430\,346\,826\,023\,640\,517\,408\,460\,898\,304}{12\,709\,329\,141\,645} k_{30} \\
& + \frac{6834\,222\,501\,068\,915\,456\,761\,403\,126\,354\,771\,181\,568}{1412\,147\,682\,405} k_{31} \\
& - \frac{109\,347\,560\,032\,355\,164\,468\,094\,250\,170\,795\,933\,302\,784}{12\,709\,329\,141\,645} k_{32} \\
& + \frac{38\,271\,646\,015\,573\,228\,535\,190\,532\,258\,405\,279\,596\,544}{2541\,865\,828\,329} k_{33} \\
& - \frac{109\,347\,560\,053\,988\,873\,190\,463\,380\,252\,879\,751\,217\,152}{4236\,443\,047\,215} k_{34} \\
& + \frac{546\,737\,800\,306\,052\,467\,050\,127\,092\,412\,335\,379\,185\,664}{12\,709\,329\,141\,645} k_{35} \\
& - \frac{874\,780\,480\,531\,519\,557\,007\,883\,920\,094\,815\,653\,462\,016}{12\,709\,329\,141\,645} k_{36} \\
& + \frac{437\,390\,240\,279\,455\,963\,148\,220\,207\,935\,360\,025\,493\,504}{4236\,443\,047\,215} k_{37} \\
& - \frac{1749\,560\,961\,145\,216\,221\,881\,437\,327\,517\,344\,499\,499\,008}{12\,709\,329\,141\,645} k_{38} \\
& + \frac{1749\,560\,961\,145\,216\,221\,881\,437\,327\,517\,344\,499\,499\,008}{12\,709\,329\,141\,645} k_{39}, \\
& r_{12} := - \frac{29\,124\,995\,706\,512\,128}{45} k_0 + \frac{18\,931\,247\,309\,125\,216}{15} k_1 \\
& - \frac{110\,674\,984\,780\,943\,456}{45} k_2 + \frac{215\,524\,971\,234\,923\,648}{15} k_3 \\
& - \frac{46\,599\,993\,944\,803\,136}{45} k_4 + \frac{815\,499\,896\,530\,017\,184}{45} k_5 \\
& - \frac{1584\,399\,803\,167\,117\,312}{45} k_6 + \frac{1025\,199\,874\,976\,043\,008}{45} k_7 \\
& - \frac{1192\,959\,856\,852\,615\,168}{9} k_8 + \frac{11\,556\,798\,632\,587\,805\,696}{45} k_9 \\
& - \frac{7455\,999\,128\,405\,639\,168}{15} k_{10} + \frac{43\,244\,794\,996\,838\,588\,416}{45} k_{11} \\
& - \frac{83\,507\,190\,423\,458\,824\,192}{15} k_{12} + \frac{17\,894\,397\,963\,102\,707\,712}{45} k_{13} \\
& - \frac{310\,169\,564\,913\,679\,597\,568}{45} k_{14} + \frac{119\,295\,986\,575\,367\,077\,888}{5} k_{15} \\
& - \frac{381\,747\,157\,226\,028\,531\,712}{15} k_{16} + \frac{2195\,046\,154\,920\,079\,654\,912}{45} k_{17}
\end{aligned}$$

$$\begin{aligned}
& - \frac{4199\ 218\ 732\ 506\ 233\ 700\ 352}{15\ 269\ 886\ 307\ 198\ 790\ 795\ 264} k_{18} + \frac{2672\ 230\ 103\ 200\ 684\ 834\ 816}{5802\ 556\ 797\ 702\ 734\ 086\ 144} k_{19} \\
& - \frac{1221\ 590\ 904\ 940\ 525\ 518\ 848}{103\ 835\ 226\ 930\ 682\ 355\ 777\ 536} k_{22} \\
& + \frac{103\ 835\ 226\ 930\ 682\ 355\ 777\ 536}{122\ 159\ 090\ 524\ 112\ 826\ 662\ 912} k_{23} - \frac{39\ 090\ 908\ 965\ 286\ 054\ 985\ 728}{684\ 090\ 906\ 967\ 606\ 418\ 210\ 816} k_{24} \\
& + \frac{122\ 159\ 090\ 524\ 112\ 826\ 662\ 912}{1270\ 454\ 541\ 557\ 233\ 879\ 089\ 152} k_{25} - \frac{684\ 090\ 906\ 967\ 606\ 418\ 210\ 816}{781\ 818\ 179\ 441\ 155\ 377\ 201\ 152} k_{26} \\
& + \frac{1270\ 454\ 541\ 557\ 233\ 879\ 089\ 152}{781\ 818\ 179\ 441\ 155\ 377\ 201\ 152} k_{27} - \frac{781\ 818\ 179\ 441\ 155\ 377\ 201\ 152}{4299\ 999\ 987\ 014\ 028\ 815\ 761\ 408} k_{28} \\
& - \frac{781\ 818\ 179\ 441\ 155\ 377\ 201\ 152}{4299\ 999\ 987\ 014\ 028\ 815\ 761\ 408} k_{29} \\
& + \frac{1563\ 636\ 358\ 955\ 258\ 626\ 441\ 216}{1563\ 636\ 358\ 955\ 258\ 626\ 441\ 216} k_{30} + \frac{25\ 018\ 181\ 743\ 487\ 685\ 113\ 151\ 488}{25\ 018\ 181\ 743\ 487\ 685\ 113\ 151\ 488} k_{31} \\
& + \frac{8756\ 363\ 610\ 272\ 311\ 860\ 527\ 104}{8756\ 363\ 610\ 272\ 311\ 860\ 527\ 104} k_{32} - \frac{25\ 018\ 181\ 743\ 487\ 685\ 113\ 151\ 488}{25\ 018\ 181\ 743\ 487\ 685\ 113\ 151\ 488} k_{33} \\
& + \frac{125\ 090\ 908\ 719\ 078\ 622\ 036\ 492\ 288}{125\ 090\ 908\ 719\ 078\ 622\ 036\ 492\ 288} k_{34} - \frac{200\ 145\ 453\ 950\ 935\ 308\ 364\ 152\ 832}{200\ 145\ 453\ 950\ 935\ 308\ 364\ 152\ 832} k_{35} \\
& + \frac{100\ 072\ 726\ 975\ 597\ 671\ 432\ 060\ 928}{100\ 072\ 726\ 975\ 597\ 671\ 432\ 060\ 928} k_{36} - \frac{400\ 290\ 907\ 902\ 650\ 720\ 228\ 212\ 736}{400\ 290\ 907\ 902\ 650\ 720\ 228\ 212\ 736} k_{37} \\
& + \frac{400\ 290\ 907\ 902\ 650\ 720\ 228\ 212\ 736}{400\ 290\ 907\ 902\ 650\ 720\ 228\ 212\ 736} k_{39}, \\
r_{13} := & \frac{10\ 938\ 283\ 015\ 553\ 637\ 252\ 608}{41\ 565\ 476\ 078\ 131\ 935\ 267\ 136} k_0 - \frac{7109\ 884\ 015\ 104\ 497\ 247\ 296}{41\ 565\ 476\ 078\ 131\ 935\ 267\ 136} k_1 \\
& + \frac{41\ 565\ 476\ 078\ 131\ 935\ 267\ 136}{17\ 501\ 253\ 307\ 856\ 085\ 291\ 136} k_2 - \frac{80\ 943\ 296\ 055\ 667\ 664\ 241\ 088}{17\ 501\ 253\ 307\ 856\ 085\ 291\ 136} k_3 \\
& + \frac{17\ 501\ 253\ 307\ 856\ 085\ 291\ 136}{595\ 042\ 618\ 860\ 396\ 089\ 209\ 472} k_4 - \frac{306\ 271\ 934\ 603\ 563\ 436\ 196\ 224}{595\ 042\ 618\ 860\ 396\ 089\ 209\ 472} k_5 \\
& + \frac{595\ 042\ 618\ 860\ 396\ 089\ 209\ 472}{448\ 032\ 093\ 528\ 377\ 158\ 541\ 312} k_6 - \frac{385\ 027\ 578\ 721\ 580\ 361\ 347\ 968}{448\ 032\ 093\ 528\ 377\ 158\ 541\ 312} k_7 \\
& + \frac{448\ 032\ 093\ 528\ 377\ 158\ 541\ 312}{2800\ 200\ 605\ 458\ 783\ 102\ 056\ 448} k_8 - \frac{4340\ 310\ 923\ 038\ 907\ 837\ 349\ 376}{2800\ 200\ 605\ 458\ 783\ 102\ 056\ 448} k_9 \\
& + \frac{2800\ 200\ 605\ 458\ 783\ 102\ 056\ 448}{31\ 362\ 246\ 973\ 119\ 974\ 846\ 676\ 992} k_{10} - \frac{16\ 241\ 163\ 563\ 913\ 606\ 532\ 560\ 896}{31\ 362\ 246\ 973\ 119\ 974\ 846\ 676\ 992} k_{11} \\
& + \frac{31\ 362\ 246\ 973\ 119\ 974\ 846\ 676\ 992}{116\ 488\ 346\ 477\ 445\ 123\ 970\ 367\ 488} k_{12} - \frac{2240\ 160\ 503\ 933\ 335\ 246\ 168\ 064}{116\ 488\ 346\ 477\ 445\ 123\ 970\ 367\ 488} k_{13} \\
& + \frac{116\ 488\ 346\ 477\ 445\ 123\ 970\ 367\ 488}{143\ 370\ 273\ 154\ 763\ 418\ 393\ 116\ 672} k_{14} - \frac{44\ 803\ 210\ 277\ 407\ 612\ 656\ 877\ 568}{143\ 370\ 273\ 154\ 763\ 418\ 393\ 116\ 672} k_{15} \\
& + \frac{143\ 370\ 273\ 154\ 763\ 418\ 393\ 116\ 672}{1577\ 073\ 009\ 604\ 242\ 280\ 417\ 329\ 152} k_{16} - \frac{824\ 379\ 072\ 000\ 972\ 002\ 660\ 974\ 592}{1577\ 073\ 009\ 604\ 242\ 280\ 417\ 329\ 152} k_{17} \\
& + \frac{1577\ 073\ 009\ 604\ 242\ 280\ 417\ 329\ 152}{5734\ 810\ 957\ 776\ 822\ 566\ 234\ 619\ 904} k_{18} - \frac{1003\ 591\ 916\ 487\ 518\ 748\ 526\ 247\ 936}{5734\ 810\ 957\ 776\ 822\ 566\ 234\ 619\ 904} k_{19} \\
& + \frac{5734\ 810\ 957\ 776\ 822\ 566\ 234\ 619\ 904}{458\ 784\ 877\ 455\ 576\ 544\ 684\ 539\ 904} k_{20} - \frac{2179\ 228\ 166\ 077\ 456\ 389\ 351\ 931\ 904}{458\ 784\ 877\ 455\ 576\ 544\ 684\ 539\ 904} k_{21} \\
& + \frac{458\ 784\ 877\ 455\ 576\ 544\ 684\ 539\ 904}{14\ 681\ 116\ 098\ 333\ 746\ 133\ 194\ 506\ 240} k_{22} - \frac{38\ 996\ 714\ 612\ 004\ 864\ 122\ 742\ 112\ 256}{14\ 681\ 116\ 098\ 333\ 746\ 133\ 194\ 506\ 240} k_{23} \\
& + \frac{14\ 681\ 116\ 098\ 333\ 746\ 133\ 194\ 506\ 240}{256\ 919\ 531\ 970\ 862\ 710\ 014\ 026\ 448\ 896} k_{24} - \frac{45\ 878\ 487\ 831\ 494\ 260\ 098\ 001\ 272\ 832}{256\ 919\ 531\ 970\ 862\ 710\ 014\ 026\ 448\ 896} k_{25} \\
& + \frac{256\ 919\ 531\ 970\ 862\ 710\ 014\ 026\ 448\ 896}{293\ 622\ 322\ 453\ 729\ 763\ 115\ 151\ 654\ 912} k_{26} - \frac{477\ 136\ 273\ 838\ 610\ 718\ 264\ 511\ 168\ 512}{293\ 622\ 322\ 453\ 729\ 763\ 115\ 151\ 654\ 912} k_{27} \\
& + \frac{293\ 622\ 322\ 453\ 729\ 763\ 115\ 151\ 654\ 912}{2936\ 223\ 225\ 915\ 765\ 537\ 024\ 033\ 947\ 648} k_{28} - \frac{1614\ 922\ 773\ 911\ 880\ 208\ 589\ 476\ 855\ 808}{2936\ 223\ 225\ 915\ 765\ 537\ 024\ 033\ 947\ 648} k_{29} \\
& + \frac{2936\ 223\ 225\ 915\ 765\ 537\ 024\ 033\ 947\ 648}{9395\ 914\ 325\ 853\ 496\ 373\ 358\ 622\ 670\ 848} k_{30} - \frac{587\ 244\ 645\ 284\ 314\ 612\ 904\ 121\ 860\ 096}{9395\ 914\ 325\ 853\ 496\ 373\ 358\ 622\ 670\ 848} k_{31} \\
& + \frac{9395\ 914\ 325\ 853\ 496\ 373\ 358\ 622\ 670\ 848}{9395\ 914\ 327\ 703\ 721\ 932\ 913\ 486\ 331\ 904} k_{32} - \frac{3288\ 570\ 014\ 412\ 112\ 405\ 651\ 565\ 576\ 192}{9395\ 914\ 327\ 703\ 721\ 932\ 913\ 486\ 331\ 904} k_{33} \\
& + \frac{9395\ 914\ 327\ 703\ 721\ 932\ 913\ 486\ 331\ 904}{75\ 167\ 314\ 630\ 148\ 878\ 551\ 425\ 107\ 361\ 792} k_{34} - \frac{46\ 979\ 571\ 641\ 606\ 780\ 401\ 048\ 793\ 120\ 768}{75\ 167\ 314\ 630\ 148\ 878\ 551\ 425\ 107\ 361\ 792} k_{35} \\
& + \frac{75\ 167\ 314\ 630\ 148\ 878\ 551\ 425\ 107\ 361\ 792}{150\ 334\ 629\ 267\ 326\ 041\ 948\ 313\ 696\ 075\ 776} k_{36} - \frac{37\ 583\ 657\ 316\ 245\ 820\ 083\ 289\ 800\ 572\ 928}{150\ 334\ 629\ 267\ 326\ 041\ 948\ 313\ 696\ 075\ 776} k_{37} \\
& + \frac{150\ 334\ 629\ 267\ 326\ 041\ 948\ 313\ 696\ 075\ 776}{150\ 334\ 629\ 267\ 326\ 041\ 948\ 313\ 696\ 075\ 776} k_{38} \\
& - \frac{150\ 334\ 629\ 267\ 326\ 041\ 948\ 313\ 696\ 075\ 776}{150\ 334\ 629\ 267\ 326\ 041\ 948\ 313\ 696\ 075\ 776} k_{39}, \\
r_{14} := & \frac{25\ 900\ 734\ 850\ 261\ 806\ 371\ 761\ 669\ 799\ 936}{16\ 835\ 477\ 802\ 508\ 006\ 277\ 837\ 507\ 919\ 872} k_0 \\
& - \frac{16\ 835\ 477\ 802\ 508\ 006\ 277\ 837\ 507\ 919\ 872}{98\ 422\ 794\ 041\ 540\ 656\ 877\ 543\ 309\ 049\ 856} k_1 \\
& + \frac{98\ 422\ 794\ 041\ 540\ 656\ 877\ 543\ 309\ 049\ 856}{191\ 665\ 442\ 310\ 908\ 584\ 401} k_2 \\
& - \frac{191\ 665\ 442\ 310\ 908\ 584\ 401}{41\ 441\ 176\ 969\ 219\ 511\ 509\ 303\ 953\ 719\ 296} k_3 \\
& + \frac{41\ 441\ 176\ 969\ 219\ 511\ 509\ 303\ 953\ 719\ 296}{725\ 220\ 601\ 026\ 877\ 064\ 694\ 363\ 501\ 756\ 416} k_4 \\
& - \frac{725\ 220\ 601\ 026\ 877\ 064\ 694\ 363\ 501\ 756\ 416}{1409\ 000\ 032\ 091\ 384\ 032\ 653\ 475\ 605\ 118\ 976} k_5 \\
& + \frac{1409\ 000\ 032\ 091\ 384\ 032\ 653\ 475\ 605\ 118\ 976}{911\ 705\ 907\ 403\ 069\ 258\ 678\ 145\ 052\ 934\ 144} k_6 \\
& - \frac{911\ 705\ 907\ 403\ 069\ 258\ 678\ 145\ 052\ 934\ 144}{5304\ 470\ 756\ 736\ 520\ 929\ 330\ 348\ 559\ 433\ 728} k_7 \\
& + \frac{5304\ 470\ 756\ 736\ 520\ 929\ 330\ 348\ 559\ 433\ 728}{10\ 277\ 412\ 131\ 313\ 610\ 109\ 769\ 388\ 392\ 448\ 000} k_8 \\
& - \frac{10\ 277\ 412\ 131\ 313\ 610\ 109\ 769\ 388\ 392\ 448\ 000}{6630\ 588\ 495\ 324\ 920\ 809\ 494\ 808\ 348\ 327\ 936} k_9 \\
& + \frac{6630\ 588\ 495\ 324\ 920\ 809\ 494\ 808\ 348\ 327\ 936}{6630\ 588\ 495\ 324\ 920\ 809\ 494\ 808\ 348\ 327\ 936} k_{10}
\end{aligned}$$

$$\begin{aligned}
& - 38\,457\,413\,396\,324\,883\,366\,253\,060\,576\,772\,096 \, k_{11} \\
& + 74\,262\,591\,601\,136\,432\,151\,624\,795\,136\,458\,752 \, k_{12} \\
& - 5304\,470\,842\,476\,183\,621\,946\,497\,252\,196\,352 \, k_{13} \\
& + 275\,832\,484\,453\,207\,240\,057\,330\,619\,429\,945\,344 \, k_{14} \\
& - 530\,447\,086\,594\,005\,536\,917\,513\,365\,436\,235\,776 \, k_{15} \\
& + 339\,486\,136\,050\,663\,236\,732\,078\,636\,788\,613\,120 \, k_{16} \\
& - 1952\,045\,285\,504\,430\,069\,979\,739\,804\,596\,699\,136 \, k_{17} \\
& + 3734\,347\,508\,128\,724\,890\,055\,376\,245\,564\,112\,896 \, k_{18} \\
& - 2376\,402\,962\,750\,952\,488\,098\,838\,240\,854\,802\,432 \, k_{19} \\
& + 13\,579\,445\,516\,585\,869\,321\,563\,425\,036\,623\,151\,104 \, k_{20} \\
& - 25\,800\,946\,506\,557\,411\,534\,858\,183\,599\,722\,594\,304 \, k_{21} \\
& + 5431\,778\,216\,469\,246\,994\,011\,146\,063\,288\,729\,600 \, k_{22} \\
& - 92\,340\,229\,746\,718\,928\,091\,104\,126\,167\,899\,176\,960 \, k_{23} \\
& + 173\,816\,903\,160\,121\,198\,540\,852\,887\,152\,400\,269\,312 \, k_{24} \\
& - 108\,635\,564\,532\,186\,540\,306\,026\,411\,710\,914\,494\,464 \, k_{25} \\
& + 608\,359\,161\,650\,425\,892\,274\,154\,318\,357\,690\,580\,992 \, k_{26} \\
& - 1129\,809\,872\,057\,566\,931\,596\,810\,512\,029\,848\,698\,880 \, k_{27} \\
& + 695\,267\,613\,789\,816\,417\,081\,832\,016\,845\,559\,824\,384 \, k_{28} \\
& - 3823\,971\,876\,826\,467\,570\,359\,406\,509\,639\,824\,572\,416 \, k_{29} \\
& + 6952\,676\,141\,150\,841\,173\,753\,457\,757\,638\,361\,088\,000 \, k_{30} \\
& - 1390\,535\,228\,468\,868\,004\,587\,520\,519\,943\,909\,015\,552 \, k_{31} \\
& + 22\,248\,563\,658\,579\,858\,772\,695\,549\,977\,915\,690\,057\,728 \, k_{32} \\
& - 38\,934\,986\,406\,801\,926\,307\,871\,163\,051\,378\,823\,135\,232 \, k_{33} \\
& + 22\,248\,563\,662\,945\,551\,882\,385\,499\,624\,056\,020\,795\,392 \, k_{34} \\
& - 111\,242\,818\,322\,014\,383\,851\,341\,397\,986\,371\,436\,544\,000 \, k_{35} \\
& + 177\,988\,509\,323\,665\,447\,981\,215\,700\,940\,076\,974\,342\,144 \, k_{36} \\
& - 88\,994\,254\,664\,596\,616\,012\,259\,802\,577\,761\,558\,593\,536 \, k_{37} \\
& + 355\,977\,018\,663\,914\,248\,092\,343\,114\,526\,492\,377\,219\,072 \, k_{38} \\
& - 355\,977\,018\,663\,914\,248\,092\,343\,114\,526\,492\,377\,219\,072 \, k_{39},
\end{aligned}$$

$$\begin{aligned}
r_{15} := & \frac{9419\,004\,876\,032}{5} k_0 - \frac{18\,367\,059\,645\,792}{5} k_1 + \frac{35\,792\,219\,044\,384}{5} k_2 \\
& - \frac{69\,700\,637\,530\,432}{5} k_3 + \frac{135\,633\,673\,826\,496}{5} k_4 - \frac{263\,732\,144\,968\,096}{5} k_5 \\
& + \frac{512\,393\,884\,170\,368}{5} k_6 - \frac{994\,646\,956\,085\,376}{5} k_7 + \frac{385\,802\,457\,268\,224}{5} k_8 \\
& - \frac{3737\,461\,318\,626\,304}{5} k_9 + \frac{7233\,796\,124\,798\,976}{5} k_{10} - \frac{13\,985\,339\,216\,850\,944}{5} k_{11} \\
& + \frac{27\,006\,172\,354\,101\,248}{5} k_{12} - \frac{52\,083\,332\,523\,712\,512}{5} k_{13} \\
& + \frac{100\,308\,640\,633\,290\,752}{5} k_{14} - \frac{38\,580\,246\,471\,606\,272}{5} k_{15} \\
& + \frac{370\,370\,366\,756\,880\,384}{5} k_{16} - \frac{709\,876\,537\,345\,179\,648}{5} k_{17} \\
& + \frac{4938\,271\,581\,081\,174\,016}{5} k_{20} - \frac{1876\,543\,202\,398\,306\,304}{5} k_{21} \\
& + \frac{1358\,024\,681\,914\,892\,288}{5} k_{18} - \frac{2592\,592\,577\,515\,487\,232}{5} k_{19} \\
& + \frac{3555\,555\,439\,531\,786\,24}{5} k_{22} - \frac{33\,580\,246\,824\,537\,554\,944}{5} k_{23} \\
& + \frac{12\,641\,975\,281\,616\,158\,720}{5} k_{24} - \frac{118\,518\,518\,315\,885\,789\,184}{5} k_{25} \\
& + \frac{221\,234\,567\,601\,155\,211\,264}{5} k_{26} - \frac{2528\,395\,060\,465\,727\,700\,992}{5} k_{30} \\
& + \frac{410\,864\,197\,092\,222\,435\,328}{5} k_{27} + \frac{758\,518\,517\,885\,885\,743\,104}{5} k_{28} \\
& - \frac{1390\,617\,283\,050\,636\,050\,432}{5} k_{29} - \frac{4551\,111\,109\,364\,013\,858\,816}{5} k_{31} \\
& + \frac{8090\,864\,195\,146\,468\,032\,512}{5} k_{32} - \frac{2831\,802\,468\,493\,678\,346\,240}{5} k_{33} \\
& + \frac{24\,272\,592\,588\,325\,622\,120\,448}{5} k_{34} - \frac{40\,454\,320\,982\,054\,532\,022\,272}{5} k_{35}
\end{aligned}$$

$$\begin{aligned}
& + \frac{64\,726\,913\,572\,991\,494\,258\,688}{5} k_{36} - \frac{97\,090\,370\,361\,136\,508\,829\,696}{5} k_{37} \\
& + \frac{129\,453\,827\,149\,281\,523\,400\,704}{5} k_{38} - \frac{129\,453\,827\,149\,281\,523\,400\,704}{5} k_{39},
\end{aligned}$$

$$\begin{aligned}
r_{16} := & \frac{159\,597\,210\,528\,146\,332\,048\,502\,319\,742\,976}{38\,127\,987\,424\,935} k_0 \\
& - \frac{103\,738\,186\,522\,475\,651\,515\,825\,176\,707\,072}{12\,709\,329\,141\,645} k_1 \\
& + \frac{606\,469\,398\,665\,129\,159\,608\,030\,663\,278\,592}{38\,127\,987\,424\,935} k_2 \\
& - \frac{1181\,019\,358\,715\,204\,059\,994\,921\,585\,606\,656}{7625\,597\,484\,987} k_3 \\
& + \frac{255\,355\,538\,008\,463\,951\,407\,469\,415\,104\,512}{4236\,443\,047\,215} k_4 \\
& - \frac{4468\,721\,934\,250\,862\,116\,004\,709\,382\,750\,208}{38\,127\,987\,424\,935} k_5 \\
& + \frac{8682\,088\,367\,169\,966\,751\,184\,992\,625\,229\,824}{38\,127\,987\,424\,935} k_6 \\
& - \frac{5617\,821\,908\,457\,613\,373\,800\,501\,787\,754\,496}{12\,709\,329\,141\,645} k_7 \\
& + \frac{6537\,101\,883\,435\,082\,327\,436\,516\,913\,053\,696}{7625\,597\,484\,987} k_8 \\
& - \frac{63\,328\,174\,733\,867\,571\,329\,734\,960\,104\,865\,792}{38\,127\,987\,424\,935} k_9 \\
& + \frac{40\,856\,887\,066\,831\,741\,337\,898\,273\,332\,002\,816}{12\,709\,329\,141\,645} k_{10} \\
& - \frac{236\,969\,945\,739\,834\,975\,800\,200\,376\,826\,724\,352}{38\,127\,987\,424\,935} k_{11} \\
& + \frac{457\,597\,137\,921\,001\,489\,028\,786\,046\,604\,673\,024}{38\,127\,987\,424\,935} k_{12} \\
& - \frac{32\,685\,509\,936\,692\,056\,036\,104\,003\,668\,410\,368}{1412\,147\,682\,405} k_{13} \\
& + \frac{1699\,646\,520\,690\,975\,524\,557\,784\,270\,793\,342\,976}{38\,127\,987\,424\,935} k_{14} \\
& - \frac{653\,710\,201\,636\,741\,912\,071\,160\,829\,069\,754\,368}{7625\,597\,484\,987} k_{15} \\
& + \frac{2091\,872\,649\,146\,268\,943\,968\,480\,874\,446\,454\,784}{12\,709\,329\,141\,645} k_{16} \\
& - \frac{12\,028\,267\,752\,525\,704\,542\,075\,318\,899\,964\,903\,424}{38\,127\,987\,424\,935} k_{17} \\
& + \frac{23\,010\,599\,212\,416\,633\,296\,042\,647\,008\,674\,054\,144}{38\,127\,987\,424\,935} k_{18} \\
& - \frac{14\,643\,108\,608\,550\,284\,288\,617\,310\,623\,537\,037\,312}{12\,709\,329\,141\,645} k_{19} \\
& + \frac{83\,674\,906\,428\,674\,226\,395\,749\,550\,502\,411\,501\,568}{38\,127\,987\,424\,935} k_{20} \\
& - \frac{31\,796\,464\,474\,008\,069\,541\,586\,403\,582\,946\,574\,336}{7625\,597\,484\,987} k_{21} \\
& + \frac{6693\,992\,526\,512\,086\,349\,133\,297\,876\,245\,413\,888}{847\,288\,609\,443} k_{22} \\
& - \frac{568\,989\,365\,168\,145\,290\,975\,519\,260\,809\,900\,326\,912}{38\,127\,987\,424\,935} k_{23} \\
& + \frac{214\,207\,761\,138\,014\,562\,053\,182\,428\,235\,517\,919\,232}{7625\,597\,484\,987} k_{24} \\
& - \frac{669\,399\,253\,911\,105\,325\,618\,032\,790\,324\,677\,443\,584}{12\,709\,329\,141\,645} k_{25} \\
& + \frac{3748\,635\,823\,580\,760\,709\,995\,554\,604\,619\,317\,379\,072}{38\,127\,987\,424\,935} k_{26} \\
& - \frac{6961\,752\,246\,408\,823\,815\,641\,042\,188\,335\,384\,100\,864}{38\,127\,987\,424\,935} k_{27} \\
& + \frac{4284\,155\,229\,900\,815\,203\,105\,834\,112\,199\,870\,644\,224}{12\,709\,329\,141\,645} k_{28} \\
& - \frac{23\,562\,853\,770\,558\,515\,158\,169\,350\,595\,156\,803\,321\,856}{38\,127\,987\,424\,935} k_{29} \\
& + \frac{42\,841\,552\,319\,216\,733\,262\,406\,689\,999\,373\,264\,224\,256}{38\,127\,987\,424\,935} k_{30} \\
& - \frac{8568\,310\,465\,326\,372\,102\,184\,694\,252\,508\,211\,576\,832}{4236\,443\,047\,215} k_{31} \\
& + \frac{137\,092\,967\,464\,345\,205\,015\,758\,844\,409\,003\,278\,073\,856}{38\,127\,987\,424\,935} k_{32} \\
& - \frac{47\,982\,538\,617\,848\,018\,648\,577\,476\,928\,282\,113\,867\,776}{7625\,597\,484\,987} k_{33} \\
& + \frac{137\,092\,967\,491\,469\,036\,337\,261\,619\,469\,544\,857\,796\,608}{12\,709\,329\,141\,645} k_{34} \\
& - \frac{685\,464\,837\,502\,616\,651\,461\,734\,338\,355\,603\,697\,565\,696}{38\,127\,987\,424\,935} k_{35} \\
& + \frac{1096\,743\,740\,056\,639\,119\,988\,018\,897\,127\,246\,349\,205\,504}{38\,127\,987\,424\,935} k_{36} \\
& - \frac{548\,371\,870\,045\,491\,504\,603\,546\,178\,241\,187\,509\,436\,416}{12\,709\,329\,141\,645} k_{37} \\
& + \frac{2193\,487\,480\,216\,309\,907\,893\,258\,172\,319\,878\,707\,412\,992}{38\,127\,987\,424\,935} k_{38} \\
& - \frac{2193\,487\,480\,216\,309\,907\,893\,258\,172\,319\,878\,707\,412\,992}{38\,127\,987\,424\,935} k_{39},
\end{aligned}$$

$$r_{17} := \frac{78\,573\,551\,898\,356\,949\,909\,790\,722\,621\,440}{7625\,597\,484\,987} k_0$$

$$\begin{aligned}
& - 51\,072\,808\,817\,861\,935\,590\,225\,395\,843\,072\,k_1 \\
& + 298\,579\,497\,923\,845\,155\,907\,115\,394\,531\,328\,k_2 \\
& - 581\,444\,286\,380\,380\,531\,464\,740\,364\,353\,536\,k_3 \\
& + 125\,717\,683\,878\,983\,927\,793\,007\,602\,958\,336\,k_4 \\
& - 2200\,059\,475\,405\,933\,401\,395\,740\,157\,149\,184\,k_5 \\
& + 4274\,401\,282\,759\,340\,979\,177\,447\,609\,073\,664\,k_6 \\
& - 2765\,789\,076\,135\,410\,674\,605\,038\,969\,552\,896\,k_7 \\
& + 16\,091\,863\,777\,469\,249\,512\,860\,656\,796\,172\,288\,k_8 \\
& - 31\,177\,986\,182\,819\,432\,133\,473\,272\,852\,381\,696\,k_9 \\
& + 20\,114\,829\,864\,025\,991\,432\,360\,292\,178\,198\,528\,k_{10} \\
& - 116\,666\,013\,578\,215\,784\,349\,329\,075\,977\,846\,784\,k_{11} \\
& + 225\,286\,095\,831\,895\,046\,817\,278\,801\,462\,951\,936\,k_{12} \\
& - 16\,091\,864\,029\,809\,144\,285\,401\,497\,336\,807\,424\,k_{13} \\
& + 836\,776\,931\,507\,762\,821\,382\,126\,504\,249\,393\,152\,k_{14} \\
& - 1609\,186\,410\,117\,527\,040\,347\,637\,839\,401\,320\,448\,k_{15} \\
& + 1029\,879\,304\,398\,658\,614\,305\,746\,140\,784\,492\,544\,k_{16} \\
& - 5921\,806\,010\,104\,259\,315\,413\,144\,959\,438\,553\,088\,k_{17} \\
& + 11\,328\,672\,383\,731\,515\,946\,154\,128\,984\,883\,855\,360\,k_{18} \\
& - 7209\,155\,162\,553\,990\,159\,940\,611\,915\,672\,190\,976\,k_{19} \\
& + 41\,195\,172\,403\,778\,828\,874\,249\,984\,194\,709\,028\,864\,k_{20} \\
& - 78\,270\,827\,643\,765\,193\,240\,573\,756\,815\,488\,057\,344\,k_{21} \\
& + 16\,478\,068\,991\,587\,994\,154\,296\,065\,597\,506\,584\,576\,k_{22} \\
& - 280\,127\,173\,061\,123\,569\,131\,251\,214\,435\,177\,463\,808\,k_{23} \\
& + 527\,298\,208\,443\,773\,959\,256\,803\,337\,310\,272\,749\,568\,k_{24} \\
& - 329\,561\,380\,452\,041\,107\,204\,889\,504\,602\,572\,980\,224\,k_{25} \\
& + 1845\,543\,731\,357\,834\,814\,792\,883\,831\,458\,947\,399\,680\,k_{26} \\
& - 3427\,438\,359\,523\,894\,718\,369\,963\,471\,130\,119\,372\,800\,k_{27} \\
& + 2109\,192\,837\,290\,562\,824\,960\,291\,748\,032\,548\,962\,304\,k_{28} \\
& - 11\,600\,560\,608\,103\,263\,441\,648\,448\,191\,906\,367\,668\,224\,k_{29} \\
& + 21\,091\,928\,382\,854\,817\,514\,494\,599\,257\,484\,133\,662\,720\,k_{30} \\
& - 4218\,385\,677\,301\,093\,457\,023\,212\,550\,905\,002\,983\,424\,k_{31} \\
& + 67\,494\,170\,846\,232\,340\,018\,652\,107\,991\,113\,416\,048\,640\,k_{32} \\
& - 118\,114\,798\,994\,020\,139\,061\,494\,390\,771\,568\,854\,695\,936\,k_{33} \\
& + 67\,494\,170\,859\,586\,061\,936\,984\,602\,990\,230\,326\,214\,656\,k_{34} \\
& - 337\,470\,854\,320\,218\,550\,574\,796\,251\,515\,659\,506\,155\,520\,k_{35} \\
& + 539\,953\,366\,938\,173\,303\,660\,787\,607\,333\,654\,155\,493\,376\,k_{36} \\
& - 269\,976\,683\,477\,540\,815\,022\,975\,958\,808\,224\,975\,552\,512\,k_{37} \\
& + 1079\,906\,733\,927\,071\,586\,477\,068\,145\,515\,695\,697\,821\,696\,k_{38} \\
& - 1079\,906\,733\,927\,071\,586\,477\,068\,145\,515\,695\,697\,821\,696\,k_{39}, \\
& \quad 7625\,597\,484\,987
\end{aligned}$$

$$\begin{aligned}
r_{18} := & - \frac{4547\,023\,992\,418\,304}{114\,383\,962\,274\,805}k_0 + \frac{57\,838\,550\,634\,368}{38\,127\,987\,424\,935}k_1 + \frac{107\,671\,096\,184\,192}{114\,383\,962\,274\,805}k_2 \\
& - \frac{209\,675\,293\,954\,496}{114\,383\,962\,274\,805}k_3 + \frac{45\,335\,198\,968\,832}{12\,709\,329\,141\,645}k_4 - \frac{793\,365\,986\,394\,688}{114\,383\,962\,274\,805}k_5 + \\
& \frac{1541\,396\,781\,480\,064}{114\,383\,962\,274\,805}k_6 - \frac{997\,374\,392\,702\,336}{38\,127\,987\,424\,935}k_7 + \frac{1160\,581\,116\,455\,632}{22\,876\,792\,454\,961}k_8 \\
& - \frac{114\,383\,962\,274\,805}{114\,383\,962\,274\,805}k_9 + \frac{38\,127\,987\,424\,935}{7233\,632\,032\,075\,776}k_{10} - \frac{42\,071\,065\,921\,073\,152}{114\,383\,962\,274\,805}k_{11} \\
& + \frac{81\,240\,679\,255\,343\,104}{114\,383\,962\,274\,805}k_{12} - \frac{5802\,905\,876\,218\,368}{4236\,443\,047\,215}k_{13} + \frac{301\,731\,095\,868\,558\,656}{114\,383\,962\,274\,805}k_{14}
\end{aligned}$$

$$\begin{aligned}
& - \frac{116\,058\,114\,037\,743\,616}{22\,876\,792\,454\,961} k_{15} + \frac{371\,385\,965\,610\,532\,864}{38\,127\,987\,424\,935} k_{16} \\
& - \frac{2135\,469\,305\,775\,652\,864}{114\,383\,962\,274\,805} k_{17} + \frac{114\,383\,962\,274\,805}{2599\,701\,770\,647\,109\,632} k_{18} \\
& - \frac{14\,855\,438\,705\,987\,944\,448}{114\,383\,962\,274\,805} k_{20} + \frac{38\,127\,987\,424\,935}{1188\,435\,098\,630\,881\,280} k_{19} \\
& - \frac{5645\,066\,713\,755\,025\,408}{22\,876\,792\,454\,961} k_{21} + \frac{2541\,865\,828\,329}{38\,029\,923\,207\,190\,937\,600} k_{22} \\
& - \frac{101\,016\,983\,456\,639\,352\,832}{114\,383\,962\,274\,805} k_{23} + \frac{22\,876\,792\,454\,961}{665\,523\,656\,771\,294\,461\,952} k_{24} \\
& - \frac{118\,843\,510\,084\,950\,032\,384}{38\,127\,987\,424\,935} k_{25} + \frac{114\,383\,962\,274\,805}{760\,598\,465\,401\,170\,427\,904} k_{26} \\
& - \frac{1235\,972\,505\,893\,039\,243\,264}{114\,383\,962\,274\,805} k_{27} + \frac{38\,127\,987\,424\,935}{4183\,291\,560\,781\,252\,919\,296} k_{28} \\
& - \frac{7605\,984\,657\,570\,084\,683\,776}{114\,383\,962\,274\,805} k_{30} + \frac{114\,383\,962\,274\,805}{24\,339\,150\,911\,769\,669\,533\,696} k_{29} \\
& - \frac{1521\,196\,931\,775\,150\,948\,352}{12\,709\,329\,141\,645} k_{31} + \frac{114\,383\,962\,274\,805}{24\,339\,150\,916\,545\,673\,166\,848} k_{32} \\
& - \frac{8518\,702\,820\,057\,405\,194\,240}{22\,876\,792\,454\,961} k_{33} + \frac{38\,127\,987\,424\,935}{194\,713\,207\,354\,355\,617\,890\,304} k_{34} \\
& - \frac{121\,695\,754\,590\,699\,825\,135\,616}{114\,383\,962\,274\,805} k_{35} + \frac{389\,426\,414\,726\,853\,177\,638\,912}{114\,383\,962\,274\,805} k_{36} \\
& - \frac{97\,356\,603\,680\,201\,465\,921\,536}{38\,127\,987\,424\,935} k_{37} + \frac{389\,426\,414\,726\,853\,177\,638\,912}{114\,383\,962\,274\,805} k_{38} \\
& - \frac{389\,426\,414\,726\,853\,177\,638\,912}{114\,383\,962\,274\,805} k_{39},
\end{aligned}$$

$$\begin{aligned}
r_{19} &:= \frac{19\,031\,703\,008\,546\,860\,114\,764\,329\,224\,503\,296}{249\,349\,869\,374\,041\,648\,401\,508\,114\,126\,155} k_0 \\
& + \frac{170\,121\,336\,394\,447\,598\,998\,011\,067\,375\,839\,695\,258\,779\,648}{185\,878\,993\,533\,376\,501\,535\,669\,685\,075\,861} k_1 \\
& - \frac{9356\,673\,500\,445\,936\,883\,085\,107\,814\,664\,007\,314\,553\,438\,208}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_2 \\
& + \frac{637\,955\,011\,487\,535\,427\,344\,644\,694\,029\,900\,068\,042\,047\,488}{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305} k_3 \\
& - \frac{4678\,336\,749\,963\,876\,125\,380\,225\,917\,856\,546\,849\,493\,614\,592}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_4 \\
& + \frac{584\,792\,093\,912\,635\,965\,623\,667\,347\,260\,146\,275\,114\,811\,392}{2044\,668\,928\,867\,141\,516\,892\,366\,535\,834\,471} k_5 \\
& - \frac{1754\,376\,280\,940\,060\,804\,304\,110\,283\,006\,504\,807\,434\,289\,152}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_6 \\
& + \frac{1023\,386\,164\,587\,994\,652\,026\,960\,367\,290\,640\,090\,678\,689\,792}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_7 \\
& - \frac{584\,792\,093\,375\,635\,902\,899\,623\,135\,247\,582\,095\,959\,130\,112}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_8 \\
& + \frac{328\,945\,553\,115\,639\,033\,147\,447\,485\,895\,290\,277\,230\,804\,992}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_9 \\
& - \frac{182\,747\,528\,948\,906\,494\,912\,808\,887\,409\,584\,321\,951\,956\,992}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{10} \\
& + \frac{9137\,376\,491\,375\,298\,994\,953\,877\,460\,646\,964\,584\,513\,536}{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305} k_{11} \\
& - \frac{54\,824\,258\,499\,598\,088\,248\,115\,135\,519\,744\,600\,777\,424\,896}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{12} \\
& + \frac{2699\,679\,430\,156\,414\,257\,510\,860\,558\,945\,748\,558\,282\,752}{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305} k_{13} \\
& - \frac{15\,990\,408\,593\,323\,902\,220\,174\,235\,258\,518\,205\,590\,667\,264}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{14} \\
& + \frac{8566\,290\,592\,500\,980\,648\,992\,058\,162\,653\,215\,342\,985\,216}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{15} \\
& - \frac{913\,737\,617\,210\,446\,942\,707\,788\,465\,038\,411\,637\,456\,896}{2044\,668\,928\,867\,141\,516\,892\,366\,535\,834\,471} k_{16} \\
& + \frac{2427\,115\,719\,453\,031\,194\,686\,946\,233\,733\,068\,82\,918\,336}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{17} \\
& - \frac{1284\,943\,496\,060\,940\,933\,498\,541\,518\,381\,675\,922\,325\,504}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{18} \\
& + \frac{16\,540\,602\,393\,784\,264\,613\,355\,184\,563\,247\,873\,261\,568}{249\,349\,869\,374\,041\,648\,401\,508\,114\,126\,155} k_{19} \\
& - \frac{1741\,115\,998\,569\,374\,041\,648\,401\,508\,114\,126\,155}{115\,998\,569\,374\,041\,648\,401\,508\,114\,126\,155} k_{20} \\
& + \frac{3407\,027\,088\,577\,874\,898\,168\,689\,301\,622\,825\,231}{185\,878\,993\,533\,376\,501\,535\,669\,685\,075\,861} k_{21} \\
& - \frac{98\,155\,568\,878\,986\,128\,18\,403\,698\,386\,435\,272\,117\,248}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{22} \\
& + \frac{4664\,043\,556\,853\,322\,481\,43\,716\,632\,329\,811\,968}{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305} k_{23} \\
& - \frac{26\,769\,845\,740\,748\,227\,343\,006\,513\,387\,425\,018\,840\,192}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{24} \\
& + \frac{2788\,483\,170\,277\,683\,016\,208\,777\,121\,835\,415\,764\,992}{2044\,668\,928\,867\,141\,516\,892\,366\,535\,834\,471} k_{25} \\
& - \frac{7250\,401\,815\,068\,225\,663\,500\,448\,487\,108\,648\,108\,032}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{26} \\
& + \frac{3764\,344\,740\,650\,206\,971\,063\,496\,022\,448\,859\,512\,832}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{27} \\
& - \frac{1952\,346\,518\,253\,316\,800\,082\,766\,320\,987\,467\,307\,392}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{28} \\
& + \frac{1010\,669\,452\,860\,125\,838\,944\,487\,478\,423\,458\,414\,592}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{29} \\
& - \frac{523\,352\,465\,295\,256\,855\,762\,079\,266\,000\,854\,843\,392}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{30} \\
& + \frac{24\,541\,515\,867\,168\,527\,613\,302\,395\,357\,381\,001\,216}{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305} k_{31}
\end{aligned}$$

$$\begin{aligned}
& - \frac{140\,058\,475\,410\,241\,115\,353\,034\,266\,035\,183\,681\,536}{6518\,758\,154\,653\,974\,970\,381\,793\,408\,969\,080\,832} k_{32} \\
& + \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{37\,805\,064\,207\,128\,546\,706\,208\,248\,852\,710\,948\,864} k_{33} \\
& + \frac{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355}{18\,884\,266\,789\,487\,435\,886\,229\,418\,934\,000\,418\,816} k_{34} \\
& - \frac{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355}{2144\,641\,488\,352\,425\,106\,600\,194\,638\,067\,269\,632} k_{35} \\
& - \frac{2044\,668\,928\,867\,141\,516\,892\,366\,535\,834\,471}{976\,081\,230\,187\,216\,456\,799\,676\,503\,466\,967\,040} k_{36} \\
& + \frac{2044\,668\,928\,867\,141\,516\,892\,366\,535\,834\,471}{3674\,120\,973\,908\,573\,243\,447\,501\,985\,658\,437\,632} k_{37} \\
& - \frac{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355}{30\,769\,527\,313\,501\,345\,423\,066\,851\,763\,552\,256} k_{38} \\
& + \frac{249\,349\,869\,374\,041\,648\,401\,508\,114\,126\,155}{61\,539\,054\,627\,002\,690\,846\,133\,703\,527\,104\,512} k_{39} \\
& - \frac{249\,349\,869\,374\,041\,648\,401\,508\,114\,126\,155}{249\,349\,869\,374\,041\,648\,401\,508\,114\,126\,155} k_{40} , \\
r_{20} := & \frac{3042\,821\,076\,025\,013\,673\,555\,351\,990\,735\,720\,133\,050\,761\,216}{6761\,335\,073\,203\,617\,749\,272\,325\,543\,535\,443\,968} k_0 \\
& - \frac{122\,408\,117\,692\,711\,354\,669\,831\,256\,023\,567}{646\,599\,061\,678\,514\,817\,768\,503\,368\,033\,295\,442\,306\,531\,328} k_1 \\
& + \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{53\,595\,110\,461\,768\,035\,411\,294\,138\,423\,908\,301\,644\,627\,968} k_2 \\
& - \frac{612\,040\,588\,463\,556\,773\,349\,156\,280\,127\,835}{399\,369\,958\,189\,804\,405\,799\,804\,891\,442\,150\,451\,787\,333\,632} k_3 \\
& + \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{47\,544\,028\,238\,453\,837\,328\,066\,888\,090\,515\,432\,766\,177\,280} k_4 \\
& - \frac{1346\,489\,294\,619\,824\,901\,368\,143\,816\,281\,237}{130\,746\,002\,422\,931\,920\,972\,801\,383\,539\,736\,214\,985\,900\,032} k_5 \\
& + \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{67\,750\,128\,142\,072\,245\,953\,220\,532\,143\,265\,461\,849\,423\,872} k_6 \\
& - \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{33\,280\,693\,575\,131\,734\,306\,775\,850\,294\,084\,125\,565\,386\,752} k_7 \\
& + \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{15\,451\,682\,718\,660\,043\,460\,571\,467\,436\,861\,057\,102\,774\,272} k_8 \\
& - \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{6685\,758\,254\,544\,571\,915\,686\,101\,331\,893\,295\,326\,298\,112} k_{10} \\
& + \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{236\,359\,341\,207\,185\,271\,116\,794\,642\,131\,761\,087\,512\,576} k_{11} \\
& - \frac{612\,040\,588\,463\,556\,773\,349\,156\,280\,127\,835}{817\,062\,212\,392\,817\,190\,213\,578\,790\,224\,947\,678\,806\,016} k_{12} \\
& + \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{10\,122\,039\,734\,407\,404\,897\,123\,035\,574\,371\,784\,589\,312} k_{13} \\
& - \frac{612\,040\,588\,463\,556\,773\,349\,156\,280\,127\,835}{120\,793\,487\,377\,702\,049\,598\,612\,617\,720\,690\,833\,227\,776} k_{14} \\
& + \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{162\,565\,946\,749\,095\,500\,822\,325\,765\,748\,786\,824\,085\,504} k_{15} \\
& - \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{27\,867\,016\,462\,194\,938\,182\,329\,249\,107\,877\,986\,566\,144} k_{16} \\
& + \frac{1346\,489\,294\,619\,824\,901\,368\,143\,816\,281\,237}{102\,172\,722\,187\,916\,895\,639\,459\,971\,689\,125\,886\,296\,064} k_{17} \\
& - \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{69\,069\,983\,093\,351\,439\,622\,959\,813\,471\,714\,781\,822\,976} k_{18} \\
& + \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{44\,378\,930\,239\,415\,039\,902\,682\,127\,158\,135\,647\,240\,192} k_{19} \\
& - \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{5503\,724\,395\,465\,464\,995\,762\,913\,489\,995\,695\,390\,720} k_{20} \\
& + \frac{1346\,489\,294\,619\,824\,901\,368\,143\,816\,281\,237}{301\,859\,147\,893\,535\,684\,891\,703\,843\,808\,057\,229\,312} k_{21} \\
& - \frac{122\,408\,117\,692\,711\,354\,669\,831\,256\,023\,567}{9779\,216\,511\,660\,808\,198\,920\,137\,661\,383\,682\,424\,832} k_{22} \\
& + \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{510\,563\,438\,277\,827\,951\,119\,706\,719\,497\,576\,906\,752} k_{23} \\
& - \frac{612\,040\,588\,463\,556\,773\,349\,156\,280\,127\,835}{3114\,962\,504\,283\,843\,972\,174\,617\,899\,083\,706\,400\,768} k_{24} \\
& + \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{324\,418\,652\,275\,748\,244\,146\,945\,642\,665\,414\,492\,160} k_{25} \\
& - \frac{1346\,489\,294\,619\,824\,901\,368\,143\,816\,281\,237}{726\,535\,177\,544\,434\,135\,693\,518\,214\,481\,717\,362\,688} k_{26} \\
& + \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{177\,240\,312\,237\,119\,195\,794\,915\,297\,665\,466\,892\,288} k_{27} \\
& - \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{176\,070\,709\,281\,063\,737\,084\,415\,518\,884\,378\,181\,632} k_{28} \\
& + \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{421\,863\,104\,207\,049\,171\,029\,311\,042\,854\,019\,072} k_{29} \\
& - \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{611\,551\,956\,261\,167\,790\,301\,128\,788\,132\,734\,042\,112} k_{30} \\
& + \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{70\,455\,113\,043\,461\,864\,888\,641\,674\,147\,695\,558\,656} k_{31} \\
& - \frac{612\,040\,588\,463\,556\,773\,349\,156\,280\,127\,835}{929\,116\,790\,389\,152\,811\,269\,588\,004\,201\,633\,939\,456} k_{32} \\
& + \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{98\,555\,089\,991\,563\,126\,943\,132\,158\,653\,403\,758\,592} k_{33} \\
& - \frac{612\,040\,588\,463\,556\,773\,349\,156\,280\,127\,835}{1245\,321\,063\,140\,691\,422\,928\,035\,093\,902\,493\,876\,224} k_{34} \\
& + \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{1416\,820\,579\,362\,448\,391\,821\,785\,149\,975\,736\,221\,696} k_{35} \\
& - \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}
\end{aligned}$$

$$\begin{aligned}
& - \frac{320\,017\,160\,834\,781\,299\,614\,260\,860\,330\,632\,282\,112}{1346\,489\,294\,619\,824\,901\,368\,143\,816\,281\,237} k_{36} \\
& + \frac{359\,615\,853\,755\,589\,626\,336\,158\,665\,085\,351\,100\,416}{1346\,489\,294\,619\,824\,901\,368\,143\,816\,281\,237} k_{37} \\
& - \frac{2025\,529\,212\,967\,156\,820\,016\,222\,093\,392\,687\,398\,912}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{38} \\
& + \frac{2480\,429\,101\,345\,574\,196\,687\,079\,629\,324\,551\,192\,576}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{39} \\
& - \frac{4960\,858\,202\,691\,148\,393\,374\,159\,258\,649\,102\,385\,152}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{40}, \\
r_{21} := & \frac{147\,346\,965\,222\,089\,500\,546\,976\,821\,186\,787\,515\,651\,072}{3078\,393\,449\,062\,242\,572\,858\,124\,865\,755} k_0 \\
& - \frac{20\,265\,725\,080\,297\,182\,080\,891\,402\,026\,702\,821\,006\,208}{2294\,802\,389\,300\,944\,463\,403\,329\,445\,381} k_1 \\
& - \frac{141\,115\,527\,453\,895\,406\,303\,525\,600\,229\,610\,662\,540\,416}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_2 \\
& + \frac{29\,028\,379\,272\,116\,319\,381\,496\,062\,413\,839\,703\,337\,856}{11\,474\,011\,946\,504\,722\,317\,016\,647\,226\,905} k_3 \\
& - \frac{243\,839\,455\,845\,179\,454\,380\,354\,837\,436\,449\,610\,813\,184}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_4 \\
& + \frac{29\,302\,220\,309\,565\,243\,819\,732\,219\,992\,681\,723\,831\,552}{25\,242\,826\,282\,310\,389\,097\,436\,623\,899\,191} k_5 \\
& - \frac{76\,436\,971\,222\,484\,498\,797\,534\,232\,460\,663\,611\,467\,264}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_6 \\
& + \frac{33\,989\,471\,562\,168\,046\,204\,518\,430\,840\,753\,932\,222\,464}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_7 \\
& - \frac{10\,680\,262\,440\,746\,927\,289\,045\,463\,181\,861\,612\,847\,104}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_8 \\
& - \frac{954\,495\,969\,507\,847\,443\,916\,050\,411\,338\,771\,132\,416}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_9 \\
& + \frac{6003\,303\,050\,443\,368\,431\,417\,167\,722\,637\,550\,821\,376}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_{10} \\
& - \frac{704\,000\,287\,402\,470\,856\,775\,038\,160\,947\,814\,268\,928}{11\,474\,011\,946\,504\,722\,317\,016\,647\,226\,905} k_{11} \\
& + \frac{8354\,084\,960\,199\,625\,188\,912\,833\,066\,869\,595\,045\,888}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_{12} \\
& - \frac{857\,469\,754\,847\,868\,958\,063\,442\,864\,676\,648\,452\,096}{11\,474\,011\,946\,504\,722\,317\,016\,647\,226\,905} k_{13} \\
& + \frac{12\,348\,695\,322\,530\,846\,588\,311\,268\,750\,992\,863\,035\,392}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_{14} \\
& - \frac{18\,491\,855\,399\,996\,113\,860\,974\,410\,399\,831\,952\,293\,888}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_{15} \\
& + \frac{5891\,444\,382\,924\,573\,796\,819\,070\,607\,003\,413\,512\,192}{25\,242\,826\,282\,310\,389\,097\,436\,623\,899\,191} k_{16} \\
& - \frac{47\,208\,753\,123\,497\,092\,748\,586\,546\,095\,600\,838\,115\,328}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_{17} \\
& + \frac{74\,225\,461\,072\,950\,044\,206\,128\,461\,473\,506\,735\,521\,792}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_{18} \\
& - \frac{2771\,729\,717\,854\,529\,895\,508\,644\,712\,847\,191\,998\,464}{3078\,393\,449\,062\,242\,572\,858\,124\,865\,755} k_{19} \\
& + \frac{826\,239\,915\,213\,703\,424\,917\,875\,468\,826\,936\,410\,112}{615\,678\,689\,812\,448\,514\,571\,624\,973\,151} k_{20} \\
& - \frac{4477\,980\,494\,906\,208\,571\,098\,517\,133\,087\,391\,023\,104}{2294\,802\,389\,300\,944\,463\,403\,329\,445\,381} k_{21} \\
& + \frac{350\,276\,673\,366\,372\,785\,141\,720\,556\,175\,752\,087\,240\,704}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_{22} \\
& - \frac{44\,403\,596\,790\,225\,237\,835\,184\,625\,608\,623\,779\,119\,104}{11\,474\,011\,946\,504\,722\,317\,016\,647\,226\,905} k_{23} \\
& + \frac{669\,197\,900\,307\,968\,220\,832\,025\,000\,703\,259\,575\,320\,576}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_{24} \\
& - \frac{180\,485\,504\,041\,957\,022\,767\,795\,022\,133\,011\,112\,919\,040}{25\,242\,826\,282\,310\,389\,097\,436\,623\,899\,191} k_{25} \\
& + \frac{1199\,592\,062\,791\,214\,156\,745\,958\,472\,484\,489\,423\,978\,496}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_{26} \\
& - \frac{1573\,875\,051\,140\,835\,341\,401\,840\,914\,817\,203\,390\,939\,136}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_{27} \\
& + \frac{2040\,311\,678\,234\,322\,123\,148\,893\,490\,884\,296\,641\,806\,336}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_{28} \\
& - \frac{2615\,920\,071\,353\,287\,508\,107\,186\,603\,831\,460\,893\,329\,056}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_{29} \\
& + \frac{3319\,831\,046\,386\,744\,400\,847\,347\,507\,150\,735\,166\,606\,336}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_{30} \\
& - \frac{379\,401\,496\,584\,246\,084\,013\,714\,856\,132\,854\,832\,652\,288}{11\,474\,011\,946\,504\,722\,317\,016\,647\,226\,905} k_{31} \\
& + \frac{5200\,411\,733\,869\,377\,833\,332\,487\,144\,002\,327\,255\,318\,528}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_{32} \\
& - \frac{584\,275\,489\,868\,164\,791\,865\,797\,693\,117\,650\,638\,656\,256}{11\,474\,011\,946\,504\,722\,317\,016\,647\,226\,905} k_{33} \\
& + \frac{7882\,059\,480\,107\,334\,197\,528\,846\,499\,638\,538\,458\,202\,112}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_{34} \\
& - \frac{9597\,049\,352\,319\,769\,263\,036\,043\,552\,367\,078\,029\,426\,688}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_{35} \\
& + \frac{2321\,816\,442\,847\,829\,297\,810\,407\,889\,594\,261\,341\,143\,040}{25\,242\,826\,282\,310\,389\,097\,436\,623\,899\,191} k_{36} \\
& - \frac{2798\,463\,882\,794\,184\,783\,918\,039\,483\,486\,857\,196\,142\,592}{25\,242\,826\,282\,310\,389\,097\,436\,623\,899\,191} k_{37} \\
& + \frac{17\,117\,965\,349\,327\,501\,759\,172\,678\,934\,614\,766\,453\,129\,216}{126\,214\,131\,411\,551\,945\,487\,183\,119\,495\,955} k_{38} \\
& - \frac{569\,981\,883\,415\,625\,791\,178\,966\,877\,292\,090\,912\,145\,408}{3078\,393\,449\,062\,242\,572\,858\,124\,865\,755} k_{39}
\end{aligned}$$

$$+ \frac{1139\,963\,766\,831\,251\,582\,357\,933\,754\,584\,181\,824\,290\,816}{3078\,393\,449\,062\,242\,572\,858\,124\,865\,755} k_{40},$$

$$\begin{aligned} r_{22} := & \frac{313\,970\,605\,740\,441\,767\,643\,989\,212\,936\,535\,828\,603\,613\,184}{29\,096\,284\,712\,958\,843\,822\,455\,297\,853\,424\,724\,095\,977\,280} k_0 \\ & - \frac{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185}{5018\,732\,825\,401\,165\,541\,463\,081\,497\,048\,247} k_1 \\ & - \frac{1203\,224\,536\,254\,751\,022\,682\,679\,254\,617\,145\,368\,707\,127\,872}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_2 \\ & + \frac{129\,726\,446\,625\,211\,147\,074\,409\,454\,223\,927\,432\,443\,318\,752}{25\,093\,664\,127\,005\,827\,707\,315\,407\,485\,241\,235} k_3 \\ & - \frac{1061\,750\,480\,854\,951\,360\,449\,635\,758\,589\,816\,702\,587\,906\,048}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_4 \\ & + \frac{138\,103\,471\,114\,252\,297\,007\,187\,803\,247\,065\,507\,032\,397\,344}{55\,206\,061\,079\,412\,820\,956\,093\,896\,467\,530\,717} k_5 \\ & - \frac{430\,732\,709\,420\,755\,152\,645\,557\,537\,768\,073\,828\,469\,524\,928}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_6 \\ & + \frac{269\,993\,247\,935\,870\,302\,516\,972\,155\,042\,178\,224\,548\,968\,448}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_7 \\ & - \frac{174\,375\,600\,033\,245\,457\,316\,602\,171\,097\,049\,915\,616\,206\,848}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_8 \\ & + \frac{116\,907\,500\,027\,241\,294\,977\,176\,175\,290\,860\,494\,478\,768\,128}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_9 \\ & - \frac{81\,010\,733\,229\,580\,640\,946\,451\,697\,992\,268\,817\,694\,240\,768}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_{10} \\ & + \frac{5260\,842\,107\,672\,383\,429\,804\,678\,807\,097\,357\,056\,159\,744}{25\,093\,664\,127\,005\,827\,707\,315\,407\,485\,241\,235} k_{11} \\ & - \frac{43\,477\,681\,862\,652\,244\,198\,459\,591\,302\,030\,020\,479\,320\,064}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_{12} \\ & + \frac{3331\,012\,084\,592\,926\,160\,635\,299\,285\,401\,905\,262\,399\,488}{25\,093\,664\,127\,005\,827\,707\,315\,407\,485\,241\,235} k_{13} \\ & - \frac{37\,885\,931\,393\,995\,291\,818\,390\,623\,108\,488\,950\,148\,151\,296}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_{14} \\ & + \frac{48\,985\,695\,523\,322\,236\,753\,428\,782\,386\,389\,424\,558\,475\,264}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_{15} \\ & - \frac{14\,569\,818\,849\,576\,023\,200\,209\,966\,284\,338\,421\,548\,310\,528}{55\,206\,061\,079\,412\,820\,956\,093\,896\,467\,530\,717} k_{16} \\ & + \frac{113\,604\,246\,131\,451\,027\,427\,760\,596\,806\,051\,549\,161\,652\,224}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_{17} \\ & - \frac{176\,785\,148\,043\,149\,248\,043\,715\,680\,753\,422\,246\,096\,193\,536}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_{18} \\ & + \frac{6574\,871\,282\,762\,508\,009\,878\,206\,576\,606\,570\,249\,910\,272}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{19} \\ & - \frac{1956\,310\,917\,858\,267\,554\,284\,721\,571\,345\,587\,231\,813\,632}{1346\,489\,294\,619\,824\,901\,368\,143\,816\,281\,237} k_{20} \\ & + \frac{10\,590\,504\,565\,987\,851\,906\,885\,922\,419\,754\,903\,200\,518\,144}{5018\,732\,825\,401\,165\,541\,463\,081\,497\,048\,247} k_{21} \\ & - \frac{827\,610\,686\,081\,780\,205\,351\,257\,304\,970\,117\,817\,685\,809\,152}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_{22} \\ & + \frac{104\,812\,445\,657\,547\,689\,813\,339\,687\,965\,997\,885\,194\,319\,872}{25\,093\,664\,127\,005\,827\,707\,315\,407\,485\,241\,235} k_{23} \\ & - \frac{1577\,995\,226\,348\,369\,148\,110\,658\,863\,784\,959\,747\,269\,132\,288}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_{24} \\ & + \frac{425\,131\,847\,456\,253\,362\,680\,411\,483\,529\,264\,756\,880\,695\,296}{55\,206\,061\,079\,412\,820\,956\,093\,896\,467\,530\,717} k_{25} \\ & - \frac{2822\,428\,479\,695\,268\,362\,044\,154\,744\,475\,172\,126\,403\,749\,888}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_{26} \\ & + \frac{3698\,720\,416\,359\,109\,262\,214\,026\,840\,731\,906\,313\,800\,521\,728}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_{27} \\ & - \frac{4789\,162\,880\,504\,051\,585\,686\,721\,556\,786\,451\,513\,957\,961\,728}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_{28} \\ & + \frac{6132\,886\,501\,124\,157\,796\,808\,072\,314\,857\,695\,814\,384\,816\,128}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_{29} \\ & - \frac{7773\,815\,922\,810\,237\,781\,924\,398\,527\,749\,007\,294\,937\,315\,328}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_{30} \\ & + \frac{887\,359\,751\,368\,662\,289\,285\,594\,102\,869\,693\,666\,127\,796\,224}{25\,093\,664\,127\,005\,827\,707\,315\,407\,485\,241\,235} k_{31} \\ & - \frac{12\,148\,676\,512\,663\,368\,487\,774\,135\,760\,839\,637\,748\,465\,639\,424}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_{32} \\ & + \frac{1363\,359\,838\,229\,627\,982\,837\,012\,602\,079\,890\,199\,814\,094\,848}{25\,093\,664\,127\,005\,827\,707\,315\,407\,485\,241\,235} k_{33} \\ & - \frac{18\,371\,624\,847\,132\,723\,016\,581\,557\,770\,613\,225\,787\,804\,583\,936}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_{34} \\ & + \frac{22\,344\,775\,421\,594\,129\,970\,166\,065\,648\,263\,799\,439\,897\,278\,464}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_{35} \\ & - \frac{5400\,212\,422\,852\,287\,319\,256\,050\,296\,526\,066\,339\,204\,190\,208}{55\,206\,061\,079\,412\,820\,956\,093\,896\,467\,530\,717} k_{36} \\ & + \frac{6501\,957\,853\,167\,451\,732\,717\,058\,745\,466\,991\,927\,950\,249\,984}{55\,206\,061\,079\,412\,820\,956\,093\,896\,467\,530\,717} k_{37} \\ & - \frac{39\,723\,397\,335\,230\,111\,630\,250\,048\,792\,603\,278\,958\,694\,801\,408}{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585} k_{38} \\ & + \frac{1320\,746\,670\,097\,946\,769\,843\,403\,876\,180\,729\,697\,477\,607\,424}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{39} \\ & - \frac{2641\,493\,340\,195\,893\,539\,686\,807\,752\,361\,459\,394\,955\,214\,848}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{40}, \end{aligned}$$

$$\begin{aligned} r_{23} := & \frac{147\,483\,928\,766\,002\,248\,173\,888}{9986\,349\,015\,518\,931} k_0 - \frac{139\,953\,001\,400\,284\,339\,584\,584}{28\,143\,347\,225\,553\,351} k_1 \\ & + \frac{812\,015\,147\,241\,821\,741\,126\,632}{309\,576\,819\,481\,086\,861} k_2 - \frac{55\,461\,366\,977\,268\,169\,767\,752}{28\,143\,347\,225\,553\,351} k_3 \end{aligned}$$

$$\begin{aligned}
& + \frac{521\,307\,880\,574\,120\,404\,732\,400}{309\,576\,819\,481\,086\,861} k_4 - \frac{459\,303\,189\,921\,543\,558\,274\,688}{309\,576\,819\,481\,086\,861} k_5 \\
& + \frac{407\,814\,288\,989\,078\,064\,440\,960}{309\,576\,819\,481\,086\,861} k_6 - \frac{363\,668\,592\,373\,095\,546\,068\,608}{309\,576\,819\,481\,086\,861} k_7 \\
& + \frac{325\,596\,814\,034\,134\,416\,485\,632}{309\,576\,819\,481\,086\,861} k_8 - \frac{9434\,004\,140\,476\,272\,494\,080}{9986\,349\,015\,518\,931} k_9 \\
& + \frac{8485\,290\,827\,658\,386\,686\,976}{9986\,349\,015\,518\,931} k_{10} - \frac{21\,466\,745\,707\,073\,642\,831\,872}{28\,143\,347\,225\,553\,351} k_{11} \\
& + \frac{210\,474\,539\,806\,787\,744\,669\,696}{309\,576\,819\,481\,086\,861} k_{12} - \frac{16\,800\,539\,860\,396\,028\,334\,080}{28\,143\,347\,225\,553\,351} k_{13} \\
& + \frac{157\,864\,841\,283\,625\,793\,640\,448}{309\,576\,819\,481\,086\,861} k_{14} - \frac{128\,385\,456\,206\,052\,664\,502\,272}{309\,576\,819\,481\,086\,861} k_{15} \\
& + \frac{95\,100\,873\,876\,067\,895\,336\,960}{309\,576\,819\,481\,086\,861} k_{16} - \frac{56\,743\,626\,291\,987\,163\,971\,584}{309\,576\,819\,481\,086\,861} k_{17} \\
& + \frac{12\,045\,966\,129\,068\,501\,608\,448}{309\,576\,819\,481\,086\,861} k_{18} + \frac{1298\,709\,470\,779\,482\,822\,656}{9986\,349\,015\,518\,931} k_{19} \\
& - \frac{3272\,329\,344\,605\,101\,813\,760}{9986\,349\,015\,518\,931} k_{20} + \frac{15\,706\,243\,076\,287\,567\,900\,672}{28\,143\,347\,225\,553\,351} k_{21} \\
& - \frac{255\,507\,395\,190\,554\,474\,825\,728}{309\,576\,819\,481\,086\,861} k_{22} + \frac{31\,902\,399\,229\,429\,638\,342\,656}{28\,143\,347\,225\,553\,351} k_{23} \\
& - \frac{460\,293\,684\,854\,588\,299\,214\,848}{309\,576\,819\,481\,086\,861} k_{24} + \frac{584\,877\,299\,107\,428\,429\,996\,032}{309\,576\,819\,481\,086\,861} k_{25} \\
& - \frac{725\,945\,258\,753\,154\,002\,008\,064}{309\,576\,819\,481\,086\,861} k_{26} + \frac{884\,765\,587\,716\,052\,138\,084\,352}{309\,576\,819\,481\,086\,861} k_{27} \\
& - \frac{1062\,606\,308\,012\,033\,249\,701\,888}{309\,576\,819\,481\,086\,861} k_{28} + \frac{40\,668\,885\,078\,319\,081\,246\,720}{9986\,349\,015\,518\,931} k_{29} \\
& - \frac{47\,755\,515\,648\,090\,392\,909\,824}{309\,576\,819\,481\,086\,861} k_{30} + \frac{156\,630\,085\,700\,292\,219\,701\,248}{28\,143\,347\,225\,553\,351} k_{31} \\
& - \frac{1989\,533\,267\,070\,176\,141\,041\,664}{309\,576\,819\,481\,086\,861} k_{32} + \frac{207\,408\,713\,197\,560\,293\,539\,840}{28\,143\,347\,225\,553\,351} k_{33} \\
& - \frac{2600\,086\,424\,336\,917\,649\,201\,152}{309\,576\,819\,481\,086\,861} k_{34} + \frac{2946\,572\,472\,563\,123\,724\,003\,328}{309\,576\,819\,481\,086\,861} k_{35} \\
& - \frac{3322\,220\,899\,207\,350\,482\,268\,160}{309\,576\,819\,481\,086\,861} k_{36} + \frac{3729\,565\,522\,980\,735\,981\,842\,432}{309\,576\,819\,481\,086\,861} k_{37} \\
& - \frac{4200\,302\,541\,012\,438\,964\,035\,584}{309\,576\,819\,481\,086\,861} k_{38} + \frac{165\,863\,760\,550\,833\,707\,368\,448}{9986\,349\,015\,518\,931} k_{39} \\
& - \frac{331\,727\,521\,101\,667\,414\,736\,896}{9986\,349\,015\,518\,931} k_{40}, \\
r_{24} &:= - \frac{28\,521\,078\,987\,443\,044\,843\,608\,113\,230\,892\,093\,073\,536}{68\,004\,509\,829\,284\,085\,927\,684\,031\,125\,315} k_0 \\
& + \frac{590\,548\,507\,645\,671\,439\,794\,703\,591\,848\,942\,116\,171\,120}{50\,694\,270\,963\,648\,136\,782\,455\,368\,657\,053} k_1 \\
& - \frac{32\,312\,124\,313\,421\,135\,776\,842\,711\,060\,936\,638\,449\,672\,432}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_2 \\
& + \frac{2208\,260\,956\,615\,905\,710\,953\,147\,349\,626\,028\,799\,545\,392}{253\,471\,354\,818\,240\,683\,912\,276\,843\,285\,265} k_3 \\
& - \frac{16\,290\,213\,667\,676\,479\,465\,113\,326\,752\,161\,336\,810\,471\,328}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_4 \\
& + \frac{2055\,419\,531\,564\,619\,753\,955\,511\,910\,555\,813\,754\,016\,512}{557\,636\,980\,600\,129\,504\,607\,009\,055\,227\,583} k_5 \\
& - \frac{6249\,615\,661\,604\,103\,373\,938\,524\,461\,601\,935\,235\,757\,568}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_6 \\
& + \frac{3713\,808\,384\,080\,247\,685\,554\,501\,196\,010\,636\,157\,744\,128}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_7 \\
& - \frac{2175\,998\,526\,744\,706\,050\,128\,162\,179\,696\,678\,442\,211\,328}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_8 \\
& + \frac{1265\,982\,214\,802\,095\,956\,151\,055\,616\,264\,317\,614\,949\,888}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_9 \\
& - \frac{737\,216\,400\,246\,805\,947\,562\,375\,972\,502\,396\,503\,364\,608}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{10} \\
& + \frac{39\,665\,413\,033\,677\,671\,949\,794\,678\,746\,005\,759\,053\,824}{253\,471\,354\,818\,240\,683\,912\,276\,843\,285\,265} k_{11} \\
& - \frac{272\,677\,779\,820\,100\,024\,672\,617\,681\,993\,912\,976\,932\,864}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{12} \\
& + \frac{17\,807\,455\,354\,375\,033\,066\,321\,137\,765\,425\,181\,503\,488}{253\,471\,354\,818\,240\,683\,912\,276\,843\,285\,265} k_{13} \\
& - \frac{181\,037\,217\,673\,039\,637\,861\,839\,601\,435\,895\,588\,284\,416}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{14} \\
& + \frac{220\,070\,356\,858\,885\,432\,344\,906\,377\,530\,777\,626\,630\,144}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{15} \\
& - \frac{63\,433\,950\,619\,110\,783\,622\,883\,794\,760\,854\,826\,235\,296}{557\,636\,980\,600\,129\,504\,607\,009\,055\,227\,583} k_{16} \\
& + \frac{486\,975\,295\,439\,922\,483\,106\,186\,200\,297\,689\,738\,706\,944}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{17} \\
& - \frac{754\,622\,000\,840\,936\,434\,800\,298\,032\,917\,803\,523\,577\,856}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{18} \\
& + \frac{28\,221\,646\,182\,803\,000\,647\,523\,035\,045\,276\,137\,915}{68\,004\,509\,829\,284\,085\,927\,684\,031\,125\,315} k_{19} \\
& - \frac{8515\,260\,701\,721\,685\,808\,983\,600\,158\,875\,571\,566\,560}{13\,600\,901\,965\,856\,817\,185\,536\,806\,225\,063} k_{20} \\
& + \frac{47\,070\,721\,090\,783\,932\,854\,514\,874\,587\,610\,284\,027\,904}{50\,694\,270\,963\,648\,136\,782\,455\,368\,657\,053} k_{21} \\
& - \frac{3777\,037\,966\,580\,708\,826\,547\,853\,766\,635\,680\,735\,987\,712}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{22} \\
& + \frac{493\,314\,096\,618\,239\,876\,930\,057\,167\,214\,005\,846\,730\,752}{253\,471\,354\,818\,240\,683\,912\,276\,843\,285\,265} k_{23} \\
& - \frac{7685\,230\,910\,363\,646\,000\,100\,734\,097\,346\,189\,959\,168}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{24} \\
& + \frac{2147\,872\,812\,604\,478\,051\,681\,679\,481\,248\,556\,594\,143\,232}{557\,636\,980\,600\,129\,504\,607\,009\,055\,227\,583} k_{25}
\end{aligned}$$

$$\begin{aligned}
& - \frac{14\,819\,675\,140\,730\,436\,254\,969\,993\,564\,210\,591\,036\,274\,688}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{26} \\
& + \frac{20\,209\,424\,967\,592\,836\,105\,889\,142\,831\,098\,809\,531\,926\,528}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{27} \\
& - \frac{27\,252\,622\,003\,411\,874\,789\,151\,726\,709\,984\,626\,658\,275\,328}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{28} \\
& + \frac{36\,362\,989\,230\,658\,435\,908\,773\,433\,103\,066\,619\,887\,136\,768}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{29} \\
& - \frac{48\,033\,532\,074\,834\,176\,894\,829\,388\,520\,471\,939\,998\,148\,608}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{30} \\
& + \frac{57\,133\,326\,556\,412\,738\,645\,293\,336\,789\,101\,288\,362\,297\,344}{253\,471\,354\,818\,240\,683\,912\,276\,843\,285\,265} k_{31} \\
& - \frac{81\,484\,157\,754\,268\,150\,654\,143\,306\,146\,001\,012\,191\,125\,504}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{32} \\
& + \frac{95\,216\,333\,999\,631\,657\,078\,361\,797\,481\,799\,094\,580\,461\,568}{253\,471\,354\,818\,240\,683\,912\,276\,843\,285\,265} k_{33} \\
& - \frac{133\,519\,250\,708\,007\,273\,598\,337\,207\,978\,840\,681\,728\,792\,576}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{34} \\
& + \frac{168\,878\,079\,013\,486\,824\,142\,972\,984\,752\,318\,130\,707\,359\,744}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{35} \\
& - \frac{42\,428\,462\,511\,331\,530\,916\,391\,401\,530\,599\,824\,090\,542\,080}{557\,636\,980\,600\,129\,504\,607\,009\,055\,227\,583} k_{36} \\
& + \frac{53\,193\,531\,725\,212\,263\,017\,485\,817\,349\,287\,423\,445\,741\,568}{557\,636\,980\,600\,129\,504\,607\,009\,055\,227\,583} k_{37} \\
& - \frac{340\,915\,229\,747\,930\,635\,725\,877\,278\,225\,389\,128\,065\,998\,848}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{38} \\
& + \frac{11\,970\,984\,682\,723\,640\,902\,506\,674\,663\,007\,149\,993\,672\,704}{68\,004\,509\,829\,284\,085\,927\,684\,031\,125\,315} k_{39} \\
& - \frac{23\,941\,969\,365\,447\,281\,805\,013\,349\,326\,014\,299\,987\,345\,408}{68\,004\,509\,829\,284\,085\,927\,684\,031\,125\,315} k_{40}, \\
r_{25} &:= \frac{2374\,262\,327\,847\,412\,948\,340\,204\,437\,451\,994\,916\,450\,432}{249\,349\,869\,374\,041\,648\,401\,508\,114\,126\,155} k_0 \\
& - \frac{405\,065\,677\,197\,661\,810\,374\,221\,639\,938\,825\,665\,695\,920}{185\,878\,993\,533\,376\,501\,535\,669\,685\,075\,861} k_1 \\
& + \frac{758\,443\,457\,122\,575\,193\,692\,186\,569\,251\,475\,248\,934\,288}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_2 \\
& + \frac{155\,483\,807\,445\,230\,157\,027\,376\,966\,284\,095\,218\,571\,056}{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305} k_3 \\
& - \frac{1721\,631\,552\,978\,615\,433\,484\,375\,010\,122\,110\,843\,007\,584}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_4 \\
& + \frac{73\,702\,873\,040\,572\,515\,212\,346\,136\,126\,608\,985\,501\,408}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_5 \\
& - \frac{612\,969\,064\,257\,573\,440\,760\,194\,465\,362\,359\,236\,042\,944}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_6 \\
& + \frac{314\,859\,712\,783\,549\,243\,527\,239\,176\,633\,600\,142\,879\,744}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_7 \\
& - \frac{50\,514\,125\,786\,337\,023\,120\,004\,060\,203\,996\,005\,992\,448}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_8 \\
& + \frac{65\,483\,781\,591\,808\,816\,117\,429\,706\,673\,121\,292\,747\,264}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_9 \\
& - \frac{20\,615\,180\,227\,587\,417\,515\,761\,408\,391\,738\,185\,268\,224}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{10} \\
& - \frac{82\,433\,569\,416\,872\,246\,072\,770\,548\,276\,467\,326\,976}{309\,798\,322\,555\,627\,502\,559\,449\,475\,126\,435} k_{11} \\
& + \frac{14\,559\,046\,734\,484\,981\,506\,211\,831\,064\,154\,120\,716\,288}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{12} \\
& - \frac{1802\,378\,922\,830\,070\,441\,545\,128\,585\,142\,137\,511\,936}{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305} k_{13} \\
& + \frac{6947\,153\,314\,199\,389\,176\,656\,546\,166\,486\,289\,854\,464}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_{14} \\
& - \frac{18\,616\,804\,771\,148\,479\,267\,674\,487\,733\,813\,454\,544\,128}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{15} \\
& + \frac{2702\,026\,348\,804\,039\,849\,793\,961\,200\,672\,325\,910\,528}{2044\,668\,928\,867\,141\,516\,892\,366\,535\,834\,471} k_{16} \\
& - \frac{1850\,798\,042\,332\,980\,669\,286\,551\,692\,181\,467\,693\,056}{5388\,340\,681\,538\,111\,902\,528\,153\,944\,226\,390\,785} k_{17} \\
& - \frac{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785}{476\,296\,603\,015\,276\,475\,583\,215\,493\,945\,809\,268\,736} k_{18} \\
& + \frac{60\,358\,388\,278\,250\,546\,663\,416\,796\,978\,601\,203\,968}{249\,349\,869\,374\,041\,648\,401\,508\,114\,126\,155} k_{19} \\
& - \frac{1062\,568\,636\,723\,804\,285\,344\,561\,880\,169\,755\,615\,232}{16\,623\,324\,624\,936\,109\,893\,433\,874\,275\,077} k_{20} \\
& + \frac{83\,776\,365\,171\,635\,491\,430\,786\,816\,024\,326\,388\,637\,696}{185\,878\,993\,533\,376\,501\,535\,669\,685\,075\,861} k_{21} \\
& - \frac{3436\,884\,761\,844\,335\,707\,584\,461\,832\,679\,172\,355}{147\,636\,628\,661\,768\,150\,924\,122\,152\,873\,468\,150\,022\,144} k_{22} \\
& + \frac{147\,636\,628\,661\,768\,150\,924\,122\,152\,873\,468\,150\,022\,144}{309\,798\,322\,555\,627\,502\,559\,449\,475\,126\,435} k_{23} \\
& - \frac{37\,357\,923\,337\,282\,818\,029\,471\,623\,744\,162\,930\,475\,008}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{24} \\
& + \frac{77\,037\,180\,612\,203\,432\,589\,735\,332\,803\,130\,256\,683\,008}{2044\,668\,928\,867\,141\,516\,892\,366\,535\,834\,471} k_{25} \\
& - \frac{280\,918\,106\,440\,797\,294\,097\,259\,792\,014\,509\,588\,721\,664}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_{26} \\
& + \frac{336\,505\,171\,547\,335\,894\,833\,571\,732\,520\,803\,631\,632\,384}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{27} \\
& - \frac{132\,722\,891\,429\,578\,956\,532\,092\,821\,924\,654\,528\,209\,408}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_{29}
\end{aligned}$$

$$\begin{aligned}
& - \frac{466\,204\,586\,094\,427\,133\,548\,953\,530\,349\,671\,752\,658\,944}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{30} \\
& + \frac{49\,173\,535\,022\,319\,317\,604\,817\,653\,668\,624\,725\,061\,632}{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305} k_{31} \\
& - \frac{207\,525\,845\,220\,613\,786\,322\,868\,074\,827\,108\,687\,396\,864}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_{32} \\
& + \frac{64\,682\,405\,063\,816\,203\,077\,772\,352\,615\,492\,714\,266\,624}{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305} k_{33} \\
& - \frac{807\,991\,466\,988\,996\,776\,973\,030\,146\,683\,446\,976\,811\,008}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{34} \\
& + \frac{304\,109\,397\,354\,021\,973\,093\,499\,109\,747\,392\,494\,260\,224}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_{35} \\
& - \frac{204\,962\,371\,058\,509\,027\,267\,409\,268\,517\,866\,864\,779\,264}{2044\,668\,928\,867\,141\,516\,892\,366\,535\,834\,471} k_{36} \\
& + \frac{229\,206\,581\,084\,630\,675\,852\,195\,003\,802\,072\,679\,653\,376}{2044\,668\,928\,867\,141\,516\,892\,366\,535\,834\,471} k_{37} \\
& - \frac{428\,242\,909\,784\,673\,224\,639\,887\,673\,859\,712\,313\,049\,088}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_{38} \\
& + \frac{38\,100\,497\,005\,262\,250\,322\,854\,610\,407\,724\,000\,509\,952}{249\,349\,869\,374\,041\,648\,401\,508\,114\,126\,155} k_{39} \\
& - \frac{76\,200\,994\,010\,524\,500\,645\,709\,220\,815\,448\,001\,019\,904}{249\,349\,869\,374\,041\,648\,401\,508\,114\,126\,155} k_{40}, \\
r_{26} & := \frac{246\,452\,666\,948\,661\,450\,763\,044\,737\,237\,996\,499\,136}{16\,623\,324\,624\,936\,109\,893\,433\,874\,275\,077} k_0 \\
& - \frac{768\,365\,046\,894\,009\,062\,775\,027\,149\,394\,615\,856\,136}{61\,959\,664\,511\,125\,500\,511\,889\,895\,025\,287} k_1 \\
& + \frac{7005\,968\,864\,575\,981\,873\,362\,572\,769\,789\,196\,907\,048}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_2 \\
& - \frac{523\,002\,557\,314\,947\,998\,619\,406\,457\,953\,335\,010\,088}{61\,959\,664\,511\,125\,500\,511\,889\,895\,025\,287} k_3 \\
& + \frac{4678\,498\,672\,104\,127\,078\,062\,139\,138\,466\,822\,052\,080}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_4 \\
& - \frac{3768\,138\,634\,240\,420\,842\,059\,901\,824\,170\,496\,142\,880}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_5 \\
& + \frac{3009\,734\,030\,408\,176\,806\,887\,392\,907\,397\,983\,696\,192}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_6 \\
& - \frac{2394\,994\,554\,201\,970\,619\,726\,712\,502\,864\,442\,262\,400}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_7 \\
& + \frac{1922\,257\,072\,830\,287\,561\,322\,612\,456\,294\,318\,618\,368}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_8 \\
& - \frac{1600\,593\,766\,053\,011\,315\,684\,887\,788\,499\,672\,038\,400}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_9 \\
& + \frac{1456\,152\,874\,927\,649\,952\,761\,145\,254\,584\,328\,665\,088}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_{10} \\
& - \frac{140\,175\,248\,586\,308\,882\,927\,459\,441\,916\,864\,905\,216}{61\,959\,664\,511\,125\,500\,511\,889\,895\,025\,287} k_{11} \\
& + \frac{1952\,687\,644\,235\,632\,677\,943\,660\,229\,643\,511\,341\,056}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_{12} \\
& - \frac{258\,868\,946\,430\,529\,932\,981\,624\,263\,335\,221\,800\,960}{61\,959\,664\,511\,125\,500\,511\,889\,895\,025\,287} k_{13} \\
& + \frac{4483\,764\,960\,816\,168\,578\,108\,266\,585\,585\,545\,070\,592}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_{14} \\
& - \frac{7266\,397\,102\,685\,698\,087\,294\,767\,793\,735\,986\,509\,824}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_{15} \\
& + \frac{11\,820\,773\,706\,911\,213\,763\,358\,482\,766\,870\,430\,523\,392}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_{16} \\
& - \frac{19\,096\,071\,086\,147\,069\,707\,773\,186\,706\,069\,210\,857\,472}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_{17} \\
& + \frac{30\,511\,304\,671\,109\,949\,804\,144\,824\,615\,320\,004\,311\,040}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_{18} \\
& - \frac{1174\,570\,386\,115\,139\,622\,424\,980\,232\,249\,475\,631\,104}{16\,623\,324\,624\,936\,109\,893\,433\,874\,275\,077} k_{19} \\
& + \frac{1831\,014\,519\,390\,390\,493\,011\,590\,219\,433\,805\,926\,400}{10\,509\,372\,731\,923\,798\,251\,277\,206\,856\,924\,337\,991\,680} k_{20} \\
& - \frac{10\,509\,372\,731\,923\,798\,251\,277\,206\,856\,924\,337\,991\,680}{61\,959\,664\,511\,125\,500\,511\,889\,895\,025\,287} k_{21} \\
& + \frac{175\,889\,709\,915\,992\,716\,856\,081\,712\,072\,765\,784\,254\,464}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_{22} \\
& - \frac{24\,042\,415\,200\,977\,796\,267\,750\,915\,942\,817\,078\,146\,816}{61\,959\,664\,511\,125\,500\,511\,889\,895\,025\,287} k_{23} \\
& + \frac{393\,026\,684\,343\,086\,357\,881\,132\,335\,482\,673\,159\,564\,288}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_{24} \\
& - \frac{577\,351\,252\,670\,071\,764\,587\,684\,753\,550\,768\,415\,416\,320}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_{25} \\
& + \frac{838\,424\,770\,571\,403\,902\,335\,667\,845\,660\,496\,133\,888\,000}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_{26} \\
& - \frac{1203\,746\,641\,784\,368\,260\,643\,837\,869\,527\,452\,972\,705\,792}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_{27} \\
& + \frac{1708\,846\,909\,168\,997\,221\,101\,547\,603\,510\,208\,321\,859\,584}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_{28} \\
& - \frac{2399\,008\,286\,294\,996\,943\,284\,561\,719\,494\,665\,669\,789\,696}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_{29} \\
& + \frac{3331\,187\,773\,797\,087\,893\,183\,186\,157\,123\,425\,519\,618\,048}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_{30} \\
& - \frac{416\,010\,502\,424\,061\,499\,776\,778\,135\,338\,694\,485\,386\,112}{61\,959\,664\,511\,125\,500\,511\,889\,895\,025\,287} k_{31} \\
& + \frac{6220\,517\,397\,070\,052\,017\,496\,471\,556\,060\,590\,225\,776\,640}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_{32} \\
& - \frac{760\,850\,363\,813\,047\,897\,562\,494\,539\,737\,070\,079\,357\,632}{61\,959\,664\,511\,125\,500\,511\,889\,895\,025\,287} k_{33}
\end{aligned}$$

$$\begin{aligned}
& + \frac{11\,148\,092\,840\,042\,463\,834\,459\,302\,072\,947\,797\,262\,137\,344}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_{34} \\
& - \frac{14\,707\,252\,526\,089\,330\,404\,192\,399\,521\,524\,355\,450\,619\,904}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_{35} \\
& + \frac{19\,247\,453\,906\,736\,803\,551\,344\,082\,074\,507\,271\,726\,444\,544}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_{36} \\
& - \frac{25\,169\,938\,675\,290\,237\,213\,829\,049\,315\,236\,198\,661\,337\,088}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_{37} \\
& + \frac{33\,856\,990\,219\,655\,591\,906\,980\,585\,931\,457\,146\,914\,365\,440}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_{38} \\
& - \frac{1249\,538\,861\,180\,153\,690\,080\,089\,247\,899\,976\,668\,790\,784}{16\,623\,324\,624\,936\,109\,893\,433\,874\,275\,077} k_{39} \\
& + \frac{2499\,077\,722\,360\,307\,380\,160\,178\,495\,799\,953\,337\,581\,568}{16\,623\,324\,624\,936\,109\,893\,433\,874\,275\,077} k_{40},
\end{aligned}$$

$$\begin{aligned}
r_{27} := & \frac{5314\,146\,584\,122\,876\,498\,849\,554\,455\,104}{22\,668\,169\,943\,094\,695\,309\,228\,010\,375\,105} k_0 \\
& - \frac{5465\,999\,102\,113\,302\,407\,439\,288\,978\,040}{16\,898\,090\,321\,216\,045\,594\,151\,789\,552\,351} k_1 \\
& + \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{74\,768\,022\,638\,842\,865\,138\,454\,450\,731\,288} k_2 \\
& - \frac{84\,490\,451\,606\,080\,227\,970\,758\,947\,761\,755}{1491\,690\,055\,765\,156\,745\,579\,978\,966\,205\,392} k_3 \\
& + \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{553\,240\,377\,512\,336\,114\,448\,475\,855\,416\,128} k_4 \\
& - \frac{185\,878\,993\,533\,376\,501\,535\,669\,685\,075\,861}{5176\,887\,359\,242\,026\,210\,981\,505\,516\,915\,712} k_5 \\
& + \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{9717\,767\,138\,602\,847\,198\,834\,149\,878\,328\,192} k_6 \\
& - \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{18\,245\,632\,731\,452\,771\,427\,011\,416\,887\,871\,232} k_7 \\
& + \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{34\,220\,426\,825\,834\,645\,961\,619\,618\,210\,496\,512} k_8 \\
& - \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{64\,072\,680\,922\,203\,250\,924\,032\,806\,750\,707\,712} k_9 \\
& + \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{10\,883\,709\,962\,587\,209\,039\,529\,794\,463\,870\,976} k_{10} \\
& - \frac{84\,490\,451\,606\,080\,227\,970\,758\,947\,761\,755}{223\,188\,668\,343\,954\,348\,217\,006\,211\,552\,116\,736} k_{11} \\
& + \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{37\,731\,170\,138\,691\,956\,780\,970\,167\,103\,475\,712} k_{12} \\
& - \frac{84\,490\,451\,606\,080\,227\,970\,758\,947\,761\,755}{769\,744\,359\,207\,401\,944\,393\,269\,273\,311\,873\,024} k_{13} \\
& + \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{1423\,450\,447\,541\,063\,064\,400\,784\,475\,135\,932\,416} k_{14} \\
& - \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{524\,821\,374\,153\,658\,489\,516\,823\,898\,488\,971\,264} k_{15} \\
& + \frac{185\,878\,993\,533\,376\,501\,535\,669\,685\,075\,861}{4821\,187\,964\,597\,418\,686\,052\,590\,770\,964\,463\,616} k_{16} \\
& - \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{8825\,449\,665\,061\,007\,391\,366\,468\,997\,261\,604\,864} k_{17} \\
& + \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{392\,470\,771\,640\,196\,960\,573\,436\,185\,186\,633\,728} k_{18} \\
& - \frac{22\,668\,169\,943\,094\,695\,309\,228\,010\,375\,105}{142\,497\,197\,699\,629\,322\,597\,712\,962\,286\,817\,280} k_{19} \\
& + \frac{4533\,633\,988\,618\,939\,061\,845\,602\,075\,021}{959\,628\,053\,324\,120\,813\,806\,289\,126\,434\,287\,616} k_{20} \\
& - \frac{16\,898\,090\,321\,216\,045\,594\,151\,789\,552\,351}{94\,864\,581\,172\,862\,471\,308\,696\,203\,385\,148\,008\,448} k_{21} \\
& + \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{15\,411\,672\,584\,881\,007\,384\,573\,488\,363\,896\,915\,968} k_{22} \\
& - \frac{84\,490\,451\,606\,080\,227\,970\,758\,947\,761\,755}{301\,031\,788\,914\,745\,907\,864\,865\,635\,485\,171\,515\,392} k_{23} \\
& + \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{106\,153\,327\,674\,683\,094\,899\,121\,900\,307\,452\,796\,928} k_{24} \\
& - \frac{185\,878\,993\,533\,376\,501\,535\,669\,685\,075\,861}{928\,445\,596\,645\,557\,421\,746\,464\,578\,012\,780\,500\,992} k_{25} \\
& + \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{1609\,728\,287\,456\,573\,722\,566\,972\,577\,908\,187\,698\,432} k_{26} \\
& - \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{2763\,155\,741\,391\,143\,637\,648\,835\,934\,782\,831\,603\,712} k_{27} \\
& + \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{4689\,758\,836\,142\,831\,096\,018\,833\,148\,791\,802\,912} k_{28} \\
& - \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{7858\,516\,640\,863\,535\,258\,050\,392\,560\,411\,540\,211\,712} k_{29} \\
& + \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{1179\,929\,783\,911\,160\,795\,620\,733\,432\,421\,394\,080\,256} k_{30} \\
& - \frac{84\,490\,451\,606\,080\,227\,970\,758\,947\,761\,755}{21\,091\,549\,033\,366\,780\,421\,140\,052\,834\,7261\,755} k_{31} \\
& + \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{3060\,442\,914\,014\,323\,188\,530\,969\,569\,410\,534\,033\,792} k_{32} \\
& - \frac{84\,490\,451\,606\,080\,227\,970\,758\,947\,761\,755}{52\,728\,113\,031\,971\,569\,514\,816\,948\,245\,820\,034\,381\,824} k_{33} \\
& + \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{81\,120\,174\,083\,297\,283\,530\,804\,350\,727\,165\,376\,604\,416} k_{34} \\
& - \frac{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305}{24\,660\,532\,962\,089\,345\,528\,582\,916\,046\,584\,260\,096\,000} k_{35} \\
& + \frac{185\,878\,993\,533\,376\,501\,535\,669\,685\,075\,861}{37\,639\,760\,883\,609\,232\,299\,196\,830\,230\,769\,456\,977\,920} k_{36} \\
& - \frac{185\,878\,993\,533\,376\,501\,535\,669\,685\,075\,861}{185\,878\,993\,533\,376\,501\,535\,669\,685\,075\,861} k_{37}
\end{aligned}$$

$$\begin{aligned}
& + \frac{298\,522\,241\,786\,543\,349\,630\,972\,804\,905\,033\,190\,367\,232}{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305} k_{38} \\
& - \frac{12\,662\,661\,378\,622\,871\,363\,437\,802\,741\,645\,000\,032\,256}{22\,668\,169\,943\,094\,695\,309\,228\,010\,375\,105} k_{39} \\
& + \frac{25\,325\,322\,757\,245\,742\,726\,875\,605\,483\,290\,000\,064\,512}{22\,668\,169\,943\,094\,695\,309\,228\,010\,375\,105} k_{40}, \\
r_{28} := & \frac{499\,416\,345\,469\,435\,797\,153\,973\,362\,392\,779\,113\,889\,792}{249\,349\,869\,374\,041\,648\,401\,508\,114\,126\,155} k_0 \\
& - \frac{303\,315\,231\,392\,105\,349\,989\,900\,387\,554\,810\,108\,936\,192}{185\,878\,993\,533\,376\,501\,535\,669\,685\,075\,861} k_1 \\
& + \frac{4482\,547\,452\,780\,951\,788\,084\,125\,857\,943\,547\,754\,610\,688}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_2 \\
& - \frac{975\,497\,366\,155\,046\,660\,260\,240\,850\,630\,857\,942\,728\,704}{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305} k_3 \\
& + \frac{8469\,435\,906\,039\,401\,872\,809\,627\,077\,877\,716\,966\,506\,496}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_4 \\
& - \frac{440\,323\,530\,965\,825\,775\,135\,424\,242\,387\,450\,745\,192\,448}{681\,556\,309\,622\,380\,505\,630\,788\,845\,278\,157} k_5 \\
& + \frac{5081\,700\,682\,659\,357\,572\,864\,121\,038\,530\,435\,778\,871\,296}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_6 \\
& - \frac{3850\,052\,532\,496\,824\,772\,612\,374\,261\,347\,066\,830\,913\,536}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_7 \\
& + \frac{955\,069\,823\,521\,335\,033\,501\,844\,355\,000\,578\,192\,965\,632}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_8 \\
& - \frac{2087\,766\,184\,194\,038\,781\,023\,413\,583\,040\,440\,847\,302\,656}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_9 \\
& + \frac{1483\,644\,214\,559\,001\,787\,482\,588\,393\,502\,042\,902\,757\,376}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{10} \\
& - \frac{31\,033\,591\,460\,701\,892\,437\,799\,914\,836\,821\,558\,951\,936}{309\,798\,322\,555\,627\,502\,559\,449\,475\,126\,435} k_{11} \\
& + \frac{685\,775\,747\,801\,668\,429\,900\,516\,305\,994\,450\,993\,676\,288}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{12} \\
& - \frac{40\,965\,308\,411\,677\,244\,320\,816\,267\,481\,293\,962\,346\,496}{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305} k_{13} \\
& + \frac{101\,988\,949\,404\,282\,264\,999\,349\,705\,761\,873\,972\,690\,944}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_{14} \\
& - \frac{244\,510\,452\,367\,720\,882\,620\,493\,409\,256\,384\,219\,578\,368}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{15} \\
& + \frac{52\,859\,600\,319\,731\,610\,497\,055\,854\,814\,723\,514\,040\,320}{2044\,668\,928\,867\,141\,516\,892\,366\,535\,834\,471} k_{16} \\
& - \frac{122\,912\,670\,034\,437\,537\,626\,885\,392\,933\,210\,683\,867\,136}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_{17} \\
& + \frac{566\,598\,838\,506\,118\,600\,952\,553\,038\,810\,247\,075\,725\,312}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{18} \\
& - \frac{21\,268\,506\,279\,272\,378\,175\,563\,359\,898\,374\,116\,737\,024}{249\,349\,869\,374\,041\,648\,401\,508\,114\,126\,155} k_{19} \\
& + \frac{2121\,066\,630\,467\,884\,388\,244\,571\,621\,249\,140\,654\,080}{16\,623\,324\,624\,936\,109\,893\,433\,874\,275\,077} k_{20} \\
& - \frac{34\,341\,612\,038\,077\,571\,827\,594\,223\,796\,440\,811\,962\,368}{185\,878\,993\,533\,376\,501\,535\,669\,685\,075\,861} k_{21} \\
& + \frac{2655\,214\,924\,433\,045\,169\,005\,446\,617\,489\,212\,975\,611\,904}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{22} \\
& - \frac{110\,281\,903\,522\,965\,928\,842\,540\,255\,989\,106\,990\,645\,248}{309\,798\,322\,555\,627\,502\,559\,449\,475\,126\,435} k_{23} \\
& + \frac{4881\,980\,293\,400\,125\,314\,412\,746\,886\,695\,951\,213\,264\,896}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{24} \\
& - \frac{1285\,907\,029\,292\,682\,872\,711\,660\,756\,617\,599\,554\,945\,024}{2044\,668\,928\,867\,141\,516\,892\,366\,535\,834\,471} k_{25} \\
& + \frac{2777\,871\,620\,064\,584\,117\,079\,312\,690\,906\,858\,225\,139\,712}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_{26} \\
& - \frac{10\,651\,226\,331\,464\,645\,736\,807\,531\,025\,944\,765\,464\,313\,856}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{27} \\
& + \frac{13\,444\,735\,304\,865\,288\,087\,883\,407\,959\,663\,026\,423\,463\,936}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{28} \\
& - \frac{5593\,955\,081\,230\,123\,390\,260\,281\,449\,824\,187\,608\,727\,552}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_{29} \\
& + \frac{20\,735\,695\,071\,821\,972\,825\,437\,722\,315\,060\,885\,367\,422\,976}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{30} \\
& - \frac{2307\,695\,877\,949\,902\,837\,505\,070\,257\,310\,001\,428\,430\,848}{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305} k_{31} \\
& + \frac{10\,270\,838\,393\,495\,970\,135\,419\,805\,863\,684\,251\,069\,710\,336}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_{32} \\
& - \frac{3373\,483\,551\,577\,606\,570\,806\,367\,155\,533\,438\,804\,633\,536}{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305} k_{33} \\
& + \frac{44\,366\,612\,800\,610\,724\,369\,928\,103\,857\,952\,281\,703\,288\,832}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{34} \\
& - \frac{17\,562\,276\,986\,142\,207\,274\,732\,538\,856\,790\,001\,293\,459\,456}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_{35} \\
& + \frac{12\,435\,814\,613\,883\,501\,119\,033\,500\,344\,223\,211\,497\,885\,696}{2044\,668\,928\,867\,141\,516\,892\,366\,535\,834\,471} k_{36} \\
& - \frac{14\,612\,670\,22\,243\,633\,359\,712\,033\,216\,231\,864\,551\,604\,224}{249\,349\,869\,374\,041\,648\,401\,508\,114\,126\,155} k_{37} \\
& + \frac{28\,910\,595\,338\,228\,625\,452\,844\,538\,944\,040\,870\,448\,566\,272}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_{38} \\
& - \frac{2782\,162\,215\,161\,007\,316\,513\,183\,618\,101\,155\,817\,586\,688}{249\,349\,869\,374\,041\,648\,401\,508\,114\,126\,155} k_{39} \\
& + \frac{5564\,324\,130\,322\,014\,633\,026\,367\,236\,202\,311\,635\,173\,376}{249\,349\,869\,374\,041\,648\,401\,508\,114\,126\,155} k_{40},
\end{aligned}$$

$$\begin{aligned}
r_{29} := & \frac{5015\,271\,802\,782\,091\,268\,199\,795\,269\,814\,767\,744}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_0 \\
& - \frac{76\,286\,405\,017\,828\,414\,757\,704\,823\,560\,757\,680}{122\,408\,117\,692\,711\,354\,669\,831\,256\,025\,567} k_1 \\
& + \frac{3490\,618\,928\,505\,931\,553\,808\,862\,355\,336\,324\,528}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_2 \\
& - \frac{263\,174\,615\,803\,785\,291\,727\,858\,978\,408\,053\,008}{612\,040\,588\,463\,556\,773\,349\,156\,280\,127\,835} k_3 \\
& + \frac{2408\,572\,607\,023\,890\,744\,985\,850\,273\,396\,344\,352}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_4 \\
& - \frac{407\,879\,150\,126\,189\,648\,667\,955\,057\,913\,726\,240}{1346\,489\,294\,619\,824\,901\,368\,143\,816\,281\,237} k_5 \\
& + \frac{1808\,724\,722\,865\,912\,800\,415\,264\,870\,588\,951\,872}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_6 \\
& - \frac{1761\,276\,269\,997\,084\,931\,273\,031\,923\,890\,627\,712}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_7 \\
& + \frac{1982\,231\,527\,167\,366\,770\,346\,286\,801\,797\,462\,272}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_8 \\
& - \frac{2626\,542\,395\,475\,121\,038\,567\,648\,583\,213\,714\,432}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_9 \\
& + \frac{3968\,862\,866\,075\,522\,209\,134\,662\,049\,593\,556\,992}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{10} \\
& - \frac{589\,822\,870\,148\,448\,177\,320\,681\,680\,770\,553\,856}{612\,040\,588\,463\,556\,773\,349\,156\,280\,127\,835} k_{11} \\
& + \frac{11\,009\,181\,049\,436\,124\,609\,301\,133\,150\,152\,749\,056}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{12} \\
& - \frac{1721\,854\,400\,757\,015\,805\,733\,611\,561\,402\,068\,992}{612\,040\,588\,463\,556\,773\,349\,156\,280\,127\,835} k_{13} \\
& + \frac{32\,664\,786\,321\,303\,220\,169\,644\,403\,206\,035\,236\,864}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{14} \\
& - \frac{56\,182\,946\,875\,190\,839\,690\,917\,688\,597\,785\,204\,736}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{15} \\
& + \frac{19\,231\,324\,992\,648\,347\,575\,359\,731\,171\,089\,358\,848}{1346\,489\,294\,619\,824\,901\,368\,143\,816\,281\,237} k_{16} \\
& - \frac{578\,042\,141\,419\,531\,598\,106\,685\,305\,280\,724\,992}{23\,789\,563\,509\,184\,185\,536\,539\,643\,397\,195} k_{17} \\
& + \frac{276\,473\,935\,261\,720\,990\,857\,253\,335\,467\,535\,079\,424}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{18} \\
& - \frac{464\,006\,919\,551\,069\,116\,097\,622\,918\,196\,379\,772\,928}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{19} \\
& + \frac{154\,604\,361\,917\,584\,587\,617\,095\,454\,341\,298\,606\,080}{1346\,489\,294\,619\,824\,901\,368\,143\,816\,281\,237} k_{20} \\
& - \frac{23\,233\,836\,645\,325\,096\,739\,334\,491\,678\,965\,559\,296}{23\,233\,836\,645\,325\,096\,739\,334\,491\,678\,965\,559\,296} k_{21} \\
& + \frac{2095\,138\,875\,854\,389\,644\,411\,742\,018\,656\,141\,805\,568}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{22} \\
& - \frac{309\,587\,614\,861\,651\,767\,101\,098\,809\,983\,131\,609\,088}{612\,040\,588\,463\,556\,773\,349\,156\,280\,127\,835} k_{23} \\
& + \frac{5484\,754\,314\,897\,075\,063\,440\,550\,935\,424\,591\,921\,152}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{24} \\
& - \frac{1749\,681\,520\,273\,335\,468\,154\,526\,522\,967\,843\,184\,640}{1346\,489\,294\,619\,824\,901\,368\,143\,816\,281\,237} k_{25} \\
& + \frac{13\,812\,138\,293\,726\,193\,927\,820\,286\,386\,610\,807\,601\,152}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{26} \\
& - \frac{21\,573\,699\,741\,488\,249\,600\,663\,506\,480\,564\,421\,527\,552}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{27} \\
& + \frac{117\,737\,776\,933\,375\,082\,565\,811\,865\,564\,446\,674\,944}{23\,789\,563\,509\,184\,185\,536\,539\,643\,397\,195} k_{28} \\
& - \frac{50\,862\,080\,874\,188\,820\,271\,425\,528\,275\,737\,915\,666\,432}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{29} \\
& + \frac{76\,705\,114\,665\,226\,162\,303\,780\,691\,820\,986\,296\,788\,992}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{30} \\
& - \frac{10\,386\,009\,013\,200\,563\,861\,704\,888\,158\,962\,671\,732\,736}{612\,040\,588\,463\,556\,773\,349\,156\,280\,127\,835} k_{31} \\
& + \frac{168\,001\,044\,232\,044\,935\,628\,530\,947\,814\,987\,153\,924\,096}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{32} \\
& - \frac{22\,167\,836\,970\,383\,593\,446\,584\,507\,027\,340\,156\,649\,472}{612\,040\,588\,463\,556\,773\,349\,156\,280\,127\,835} k_{33} \\
& + \frac{349\,290\,139\,417\,301\,258\,771\,875\,642\,152\,598\,248\,740\,864}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{34} \\
& - \frac{494\,017\,790\,337\,021\,404\,840\,358\,693\,267\,606\,602\,868\,736}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{35} \\
& + \frac{138\,413\,379\,433\,836\,247\,127\,099\,083\,088\,683\,219\,390\,144}{1346\,489\,294\,619\,824\,901\,368\,143\,816\,281\,237} k_{36} \\
& - \frac{194\,302\,587\,077\,326\,639\,538\,503\,835\,635\,073\,071\,766\,528}{1346\,489\,294\,619\,824\,901\,368\,143\,816\,281\,237} k_{37} \\
& + \frac{1413\,752\,836\,373\,419\,814\,490\,1368\,143\,816\,281\,237}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{38} \\
& - \frac{2298\,232\,638\,346\,962\,848\,634\,912\,710\,708\,001\,736\,278\,016}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{39} \\
& + \frac{4596\,465\,276\,693\,985\,697\,869\,825\,421\,416\,003\,472\,556\,032}{6732\,446\,473\,099\,124\,506\,840\,719\,081\,406\,185} k_{40}, \\
\\
r_{30} := & \frac{23\,199\,444\,458\,405\,246\,197\,593\,744\,050\,280\,680\,390\,656}{748\,049\,608\,122\,124\,945\,204\,524\,342\,378\,465} k_0 \\
& - \frac{354\,750\,277\,688\,737\,193\,968\,370\,874\,982\,260\,539\,392}{13\,600\,901\,965\,856\,817\,185\,536\,806\,225\,063} k_1 \\
& + \frac{48\,817\,153\,601\,304\,893\,299\,317\,334\,515\,849\,949\,085\,696}{2244\,148\,824\,366\,374\,835\,613\,573\,027\,135\,395} k_2 \\
& - \frac{407\,607\,651\,513\,773\,843\,082\,446\,762\,539\,858\,540\,544}{22\,668\,169\,943\,094\,695\,309\,228\,010\,375\,105} k_3
\end{aligned}$$

$$\begin{aligned}
& + \frac{3671\ 802\ 718\ 759\ 233\ 394\ 039\ 878\ 046\ 719\ 261\ 802\ 496}{5360\ 120\ 910\ 216\ 487\ 266\ 127\ 022\ 451\ 002\ 413\ 678\ 592} k_4 \\
& - \frac{448\ 829\ 764\ 873\ 274\ 967\ 122\ 714\ 605\ 427\ 079}{7173\ 488\ 111\ 219\ 161\ 266\ 114\ 187\ 918\ 844\ 662\ 120\ 448} k_5 \\
& + \frac{748\ 049\ 608\ 122\ 124\ 945\ 204\ 524\ 342\ 378\ 465}{5703\ 309\ 558\ 564\ 226\ 975\ 674\ 179\ 737\ 989\ 965\ 938\ 688} k_6 \\
& - \frac{748\ 049\ 608\ 122\ 124\ 945\ 204\ 524\ 342\ 378\ 465}{13\ 473\ 101\ 572\ 366\ 752\ 735\ 251\ 870\ 070\ 268\ 906\ 962\ 944} k_7 \\
& + \frac{2244\ 148\ 824\ 366\ 374\ 835\ 613\ 573\ 027\ 135\ 395}{3504\ 692\ 195\ 626\ 973\ 202\ 107\ 043\ 997\ 364\ 725\ 219\ 328} k_8 \\
& - \frac{748\ 049\ 608\ 122\ 124\ 945\ 204\ 524\ 342\ 378\ 465}{2712\ 314\ 022\ 149\ 334\ 511\ 651\ 754\ 394\ 422\ 831\ 218\ 688} k_9 \\
& + \frac{748\ 049\ 608\ 122\ 124\ 945\ 204\ 524\ 342\ 378\ 465}{567\ 798\ 522\ 753\ 425\ 903\ 551\ 437\ 530\ 446\ 078\ 410\ 752} k_{10} \\
& - \frac{204\ 013\ 529\ 487\ 852\ 257\ 783\ 052\ 093\ 375\ 945}{58\ 576\ 371\ 279\ 318\ 999\ 059\ 037\ 607\ 420\ 839\ 329\ 792} k_{11} \\
& + \frac{27\ 705\ 541\ 041\ 560\ 183\ 155\ 723\ 123\ 791\ 795}{11\ 911\ 558\ 315\ 457\ 301\ 846\ 482\ 682\ 067\ 726\ 630\ 912} k_{12} \\
& - \frac{7556\ 056\ 647\ 698\ 231\ 769\ 742\ 670\ 125\ 035}{2529\ 007\ 445\ 727\ 627\ 961\ 135\ 292\ 410\ 779\ 984\ 723\ 968} k_{13} \\
& + \frac{2244\ 148\ 824\ 366\ 374\ 835\ 613\ 573\ 027\ 135\ 395}{540\ 864\ 415\ 332\ 589\ 712\ 519\ 703\ 636\ 327\ 794\ 212\ 864} k_{14} \\
& - \frac{748\ 049\ 608\ 122\ 124\ 945\ 204\ 524\ 342\ 378\ 465}{48\ 171\ 562\ 220\ 266\ 004\ 901\ 382\ 472\ 453\ 067\ 898\ 880} k_{15} \\
& + \frac{149\ 609\ 921\ 624\ 424\ 989\ 040\ 904\ 868\ 475\ 693}{266\ 968\ 820\ 220\ 495\ 952\ 567\ 494\ 360\ 283\ 251\ 212\ 288} k_{16} \\
& - \frac{2244\ 148\ 824\ 366\ 374\ 835\ 613\ 573\ 027\ 135\ 395}{480\ 650\ 120\ 885\ 635\ 861\ 814\ 447\ 077\ 154\ 770\ 386\ 944} k_{17} \\
& + \frac{748\ 049\ 608\ 122\ 124\ 945\ 204\ 524\ 342\ 378\ 465}{966\ 096\ 017\ 317\ 552\ 966\ 991\ 251\ 124\ 016\ 513\ 548\ 288} k_{18} \\
& - \frac{748\ 049\ 608\ 122\ 124\ 945\ 204\ 524\ 342\ 378\ 465}{946\ 379\ 750\ 101\ 314\ 077\ 802\ 603\ 423\ 194\ 202\ 767\ 360} k_{19} \\
& + \frac{448\ 829\ 764\ 873\ 274\ 967\ 122\ 714\ 605\ 427\ 079}{14\ 219\ 594\ 589\ 857\ 441\ 179\ 677\ 008\ 291\ 990\ 601\ 728} k_{20} \\
& - \frac{4533\ 633\ 988\ 618\ 939\ 061\ 845\ 602\ 075\ 021}{1101\ 622\ 958\ 748\ 434\ 408\ 530\ 323\ 236\ 329\ 224\ 667\ 136} k_{21} \\
& + \frac{249\ 349\ 869\ 374\ 041\ 648\ 401\ 508\ 114\ 126\ 155}{1223\ 230\ 684\ 421\ 637\ 872\ 389\ 749\ 606\ 070\ 675\ 308\ 544} k_{22} \\
& - \frac{204\ 013\ 529\ 487\ 852\ 257\ 783\ 052\ 093\ 375\ 945}{5919\ 136\ 289\ 862\ 546\ 539\ 443\ 198\ 221\ 150\ 859\ 558\ 912} k_{23} \\
& + \frac{748\ 049\ 608\ 122\ 124\ 945\ 204\ 524\ 342\ 378\ 465}{1527\ 742\ 498\ 605\ 908\ 619\ 290\ 032\ 208\ 928\ 594\ 722\ 816} k_{24} \\
& - \frac{149\ 609\ 921\ 624\ 424\ 989\ 040\ 904\ 868\ 475\ 693}{29\ 027\ 640\ 143\ 610\ 230\ 444\ 554\ 432\ 200\ 969\ 573\ 892\ 096} k_{25} \\
& + \frac{2244\ 148\ 824\ 366\ 374\ 835\ 613\ 573\ 027\ 135\ 395}{12\ 062\ 611\ 189\ 144\ 286\ 270\ 370\ 812\ 768\ 773\ 566\ 103\ 552} k_{26} \\
& - \frac{748\ 049\ 608\ 122\ 124\ 945\ 204\ 524\ 342\ 378\ 465}{14\ 830\ 878\ 096\ 799\ 937\ 605\ 557\ 380\ 317\ 156\ 862\ 328\ 832} k_{27} \\
& + \frac{748\ 049\ 608\ 122\ 124\ 945\ 204\ 524\ 342\ 378\ 465}{54\ 037\ 958\ 523\ 450\ 076\ 988\ 791\ 863\ 100\ 172\ 622\ 626\ 816} k_{28} \\
& - \frac{2244\ 148\ 824\ 366\ 374\ 835\ 613\ 573\ 027\ 135\ 395}{7213\ 302\ 424\ 411\ 035\ 351\ 516\ 049\ 131\ 134\ 219\ 976\ 704} k_{29} \\
& + \frac{249\ 349\ 869\ 374\ 041\ 648\ 401\ 508\ 114\ 126\ 155}{780\ 139\ 781\ 985\ 948\ 213\ 027\ 412\ 822\ 717\ 727\ 506\ 432} k_{30} \\
& - \frac{22\ 668\ 169\ 943\ 094\ 695\ 309\ 228\ 010\ 375\ 105}{91\ 076\ 219\ 920\ 327\ 920\ 746\ 961\ 955\ 142\ 514\ 500\ 435\ 968} k_{31} \\
& + \frac{2244\ 148\ 824\ 366\ 374\ 835\ 613\ 573\ 027\ 135\ 395}{3228\ 568\ 868\ 920\ 582\ 606\ 739\ 983\ 461\ 951\ 173\ 558\ 272} k_{32} \\
& - \frac{68\ 004\ 309\ 829\ 284\ 085\ 927\ 684\ 031\ 125\ 315}{145\ 735\ 444\ 637\ 257\ 981\ 270\ 466\ 364\ 780\ 057\ 427\ 968} k_{33} \\
& + \frac{2643\ 284\ 834\ 353\ 798\ 392\ 948\ 849\ 266\ 355}{142\ 731\ 954\ 156\ 047\ 803\ 230\ 510\ 765\ 431\ 108\ 713\ 054\ 208} k_{34} \\
& - \frac{2244\ 148\ 824\ 366\ 374\ 835\ 613\ 573\ 027\ 135\ 395}{10\ 909\ 752\ 687\ 878\ 168\ 654\ 518\ 694\ 275\ 772\ 591\ 374\ 336} k_{35} \\
& + \frac{149\ 609\ 921\ 624\ 424\ 989\ 040\ 904\ 868\ 475\ 693}{12\ 444\ 271\ 087\ 793\ 210\ 043\ 989\ 937\ 853\ 471\ 318\ 343\ 680} k_{36} \\
& - \frac{149\ 609\ 921\ 624\ 424\ 989\ 040\ 904\ 868\ 475\ 693}{213\ 888\ 721\ 988\ 825\ 560\ 011\ 515\ 731\ 387\ 552\ 173\ 654\ 016} k_{37} \\
& + \frac{2244\ 148\ 824\ 366\ 374\ 835\ 613\ 573\ 027\ 135\ 395}{9938\ 445\ 678\ 688\ 162\ 174\ 624\ 039\ 205\ 870\ 998\ 313\ 024} k_{38} \\
& - \frac{83\ 116\ 623\ 124\ 680\ 549\ 467\ 169\ 371\ 375\ 385}{19\ 876\ 891\ 357\ 976\ 324\ 349\ 248\ 078\ 371\ 741\ 397\ 826\ 048} k_{39} \\
& + \frac{83\ 116\ 623\ 124\ 680\ 549\ 467\ 169\ 371\ 375\ 385}{83\ 116\ 623\ 124\ 680\ 549\ 467\ 169\ 371\ 375\ 385} k_{40}, \\
r_{31} & := \frac{117\ 273\ 180\ 446\ 691\ 761\ 081\ 349\ 384\ 414\ 373\ 776\ 660\ 928}{20\ 991\ 950\ 614\ 291\ 672\ 337\ 008\ 383\ 431\ 562\ 533\ 567\ 048} k_0 \\
& - \frac{185\ 878\ 853\ 532\ 376\ 501\ 535\ 669\ 685\ 016\ 861}{2473\ 436\ 878\ 853\ 532\ 376\ 501\ 535\ 669\ 685\ 016\ 861} k_1 \\
& + \frac{109\ 928\ 437\ 035\ 867\ 823\ 488\ 836\ 910\ 528\ 735}{2782\ 579\ 682\ 402\ 964\ 494\ 941\ 120\ 189\ 275\ 226\ 814\ 696} k_2 \\
& - \frac{929\ 394\ 967\ 666\ 882\ 507\ 678\ 348\ 425\ 379\ 305}{2216\ 793\ 371\ 712\ 128\ 538\ 149\ 248\ 728\ 491\ 093\ 597\ 744} k_3 \\
& + \frac{10\ 223\ 344\ 644\ 335\ 707\ 584\ 461\ 832\ 679\ 172\ 355}{360\ 381\ 389\ 103\ 878\ 809\ 849\ 267\ 384\ 774\ 480\ 213\ 952} k_4 \\
& - \frac{681\ 556\ 309\ 622\ 380\ 505\ 630\ 788\ 845\ 278\ 157}{10\ 343\ 597\ 961\ 581\ 708\ 070\ 850\ 847\ 744\ 543\ 338\ 379\ 264} k_5 \\
& + \frac{10\ 223\ 344\ 644\ 335\ 707\ 584\ 461\ 832\ 679\ 172\ 355}{12\ 874\ 597\ 256\ 181\ 434\ 357\ 383\ 037\ 783\ 048\ 836\ 441\ 984} k_6 \\
& - \frac{10\ 223\ 344\ 644\ 335\ 707\ 584\ 461\ 832\ 679\ 172\ 355}{10\ 223\ 344\ 644\ 335\ 707\ 584\ 461\ 832\ 679\ 172\ 355} k_7
\end{aligned}$$

$$\begin{aligned}
& + \frac{4520\,254\,741\,379\,989\,791\,813\,295\,801\,333\,726\,139\,648}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_8 \\
& - \frac{13\,247\,251\,195\,908\,620\,671\,276\,114\,160\,993\,797\,986\,304}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_9 \\
& + \frac{12\,448\,036\,446\,019\,384\,437\,745\,639\,823\,973\,978\,589\,184}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{10} \\
& - \frac{346\,057\,880\,787\,310\,029\,192\,398\,829\,147\,917\,748\,224}{309\,798\,322\,555\,627\,502\,559\,449\,475\,126\,435} k_{11} \\
& + \frac{331\,526\,705\,407\,431\,643\,918\,555\,132\,396\,869\,865\,472}{329\,785\,311\,107\,603\,470\,466\,510\,731\,586\,205} k_{12} \\
& - \frac{823\,842\,722\,528\,428\,580\,018\,753\,327\,552\,818\,417\,664}{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305} k_{13} \\
& + \frac{2593\,492\,844\,306\,983\,637\,899\,558\,868\,747\,758\,032\,896}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_{14} \\
& - \frac{6419\,576\,927\,084\,258\,243\,514\,079\,357\,996\,792\,870\,912}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{15} \\
& + \frac{991\,625\,792\,069\,415\,283\,347\,803\,383\,768\,275\,558\,400}{2044\,668\,928\,867\,141\,516\,892\,366\,535\,834\,471} k_{16} \\
& - \frac{1123\,389\,579\,561\,528\,754\,593\,863\,707\,266\,288\,123\,904}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_{17} \\
& + \frac{1627\,465\,493\,104\,540\,350\,914\,088\,686\,934\,188\,177\,408}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{18} \\
& - \frac{7301\,072\,435\,502\,740\,057\,009\,231\,527\,630\,403\,584}{249\,349\,869\,374\,041\,648\,401\,508\,114\,126\,155} k_{19} \\
& + \frac{3967\,787\,103\,651\,644\,546\,489\,858\,871\,800\,811\,520}{16\,623\,324\,624\,936\,109\,893\,433\,874\,275\,077} k_{20} \\
& - \frac{87\,732\,405\,845\,178\,751\,743\,932\,952\,616\,698\,564\,608}{185\,878\,993\,533\,376\,501\,535\,669\,685\,075\,861} k_{21} \\
& + \frac{241\,450\,897\,038\,903\,335\,912\,173\,755\,462\,800\,533\,504}{329\,785\,311\,107\,603\,470\,466\,510\,731\,586\,205} k_{22} \\
& - \frac{316\,657\,587\,161\,516\,900\,667\,102\,797\,720\,083\,130\,368}{309\,798\,322\,555\,627\,502\,559\,449\,475\,126\,435} k_{23} \\
& + \frac{13\,749\,910\,268\,161\,522\,822\,923\,683\,154\,524\,975\,988\,736}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{24} \\
& - \frac{3483\,217\,081\,409\,538\,314\,980\,547\,510\,246\,218\,522\,624}{2044\,668\,928\,867\,141\,516\,892\,366\,535\,834\,471} k_{25} \\
& + \frac{7159\,570\,854\,312\,675\,679\,020\,114\,959\,668\,699\,297\,792}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_{26} \\
& - \frac{25\,968\,282\,902\,365\,645\,604\,017\,502\,979\,585\,624\,774\,656}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{27} \\
& + \frac{30\,915\,289\,775\,599\,634\,665\,879\,362\,895\,173\,585\,227\,776}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{28} \\
& - \frac{12\,116\,742\,518\,928\,782\,636\,344\,769\,154\,521\,608\,466\,432}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_{29} \\
& + \frac{42\,303\,591\,034\,908\,341\,622\,009\,588\,539\,032\,383\,010\,816}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{30} \\
& - \frac{4436\,897\,724\,843\,854\,949\,589\,223\,272\,134\,973\,216\,768}{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305} k_{31} \\
& + \frac{600\,941\,652\,635\,523\,775\,863\,169\,123\,165\,695\,778\,816}{109\,928\,437\,035\,867\,823\,488\,836\,910\,528\,739} k_{32} \\
& - \frac{5779\,925\,491\,822\,741\,968\,729\,245\,972\,058\,129\,842\,176}{929\,394\,967\,666\,882\,507\,678\,348\,425\,379\,305} k_{33} \\
& + \frac{71\,911\,186\,023\,007\,090\,396\,139\,764\,309\,755\,885\,094\,912}{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355} k_{34} \\
& - \frac{26\,971\,358\,917\,172\,228\,399\,262\,183\,037\,634\,260\,330\,496}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_{35} \\
& + \frac{18\,123\,665\,887\,686\,968\,126\,120\,048\,264\,069\,438\,148\,608}{2044\,668\,928\,867\,141\,516\,892\,366\,535\,834\,471} k_{36} \\
& - \frac{20\,216\,979\,553\,894\,669\,166\,771\,440\,673\,724\,652\,785\,664}{37\,692\,032\,462\,917\,516\,859\,333\,568\,366\,187\,554\,660\,352} k_{37} \\
& + \frac{3342\,890\,161\,641\,730\,733\,324\,090\,452\,644\,913\,758\,208}{3407\,781\,548\,111\,902\,528\,153\,944\,226\,390\,785} k_{38} \\
& - \frac{6685\,780\,323\,283\,461\,466\,648\,180\,905\,289\,827\,516\,416}{249\,349\,869\,374\,041\,648\,401\,508\,114\,126\,155} k_{40},
\end{aligned}$$

$$\begin{aligned}
r_{32} & := \frac{462\,022\,514\,400\,052\,627\,873\,443\,707\,098\,121\,855\,104}{748\,049\,608\,122\,124\,945\,204\,524\,342\,378\,465} k_0 \\
& - \frac{5857\,550\,188\,478\,871\,189\,039\,232\,188\,586\,404\,246}{13\,600\,901\,963\,856\,817\,185\,536\,806\,225\,063} k_1 \\
& + \frac{806\,469\,608\,795\,042\,728\,617\,876\,275\,427\,578\,818\,064}{2244\,148\,824\,366\,374\,835\,613\,573\,027\,135\,395} k_2 \\
& - \frac{7094\,858\,132\,567\,615\,867\,839\,036\,160\,351\,419\,696}{22\,668\,169\,943\,094\,695\,309\,228\,010\,375\,105} k_3 \\
& + \frac{7623\,218\,562\,614\,724\,425\,921\,914\,035\,118\,269\,536}{27\,705\,541\,041\,560\,183\,155\,723\,123\,791\,795} k_4 \\
& - \frac{109\,028\,498\,624\,513\,220\,167\,332\,658\,929\,990\,892\,768}{448\,829\,764\,873\,271\,967\,122\,714\,605\,427\,079} k_5 \\
& + \frac{161\,108\,893\,061\,978\,154\,667\,406\,783\,693\,455\,027\,072}{748\,049\,608\,122\,124\,945\,204\,524\,342\,378\,465} k_6 \\
& - \frac{143\,499\,792\,666\,628\,498\,195\,254\,437\,407\,100\,391\,552}{748\,049\,608\,122\,124\,945\,204\,524\,342\,378\,465} k_7 \\
& + \frac{385\,164\,923\,339\,817\,594\,126\,777\,777\,309\,984\,555\,776}{2244\,148\,824\,366\,374\,835\,613\,573\,027\,135\,395} k_8 \\
& - \frac{115\,274\,882\,187\,499\,612\,409\,540\,149\,100\,063\,457\,792}{748\,049\,608\,122\,124\,945\,204\,524\,342\,378\,465} k_9 \\
& + \frac{103\,660\,053\,260\,308\,444\,139\,054\,717\,369\,460\,237\,792}{748\,049\,608\,122\,124\,945\,204\,524\,342\,378\,465} k_{10}
\end{aligned}$$

$$\begin{aligned}
& - \frac{25\,375\,719\,868\,259\,143\,906\,650\,481\,228\,028\,377\,088}{204\,013\,529\,487\,852\,257\,783\,052\,093\,375\,945} k_{11} \\
& + \frac{27\,642\,700\,010\,286\,756\,523\,728\,616\,605\,774\,057\,472}{249\,349\,869\,374\,041\,648\,401\,508\,114\,126\,155} k_{12} \\
& - \frac{2206\,420\,631\,142\,709\,030\,843\,040\,511\,911\,378\,944}{22\,668\,169\,943\,094\,695\,309\,228\,010\,375\,105} k_{13} \\
& + \frac{186\,588\,264\,223\,908\,252\,582\,588\,759\,521\,869\,893\,632}{2244\,148\,824\,366\,374\,835\,613\,573\,027\,135\,395} k_{14} \\
& - \frac{50\,581\,158\,009\,593\,689\,488\,529\,904\,567\,714\,123\,776}{748\,049\,608\,122\,124\,945\,204\,524\,342\,378\,465} k_{15} \\
& + \frac{7493\,505\,047\,886\,254\,708\,621\,614\,242\,228\,912\,128}{149\,609\,921\,624\,424\,989\,040\,904\,868\,475\,693} k_{16} \\
& - \frac{67\,066\,870\,667\,287\,856\,831\,725\,405\,249\,156\,415\,488}{2244\,148\,824\,366\,374\,835\,613\,573\,027\,135\,395} k_{17} \\
& + \frac{4745\,886\,343\,210\,616\,548\,575\,647\,138\,335\,166\,464}{748\,049\,608\,122\,124\,945\,204\,524\,342\,378\,465} k_{18} \\
& - \frac{15\,861\,253\,215\,836\,794\,216\,279\,659\,670\,003\,453\,952}{748\,049\,608\,122\,124\,945\,204\,524\,342\,378\,465} k_{19} \\
& + \frac{23\,979\,217\,222\,557\,096\,964\,072\,876\,661\,802\,229\,760}{448\,829\,764\,873\,274\,967\,122\,714\,605\,427\,079} k_{20} \\
& - \frac{45\,835\,695\,005\,082\,020\,755\,158\,322\,315\,403\,264}{503\,737\,109\,846\,548\,784\,649\,511\,341\,669} k_{21} \\
& + \frac{33\,554\,251\,774\,414\,819\,188\,392\,920\,799\,331\,119\,104}{249\,349\,869\,374\,041\,648\,401\,508\,114\,126\,155} k_{22} \\
& - \frac{37\,705\,956\,468\,584\,505\,281\,928\,972\,817\,534\,038\,016}{705\,956\,468\,584\,505\,281\,928\,972\,817\,534\,038\,016} k_{23} \\
& + \frac{181\,342\,829\,178\,390\,381\,976\,186\,014\,376\,777\,351\,168}{204\,013\,529\,487\,852\,257\,783\,052\,093\,375\,945} k_{24} \\
& - \frac{46\,085\,057\,702\,190\,997\,140\,225\,857\,111\,446\,667\,264}{748\,049\,608\,122\,124\,945\,204\,524\,342\,378\,465} k_{25} \\
& + \frac{858\,006\,354\,929\,023\,374\,588\,050\,395\,027\,765\,202\,944}{149\,609\,921\,624\,424\,989\,040\,904\,868\,475\,693} k_{26} \\
& - \frac{348\,572\,884\,739\,729\,016\,752\,378\,845\,342\,154\,641\,408}{2244\,148\,824\,366\,374\,835\,613\,573\,027\,135\,395} k_{27} \\
& + \frac{418\,637\,153\,107\,794\,249\,576\,606\,697\,464\,265\,596\,928}{748\,049\,608\,122\,124\,945\,204\,524\,342\,378\,465} k_{28} \\
& - \frac{1490\,083\,461\,008\,803\,245\,074\,013\,505\,477\,645\,082\,624}{748\,049\,608\,122\,124\,945\,204\,524\,342\,378\,465} k_{29} \\
& + \frac{194\,414\,815\,526\,232\,358\,915\,040\,326\,388\,795\,355\,136}{2244\,148\,824\,366\,374\,835\,613\,573\,027\,135\,395} k_{30} \\
& - \frac{6856\,430\,152\,701\,438\,289\,241\,212\,592\,653\,684\,736}{249\,349\,869\,374\,041\,648\,401\,508\,114\,126\,155} k_{31} \\
& + \frac{2351\,461\,326\,477\,257\,066\,258\,167\,201\,284\,421\,599\,232}{7556\,056\,647\,698\,231\,769\,742\,670\,125\,035} k_{32} \\
& - \frac{81\,713\,229\,978\,055\,513\,680\,016\,556\,900\,849\,778\,688}{2244\,148\,824\,366\,374\,835\,613\,573\,027\,135\,395} k_{33} \\
& + \frac{1024\,361\,305\,001\,123\,648\,177\,333\,364\,580\,089\,491\,456}{68\,004\,509\,829\,284\,085\,927\,684\,031\,125\,315} k_{34} \\
& - \frac{3482\,601\,345\,095\,887\,315\,483\,050\,941\,235\,514\,191\,872}{748\,049\,608\,122\,124\,945\,204\,524\,342\,378\,465} k_{35} \\
& + \frac{261\,772\,417\,423\,385\,509\,332\,321\,456\,478\,300\,266\,496}{2244\,148\,824\,366\,374\,835\,613\,573\,027\,135\,395} k_{36} \\
& - \frac{293\,868\,895\,157\,524\,004\,627\,970\,577\,698\,579\,079\,168}{149\,609\,921\,624\,424\,989\,040\,904\,868\,475\,693} k_{37} \\
& + \frac{4964\,405\,092\,889\,301\,708\,720\,227\,308\,513\,253\,146\,624}{149\,609\,921\,624\,424\,989\,040\,904\,868\,475\,693} k_{38} \\
& - \frac{675\,238\,713\,771\,353\,887\,480\,173\,843\,842\,487\,451\,648}{2244\,148\,824\,366\,374\,835\,613\,573\,027\,135\,395} k_{39} \\
& + \frac{1350\,477\,427\,542\,707\,774\,960\,347\,687\,684\,974\,903\,296}{249\,349\,869\,374\,041\,648\,401\,508\,114\,126\,155} k_{40},
\end{aligned}$$

$$\begin{aligned}
r_{33} &:= \frac{5946\,135\,582\,867\,389\,477\,226\,504\,627\,457\,607\,335\,936}{3720\,205\,235\,021\,118\,105\,626\,195\,113\,214\,650\,351\,616} k_0 \\
& - \frac{1672\,910\,841\,800\,388\,343\,824\,027\,195\,682\,749}{513\,574\,616\,060\,211\,595\,369\,423\,748\,478\,843\,099\,283\,456} k_1 \\
& + \frac{276\,030\,305\,397\,064\,194\,780\,469\,483\,337\,653\,585}{481\,520\,596\,503\,750\,730\,730\,614\,191\,683\,214\,770\,176} k_2 \\
& - \frac{39\,849\,653\,937\,433\,181\,031\,361\,266\,063\,078\,516\,064\,256}{309\,798\,322\,557\,027\,359\,449\,475\,126\,435} k_3 \\
& + \frac{30\,670\,033\,933\,007\,122\,753\,385\,498\,037\,517\,065}{60\,168\,103\,909\,716\,594\,920\,599\,053\,955\,277\,921\,714\,176} k_4 \\
& - \frac{84\,681\,328\,061\,928\,453\,829\,856\,093\,896\,467\,538\,742\,848}{37\,328\,061\,101\,799\,021\,368\,260\,156\,494\,112\,551\,195} k_5 \\
& + \frac{72\,228\,369\,107\,799\,921\,368\,260\,156\,494\,112\,551\,195}{92\,010\,101\,799\,021\,368\,260\,156\,494\,112\,551\,195} k_6 \\
& - \frac{187\,76\,010\,101\,799\,021\,368\,260\,156\,494\,112\,551\,195}{54\,662\,964\,291\,367\,666\,412\,058\,607\,240\,832\,688\,360\,448} k_7 \\
& + \frac{92\,010\,101\,799\,021\,368\,260\,156\,494\,112\,551\,195}{48\,501\,932\,491\,735\,853\,398\,430\,338\,221\,551\,780\,608} k_8 \\
& - \frac{11\,833\,521\,289\,358\,067\,858\,129\,997\,957\,975\,383\,212\,032}{25\,093\,664\,127\,005\,827\,707\,315\,407\,485\,241\,235} k_9 \\
& + \frac{12\,933\,853\,942\,374\,063\,403\,125\,433\,926\,763\,521\,507\,328}{30\,670\,033\,933\,007\,122\,753\,385\,498\,037\,517\,065} k_{10} \\
& - \frac{1036\,774\,001\,182\,152\,032\,128\,028\,959\,618\,015\,952\,896}{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915} k_{11}
\end{aligned}$$

$$\begin{aligned}
& + \frac{87\,303\,524\,773\,861\,754\,808\,192\,252\,691\,258\,073\,939\,968}{22\,940\,115\,823\,387\,978\,569\,015\,181\,100\,904\,251\,654\,144} k_{14} \\
& + \frac{92\,010\,101\,799\,021\,368\,260\,156\,494\,112\,551\,195}{3041\,203\,926\,143\,059\,901\,372\,053\,140\,792\,804\,376\,576} k_{15} \\
& + \frac{18\,402\,020\,359\,804\,273\,652\,031\,298\,822\,510\,239}{16\,123\,623\,060\,864\,706\,636\,618\,101\,791\,265\,732\,165\,632} k_{16} \\
& - \frac{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585}{7078\,665\,444\,401\,133\,418\,359\,711\,848\,314\,224\,246\,784} k_{17} \\
& - \frac{92\,010\,101\,799\,021\,368\,260\,156\,494\,112\,551\,195}{553\,120\,615\,942\,349\,433\,675\,634\,649\,633\,477\,623\,808} k_{18} \\
& + \frac{2244\,148\,824\,366\,374\,835\,613\,573\,027\,135\,395}{613\,867\,959\,833\,387\,721\,559\,210\,759\,585\,126\,154\,240} k_{19} \\
& - \frac{1346\,489\,294\,619\,824\,901\,368\,143\,816\,281\,237}{396\,437\,011\,943\,685\,994\,065\,119\,834\,654\,261\,903\,360} k_{20} \\
& + \frac{557\,636\,980\,600\,129\,504\,607\,009\,055\,227\,583}{10\,399\,519\,990\,460\,490\,566\,574\,888\,982\,740\,855\,160\,832} k_{21} \\
& - \frac{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355}{34\,642\,556\,793\,213\,634\,899\,473\,508\,461\,703\,170\,883\,584} k_{22} \\
& + \frac{25\,093\,664\,127\,005\,827\,707\,315\,407\,485\,241\,235}{166\,217\,537\,388\,543\,083\,377\,624\,191\,941\,895\,501\,381\,632} k_{23} \\
& - \frac{92\,010\,101\,799\,021\,368\,260\,156\,494\,112\,551\,195}{42\,340\,902\,535\,504\,122\,664\,695\,560\,584\,457\,121\,169\,408} k_{24} \\
& + \frac{18\,402\,020\,359\,804\,273\,652\,031\,298\,822\,510\,239}{792\,023\,937\,620\,610\,090\,155\,052\,004\,636\,217\,765\,789\,696} k_{25} \\
& - \frac{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585}{323\,652\,281\,624\,207\,713\,541\,463\,921\,465\,991\,387\,676\,672} k_{26} \\
& + \frac{92\,010\,101\,799\,021\,368\,260\,156\,494\,112\,551\,195}{391\,161\,763\,675\,750\,439\,536\,963\,677\,173\,424\,132\,718\,592} k_{27} \\
& - \frac{92\,010\,101\,799\,021\,368\,260\,156\,494\,112\,551\,195}{1401\,182\,301\,914\,255\,396\,282\,162\,840\,830\,547\,433\,619\,456} k_{28} \\
& + \frac{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585}{61\,319\,292\,316\,495\,436\,702\,268\,229\,248\,920\,243\,929\,088} k_{29} \\
& - \frac{10\,223\,344\,644\,335\,707\,584\,461\,832\,679\,172\,355}{19\,579\,535\,922\,183\,761\,291\,033\,172\,868\,334\,616\,051\,712} k_{30} \\
& + \frac{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915}{2251\,014\,743\,269\,892\,686\,559\,081\,959\,397\,840\,459\,399\,168} k_{31} \\
& - \frac{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585}{78\,639\,873\,243\,177\,617\,435\,489\,231\,271\,285\,854\,830\,592} k_{32} \\
& + \frac{8364\,554\,709\,001\,942\,569\,105\,135\,828\,413\,745}{990\,749\,989\,343\,285\,586\,361\,630\,601\,473\,225\,084\,370\,944} k_{33} \\
& - \frac{92\,010\,101\,799\,021\,368\,260\,156\,494\,112\,551\,195}{3383\,989\,540\,574\,375\,115\,646\,044\,329\,964\,319\,217\,287\,168} k_{34} \\
& + \frac{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585}{255\,460\,412\,439\,292\,575\,281\,261\,694\,833\,272\,196\,956\,160} k_{35} \\
& - \frac{18\,402\,020\,359\,804\,273\,652\,031\,298\,822\,510\,239}{287\,942\,880\,662\,456\,111\,208\,812\,100\,656\,626\,811\,273\,216} k_{36} \\
& + \frac{18\,402\,020\,359\,804\,273\,652\,031\,298\,822\,510\,239}{4885\,020\,987\,949\,173\,757\,726\,187\,586\,830\,832\,339\,255\,296} k_{37} \\
& - \frac{276\,030\,305\,397\,064\,104\,780\,469\,482\,337\,653\,585}{16\,305\,627\,490\,444\,005\,249\,089\,972\,197\,272\,879\,890\,432} k_{38} \\
& + \frac{748\,049\,608\,122\,124\,945\,204\,524\,342\,378\,465}{32\,611\,254\,980\,888\,010\,498\,179\,944\,394\,545\,759\,780\,864} k_{39} \\
& - \frac{748\,049\,608\,122\,124\,945\,204\,524\,342\,378\,465}{748\,049\,608\,122\,124\,945\,204\,524\,342\,378\,465} k_{40}, \\
r_{34} & := \frac{12\,795\,783\,724\,033\,076\,151\,320\,187\,927\,000\,640\,064}{204\,013\,529\,487\,852\,257\,783\,052\,093\,375\,945} k_0 \\
& - \frac{8255\,168\,087\,757\,086\,734\,487\,640\,863\,730\,400\,696}{1192\,136\,188\,390\,736\,595\,730\,522\,433\,070\,561\,916\,904} k_1 \\
& + \frac{152\,082\,812\,890\,944\,410\,347\,366\,105\,971\,159}{3522\,743\,969\,079\,836\,154\,315\,232\,033\,211\,871\,352} k_2 \\
& - \frac{84\,490\,451\,606\,080\,227\,970\,758\,947\,761\,755}{102\,286\,243\,571\,083\,179\,359\,078\,017\,389\,094\,403\,824} k_3 \\
& + \frac{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915}{162\,553\,792\,856\,411\,710\,289\,674\,114\,105\,440\,386\,912} k_4 \\
& - \frac{5018\,732\,823\,401\,165\,541\,463\,081\,497\,048\,247}{240\,200\,262\,334\,857\,540\,661\,797\,457\,409\,724\,406\,592} k_5 \\
& + \frac{8364\,554\,709\,001\,942\,569\,105\,135\,828\,413\,745}{213\,946\,067\,533\,111\,014\,021\,494\,374\,296\,718\,196\,352} k_6 \\
& - \frac{8364\,554\,709\,001\,942\,569\,105\,135\,828\,413\,745}{18\,524\,105\,448\,191\,530\,291\,465\,962\,460\,786\,063\,616} k_7 \\
& + \frac{809\,473\,036\,355\,026\,700\,235\,980\,886\,620\,685}{171\,864\,600\,334\,589\,783\,280\,605\,725\,765\,733\,775\,872} k_8 \\
& - \frac{8364\,554\,709\,001\,942\,569\,105\,135\,828\,413\,745}{154\,547\,831\,036\,037\,849\,597\,307\,873\,741\,779\,110\,912} k_9 \\
& + \frac{8364\,554\,709\,001\,942\,569\,105\,135\,828\,413\,745}{37\,832\,057\,158\,020\,1942\,688\,954\,388\,834\,13745} k_{10} \\
& - \frac{2281\,242\,99\,364\,168\,125\,049\,491\,589\,567\,385\,912}{41\,212\,762\,437\,984\,298\,125\,049\,491\,589\,567\,385\,912} k_{11} \\
& + \frac{2788\,184\,903\,000\,647\,523\,035\,045\,276\,137\,915}{3289\,573\,013\,919\,610\,551\,348\,472\,007\,331\,568\,104} k_{12} \\
& - \frac{253\,471\,354\,818\,240\,683\,912\,276\,843\,285\,265}{278\,186\,160\,995\,250\,066\,134\,195\,949\,413\,527\,418\,112} k_{13} \\
& + \frac{25\,093\,664\,127\,005\,827\,707\,315\,407\,485\,241\,235}{75\,411\,911\,904\,623\,637\,164\,592\,366\,436\,404\,525\,056} k_{14} \\
& - \frac{8364\,554\,709\,001\,942\,569\,105\,135\,828\,413\,745}{11\,172\,135\,158\,153\,371\,074\,142\,018\,883\,575\,16545} k_{15} \\
& + \frac{1672\,910\,941\,800\,388\,513\,821\,027\,165\,682\,749}{99\,990\,609\,864\,124\,497\,576\,437\,853\,780\,483\,309\,568} k_{16} \\
& - \frac{25\,093\,664\,127\,005\,827\,707\,315\,407\,485\,241\,235}{25\,093\,664\,127\,005\,827\,707\,315\,407\,485\,241\,235} k_{17}
\end{aligned}$$

$$\begin{aligned}
& + \frac{228\,247\,920\,573\,484\,287\,140\,257\,511\,508\,527\,104}{576\,772\,838\,904\,443\,831\,366\,855\,961\,826\,097\,152} k_{18} \\
& - \frac{204\,013\,529\,487\,852\,257\,783\,052\,093\,375\,945}{871\,971\,533\,854\,266\,135\,174\,689\,090\,580\,336\,640} k_{19} \\
& - \frac{122\,408\,117\,692\,711\,354\,669\,831\,256\,025\,567}{615\,031\,689\,068\,606\,684\,064\,780\,821\,938\,892\,800} k_{20} \\
& + \frac{50\,694\,270\,963\,648\,136\,782\,455\,368\,657\,053}{5558\,482\,111\,592\,274\,557\,493\,599\,397\,372\,839\,936} k_{21} \\
& + \frac{309\,798\,322\,555\,627\,502\,559\,449\,475\,126\,435}{56\,216\,153\,281\,102\,291\,325\,862\,821\,382\,520\,416\,256} k_{22} \\
& - \frac{2281\,242\,193\,364\,166\,155\,210\,491\,589\,567\,385}{270\,365\,672\,605\,888\,796\,165\,854\,230\,231\,559\,241\,728} k_{23} \\
& - \frac{8364\,554\,709\,001\,942\,569\,105\,135\,828\,413\,745}{68\,708\,631\,487\,222\,680\,658\,262\,067\,779\,520\,290\,816} k_{24} \\
& + \frac{1672\,910\,941\,800\,388\,513\,821\,027\,165\,682\,749}{1279\,209\,474\,698\,325\,973\,255\,688\,202\,183\,179\,843\,584} k_{25} \\
& - \frac{25\,093\,664\,127\,005\,827\,707\,315\,407\,485\,241\,235}{519\,690\,482\,733\,965\,945\,409\,860\,009\,613\,841\,143\,808} k_{26} \\
& + \frac{8364\,554\,709\,001\,942\,569\,105\,135\,828\,413\,745}{20\,133\,868\,948\,302\,562\,676\,570\,993\,924\,931\,432\,448} k_{27} \\
& - \frac{269\,824\,345\,451\,675\,566\,745\,326\,962\,206\,895}{2221\,578\,978\,359\,047\,934\,266\,499\,293\,183\,505\,936\,384} k_{28} \\
& + \frac{25\,093\,664\,127\,005\,827\,707\,315\,407\,485\,241\,235}{32\,206\,090\,654\,643\,478\,644\,217\,382\,954\,327\,353\,344} k_{29} \\
& - \frac{309\,798\,322\,555\,627\,502\,559\,449\,475\,126\,435}{30\,666\,942\,139\,228\,944\,078\,070\,990\,798\,780\,418\,048} k_{30} \\
& + \frac{253\,471\,354\,818\,240\,683\,912\,276\,843\,285\,265}{3505\,815\,068\,755\,524\,405\,350\,144\,448\,971\,987\,279\,872} k_{31} \\
& - \frac{25\,093\,664\,127\,005\,827\,707\,315\,407\,485\,241\,235}{121\,826\,997\,428\,259\,841\,190\,759\,690\,838\,408\,183\,808} k_{32} \\
& + \frac{760\,414\,064\,454\,722\,051\,736\,830\,529\,855\,795}{1527\,229\,582\,079\,912\,662\,149\,474\,869\,525\,990\,967\,296} k_{33} \\
& - \frac{8364\,554\,709\,001\,942\,569\,105\,135\,828\,413\,745}{5192\,242\,005\,670\,009\,889\,980\,897\,174\,813\,152\,684\,032} k_{34} \\
& + \frac{25\,093\,664\,127\,005\,827\,707\,315\,407\,485\,241\,235}{390\,278\,876\,903\,502\,330\,509\,020\,761\,925\,163\,585\,536} k_{35} \\
& - \frac{1672\,910\,941\,800\,388\,513\,821\,027\,165\,682\,749}{438\,131\,807\,343\,040\,144\,326\,487\,682\,385\,317\,662\,720} k_{36} \\
& + \frac{1672\,910\,941\,800\,388\,513\,821\,027\,165\,682\,749}{238\,757\,312\,392\,250\,117\,786\,274\,133\,818\,003\,103\,744} k_{37} \\
& - \frac{809\,473\,036\,355\,026\,700\,235\,980\,886\,620\,685}{24\,554\,135\,046\,580\,099\,252\,923\,750\,605\,731\,053\,568} k_{38} \\
& + \frac{68\,004\,509\,829\,284\,085\,927\,684\,031\,125\,315}{49\,108\,270\,093\,160\,198\,505\,847\,501\,211\,462\,107\,136} k_{39} \\
& - \frac{68\,004\,509\,829\,284\,085\,927\,684\,031\,125\,315}{68\,004\,509\,829\,284\,085\,927\,684\,031\,125\,315} k_{40}, \\
r_{35} := & \frac{1942\,447\,982\,573\,679\,001\,124\,864}{941\,712\,745\,594\,742\,092\,521} k_0 - \frac{4794\,987\,381\,828\,856\,380\,196\,864}{2653\,917\,737\,585\,182\,260\,741} k_1 \\
& + \frac{138\,677\,296\,188\,415\,540\,862\,900\,224}{87\,579\,285\,340\,311\,014\,604\,453} k_2 - \frac{1229\,471\,303\,489\,625\,176\,983\,552}{884\,639\,245\,861\,727\,420\,247} k_3 \\
& + \frac{3966\,541\,810\,820\,548\,039\,184\,384}{3243\,677\,234\,826\,333\,874\,239} k_4 - \frac{94\,554\,711\,356\,885\,793\,191\,555\,072}{87\,579\,285\,340\,311\,014\,604\,453} k_5 \\
& + \frac{27\,944\,062\,173\,995\,737\,688\,147\,968}{29\,193\,095\,113\,437\,004\,868\,151} k_6 - \frac{24\,889\,740\,565\,576\,420\,149\,262\,336}{29\,193\,095\,113\,437\,004\,868\,151} k_7 \\
& + \frac{66\,805\,927\,803\,856\,579\,508\,420\,608}{579\,985\,695\,016\,864\,071\,682\,048} k_8 - \frac{644\,971\,909\,385\,505\,258\,348\,544}{941\,712\,745\,594\,742\,092\,521} k_9 \\
& + \frac{941\,712\,745\,594\,742\,092\,521}{4794\,549\,273\,575\,088\,540\,618\,752} k_{10} - \frac{7961\,753\,212\,755\,546\,782\,223}{382\,697\,470\,533\,139\,556\,200\,448} k_{11} \\
& + \frac{9731\,031\,704\,479\,001\,622\,717}{32\,363\,209\,358\,673\,550\,997\,469\,184} k_{12} - \frac{884\,639\,245\,861\,727\,420\,247}{8773\,159\,255\,567\,024\,271\,169\,536} k_{13} \\
& + \frac{6498\,636\,521\,186\,496\,267\,493\,376}{87\,579\,285\,340\,311\,014\,604\,453} k_{14} - \frac{29\,193\,095\,113\,437\,004\,868\,151}{11\,632\,559\,396\,033\,408\,177\,733\,632} k_{15} \\
& + \frac{823\,160\,618\,759\,571\,187\,816\,448}{29\,193\,095\,113\,437\,004\,868\,151} k_{16} - \frac{87\,579\,285\,340\,311\,014\,604\,453}{88\,744\,822\,475\,355\,758\,700\,544} k_{17} \\
& + \frac{670\,827\,002\,901\,649\,394\,511\,872}{29\,193\,095\,113\,437\,004\,868\,151} k_{18} + \frac{941\,712\,745\,594\,742\,092\,521}{119\,251\,075\,396\,354\,800\,994\,304} k_{19} \\
& - \frac{2825\,138\,236\,784\,226\,277\,563}{5819\,890\,093\,925\,149\,083\,428\,864} k_{20} + \frac{294\,869\,748\,620\,375\,806\,749}{6539\,991\,534\,678\,247\,245\,842\,432} k_{21} \\
& - \frac{9731\,031\,704\,479\,001\,622\,717}{31\,453\,400\,969\,441\,665\,982\,726\,144} k_{22} + \frac{7961\,753\,212\,755\,546\,782\,223}{39\,966\,614\,759\,179\,847\,974\,117\,376} k_{23} \\
& + \frac{29\,193\,095\,113\,437\,004\,868\,151}{148\,818\,776\,229\,208\,821\,152\,208\,896} k_{24} + \frac{39\,966\,614\,759\,179\,847\,974\,117\,376}{60\,458\,981\,260\,027\,402\,959\,140\,864} k_{25} \\
& - \frac{87\,579\,285\,340\,311\,014\,604\,453}{72\,611\,430\,500\,012\,741\,596\,81\,264} k_{26} + \frac{29\,193\,095\,113\,437\,004\,868\,151}{8337\,121\,389\,197\,818\,443\,501\,568} k_{27} \\
& - \frac{29\,193\,095\,113\,437\,004\,868\,151}{1087\,764\,517\,432\,739\,864\,950\,784} k_{28} + \frac{2825\,138\,236\,784\,226\,277\,563}{1189\,228\,623\,262\,026\,575\,558\,656} k_{29} \\
& - \frac{313\,904\,248\,531\,580\,697\,507}{407\,854\,318\,282\,578\,335\,257\,496\,832} k_{30} + \frac{294\,869\,748\,620\,375\,806\,749}{141\,72\,928\,693\,502\,839\,385\,440\,256} k_{31} \\
& - \frac{87\,579\,285\,340\,311\,014\,604\,453}{177\,672\,325\,945\,089\,614\,715\,676\,672} k_{32} + \frac{2653\,917\,737\,585\,182\,260\,741}{604\,032\,356\,182\,881\,586\,277\,384\,192} k_{33} \\
& - \frac{29\,193\,095\,113\,437\,004\,868\,151}{227\,018\,428\,168\,640\,482\,620\,903\,424} k_{34} + \frac{87\,579\,285\,340\,311\,014\,604\,453}{254\,823\,644\,713\,893\,598\,802\,415\,616} k_{35} \\
& - \frac{861\,062\,026\,362\,365\,046\,570\,204\,416}{7586\,018\,848\,055\,437\,618\,610\,476} k_{36} + \frac{29\,193\,095\,113\,437\,004\,868\,151}{3778\,007\,924\,027\,718\,809\,305\,088} k_{37} \\
& - \frac{861\,062\,026\,362\,365\,046\,570\,204\,416}{313\,904\,248\,531\,580\,697\,507} k_{38} + \frac{313\,904\,248\,531\,580\,697\,507}{313\,904\,248\,531\,580\,697\,507} k_{39} \\
& - \frac{313\,904\,248\,531\,580\,697\,507}{313\,904\,248\,531\,580\,697\,507} k_{40}.
\end{aligned}$$

TABLE 2

p, k EXPRESSIONS OF f_i

$$\begin{aligned}
 f_1 \quad : \quad &= \sum_{n=0}^{\infty} f_1(n) = \frac{\eta^{43}(4z)\eta^{43}(6z)}{\eta^{29}(2z)\eta^{17}(12z)} = \left(-\frac{1}{2097152}p^{32} - \frac{75}{4194304}p^{31} \right. \\
 &- \frac{1337}{4194304}p^{30} - \frac{7533}{2097152}p^{29} - \frac{30089}{1048576}p^{28} - \frac{362229}{2097152}p^{27} \\
 &- \frac{1704115}{2097152}p^{26} - \frac{801519}{262144}p^{25} - \frac{19574431}{2097152}p^{24} - \frac{97684027}{4194304}p^{23} \\
 &- \frac{199415849}{4194304}p^{22} - \frac{165329495}{2097152}p^{21} - \frac{108982769}{1048576}p^{20} - \frac{54037991}{524288}p^{19} \\
 &- \frac{16666973}{262144}p^{18} + \frac{720829}{131072}p^{17} + \frac{4853275}{65536}p^{16} + \frac{3634945}{32768}p^{15} + \frac{1740645}{16384}p^{14} \\
 &+ \frac{612955}{8192}p^{13} + \frac{163821}{4096}p^{12} + \frac{33115}{2048}p^{11} + \frac{4929}{1024}p^{10} + \frac{511}{512}p^9 + \frac{33}{256}p^8 + \frac{1}{128}p^7 \Big) k^{20},
 \end{aligned}$$

$$\begin{aligned}
 f_2 \quad = \quad &\sum_{n=0}^{\infty} f_2(n) = \frac{\eta^{38}(4z)\eta^{48}(6z)}{\eta^{28}(2z)\eta^{18}(12z)} = -\frac{1}{524288}p^{31} - \frac{69}{1048576}p^{30} \\
 &- \frac{141}{131072}p^{29} - \frac{11615}{1048576}p^{28} - \frac{42225}{524288}p^{27} - \frac{230277}{524288}p^{26} \\
 &- \frac{61021}{32768}p^{25} - \frac{3289815}{524288}p^{24} - \frac{8921979}{524288}p^{23} - \frac{39138537}{1048576}p^{22} \\
 &- \frac{8646237}{131072}p^{21} - \frac{96841107}{1048576}p^{20} - \frac{51273027}{524288}p^{19} - \frac{8835795}{131072}p^{18} \\
 &- \frac{377865}{65536}p^{17} + \frac{3957735}{65536}p^{16} + \frac{3267639}{32768}p^{15} + \frac{203769}{2048}p^{14} \\
 &+ \frac{147073}{2048}p^{13} + \frac{159819}{4096}p^{12} + \frac{32667}{2048}p^{11} + \frac{2449}{512}p^{10} + \frac{255}{256}p^9 \\
 &+ \frac{33}{256}p^8 + \frac{1}{128}p^7,
 \end{aligned}$$

$$\begin{aligned}
 f_3 \quad = \quad &\sum_{n=0}^{\infty} f_3(n) = \frac{\eta^{50}(4z)\eta^{24}(6z)}{\eta^{28}(2z)\eta^6(12z)} = \left(-\frac{1}{134217728}p^{35} - \frac{85}{268435456}p^{34} \right. \\
 &- \frac{431}{67108864}p^{33} - \frac{22197}{268435456}p^{32} - \frac{50889}{67108864}p^{31} - \frac{1413891}{268435456}p^{30} \\
 &- \frac{1930351}{67108864}p^{29} - \frac{33960143}{268435456}p^{28} - \frac{61095317}{134217728}p^{27} - \frac{90784793}{67108864}p^{26} \\
 &- \frac{111927575}{33554432}p^{25} - \frac{28601327}{4194304}p^{24} - \frac{24051549}{2097152}p^{23} - \frac{16316991}{1048576}p^{22} \\
 &- \frac{8518479}{524288}p^{21} - \frac{5920913}{524288}p^{20} - \frac{349163}{262144}p^{19} + \frac{1260745}{131072}p^{18} + \frac{1086895}{65536}p^{17}
 \end{aligned}$$

$$\begin{aligned}
& + \frac{281\,345}{16\,384}p^{16} + \frac{105\,743}{8192}p^{15} + \frac{7515}{1024}p^{14} + \frac{6459}{2048}p^{13} + \frac{4089}{4096}p^{12} + \frac{451}{2048}p^{11} \\
& + \frac{31}{1024}p^{10} + \frac{1}{512}p^9)k^{20},
\end{aligned}$$

$$\begin{aligned}
f_4 &= \sum_{n=0}^{\infty} f_4(n) = \frac{\eta^{50}(4z)\eta^{48}(6z)}{\eta^{28}(2z)\eta^{30}(12z)} = \left(\frac{1}{262\,144}p^{32} + \frac{41}{262\,144}p^{31} \right. \\
& + \frac{3205}{1048\,576}p^{30} + \frac{9925}{262\,144}p^{29} + \frac{349\,577}{1048\,576}p^{28} + \frac{1162\,805}{524\,288}p^{27} \\
& + \frac{6061\,429}{524\,288}p^{26} + \frac{1583\,015}{32\,768}p^{25} + \frac{86\,007\,727}{524\,288}p^{24} + \frac{14\,928\,729}{32\,768}p^{23} \\
& + \frac{1083\,839\,121}{1048\,576}p^{22} + \frac{496\,448\,223}{262\,144}p^{21} + \frac{2846\,654\,965}{1048\,576}p^{20} \\
& + \frac{1461\,019\,729}{524\,288}p^{19} + \frac{44\,510\,267}{32\,768}p^{18} - \frac{26\,446\,951}{16\,384}p^{17} \\
& - \frac{81\,012\,905}{16\,384}p^{16} - \frac{54\,973\,445}{8192}p^{15} - \frac{5822\,367}{1024}p^{14} - \frac{2505\,447}{1024}p^{13} \\
& + \frac{2139\,591}{2048}p^{12} + \frac{3100\,123}{1024}p^{11} + \frac{399\,745}{128}p^{10} + \frac{136\,975}{64}p^9 \\
& \left. + \frac{68\,519}{64}p^8 + \frac{12\,707}{32}p^7 + \frac{1715}{16}p^6 + 20p^5 + \frac{37}{16}p^4 + \frac{1}{8}p^3\right)k^{20},
\end{aligned}$$

$$\begin{aligned}
f_5 &= \sum_{n=0}^{\infty} f_5(n) = \frac{\eta^{45}(4z)\eta^{29}(6z)}{\eta^{27}(2z)\eta^7(12z)} = \left(-\frac{1}{33554432}p^{34} - \frac{79}{67\,108\,864}p^{33} \right. \\
& - \frac{1485}{67\,108\,864}p^{32} - \frac{17\,665}{67\,108\,864}p^{31} - \frac{149\,153}{67\,108\,864}p^{30} - \frac{950\,175}{67\,108\,864}p^{29} \\
& - \frac{4737\,983}{67\,108\,864}p^{28} - \frac{18\,928\,915}{67\,108\,864}p^{27} - \frac{61\,483\,185}{67\,108\,864}p^{26} - \frac{81\,840\,703}{33\,554\,432}p^{25} \\
& - \frac{11\,184\,419}{2097\,152}p^{24} - \frac{2498\,337}{262\,144}p^{23} - \frac{14\,362\,195}{1048\,576}p^{22} - \frac{7974\,445}{524\,288}p^{21} \\
& - \frac{190\,179}{16\,384}p^{20} - \frac{379\,219}{131\,072}p^{19} + \frac{983\,365}{131\,072}p^{18} + \frac{964\,035}{65\,536}p^{17} + \frac{130\,775}{8192}p^{16} \\
& + \frac{25\,255}{2048}p^{15} + \frac{29\,241}{4096}p^{14} + \frac{6361}{2048}p^{13} + \frac{1015}{1024}p^{12} + \frac{225}{1024}p^{11} + \frac{31}{1024}p^{10} \\
& \left. + \frac{1}{512}p^9\right)k^{20},
\end{aligned}$$

$$\begin{aligned}
f_6 &= \sum_{n=0}^{\infty} f_6(n) = \frac{\eta^{40}(4z)\eta^{34}(6z)}{\eta^{26}(2z)\eta^8(12z)} = \left(-\frac{1}{8388\,608}p^{33} - \frac{73}{16\,777\,216}p^{32} \right. \\
& - \frac{79}{1048\,576}p^{31} - \frac{6901}{8388\,608}p^{30} - \frac{53\,277}{8388\,608}p^{29} - \frac{38\,619}{1048\,576}p^{28} \\
& - \frac{1395\,163}{8388\,608}p^{27} - \frac{5016\,989}{8388\,608}p^{26} - \frac{7278\,721}{4194\,304}p^{25} - \frac{68\,569\,143}{16\,777\,216}p^{24} \\
& \left. + \frac{1}{512}p^9\right)k^{20},
\end{aligned}$$

$$\begin{aligned}
& -\frac{65\,423\,353}{8388\,608}p^{23} - \frac{49\,953\,071}{4194\,304}p^{22} - \frac{29\,514\,849}{2097\,152}p^{21} \\
& -\frac{12\,261\,571}{1048\,576}p^{20} - \frac{2202\,701}{524\,288}p^{19} + \frac{1461\,765}{262\,144}p^{18} + \frac{1695\,755}{131\,072}p^{17} \\
& + \frac{969\,595}{65\,536}p^{16} + \frac{385\,525}{32\,768}p^{15} + \frac{113\,715}{16\,384}p^{14} + \frac{25\,053}{8192}p^{13} \\
& + \frac{4031}{4096}p^{12} + \frac{449}{2048}p^{11} + \frac{31}{1024}p^{10} + \frac{1}{512}p^9)k^{20},
\end{aligned}$$

$$\begin{aligned}
f_7 &= \sum_{n=0}^{\infty} f_7(n) = \frac{\eta^{44}(4z)\eta^{36}(12z)}{\eta^{22}(2z)\eta^{18}(6z)} = \left(\frac{1}{1099\,511\,627\,776}p^{40} + \frac{21}{549\,755\,813\,888}p^{39} \right. \\
& + \frac{105}{137\,438\,953\,472}p^{38} + \frac{665}{68\,719\,476\,736}p^{37} + \frac{5985}{68\,719\,476\,736}p^{36} \\
& + \frac{20\,349}{34\,359\,738\,368}p^{35} + \frac{6783}{2147\,483\,648}p^{34} + \frac{14\,535}{1073\,741\,824}p^{33} \\
& + \frac{101\,745}{2147\,483\,648}p^{32} + \frac{146\,965}{1073\,741\,824}p^{31} + \frac{88\,179}{268\,435\,456}p^{30} \\
& + \frac{88\,179}{134\,217\,728}p^{29} + \frac{146\,965}{134\,217\,728}p^{28} + \frac{101\,745}{67\,108\,864}p^{27} + \frac{14\,535}{8388\,608}p^{26} \\
& + \frac{6783}{4194\,304}p^{25} + \frac{20\,349}{16\,777\,216}p^{24} + \frac{5985}{8388\,608}p^{23} + \frac{665}{2097\,152}p^{22} \\
& \left. + \frac{105}{1048\,576}p^{21} + \frac{21}{1048\,576}p^{20} + \frac{1}{524\,288}p^{19} \right)k^{20},
\end{aligned}$$

$$\begin{aligned}
f_8 &= \sum_{n=0}^{\infty} f_8(n) = \frac{\eta^{47}(4z)\eta^{15}(6z)\eta^3(12z)}{\eta^{25}(2z)} = \left(-\frac{1}{536\,870\,912}p^{36} - \frac{83}{1073\,741\,824}p^{35} \right. \\
& - \frac{1641}{1073\,741\,824}p^{34} - \frac{5139}{268\,435\,456}p^{33} - \frac{22\,875}{134\,217\,728}p^{32} - \frac{1230\,891}{1073\,741\,824}p^{31} \\
& - \frac{6490\,513}{1073\,741\,824}p^{30} - \frac{13\,734\,815}{536\,870\,912}p^{29} - \frac{23\,680\,251}{268\,435\,456}p^{28} - \frac{33\,552\,271}{134\,217\,728}p^{27} \\
& - \frac{9796\,913}{16\,777\,216}p^{26} - \frac{9402\,207}{8388\,608}p^{25} - \frac{7324\,671}{4194\,304}p^{24} - \frac{140\,505}{65\,536}p^{23} \\
& - \frac{4022\,319}{2097\,152}p^{22} - \frac{949\,297}{1048\,576}p^{21} + \frac{300\,067}{524\,288}p^{20} + \frac{480\,339}{262\,144}p^{19} + \frac{151\,639}{65\,536}p^{18} \\
& + \frac{64\,853}{32\,768}p^{17} + \frac{20\,445}{16\,384}p^{16} + \frac{9615}{16\,384}p^{15} + \frac{3303}{16\,384}p^{14} + \frac{393}{8192}p^{13} \\
& \left. + \frac{29}{4096}p^{12} + \frac{1}{2048}p^{11} \right)k^{20},
\end{aligned}$$

$$f_9 = \sum_{n=0}^{\infty} f_9(n) = \frac{\eta^{47}(4z)\eta^{39}(6z)}{\eta^{25}(2z)\eta^{21}(12z)} = \left(\frac{1}{1048\,576}p^{33} + \frac{5}{131\,072}p^{32} \right.$$

$$\begin{aligned}
& + \frac{3045}{4194304}p^{31} + \frac{36655}{4194304}p^{30} + \frac{156461}{2097152}p^{29} + \frac{125793}{262144}p^{28} \\
& + \frac{5055085}{2097152}p^{27} + \frac{20273155}{2097152}p^{26} + \frac{16433643}{524288}p^{25} + \frac{43281273}{524288}p^{24} \\
& + \frac{737588937}{4194304}p^{23} + \frac{1248203955}{4194304}p^{22} + \frac{799225505}{2097152}p^{21} \\
& + \frac{41362139}{131072}p^{20} + \frac{98379}{4096}p^{19} - \frac{28021015}{65536}p^{18} - \frac{26495945}{32768}p^{17} \\
& - \frac{7119375}{8192}p^{16} - \frac{4525359}{8192}p^{15} - \frac{485535}{8192}p^{14} + \frac{1312563}{4096}p^{13} \\
& + \frac{223445}{512}p^{12} + \frac{44075}{128}p^{11} + \frac{48825}{256}p^{10} + \frac{9847}{128}p^9 + \frac{715}{32}p^8 \\
& + \frac{285}{64}p^7 + \frac{35}{64}p^6 + \frac{1}{32}p^5)k^{20},
\end{aligned}$$

$$\begin{aligned}
f_{10} &= \sum_{n=0}^{\infty} f_{10}(n) = \frac{\eta^{30}(4z)\eta^{44}(6z)}{\eta^{24}(2z)\eta^{10}(12z)} = \left(\frac{1}{524288}p^{31} - \frac{61}{1048576}p^{30} \right. \\
& - \frac{219}{262144}p^{29} - \frac{7867}{1048576}p^{28} - \frac{24739}{524288}p^{27} - \frac{115587}{524288}p^{26} \\
& - \frac{51879}{65536}p^{25} - \frac{1167339}{524288}p^{24} - \frac{2592495}{524288}p^{23} - \frac{9059865}{1048576}p^{22} \\
& - \frac{3047619}{262144}p^{21} - \frac{11839743}{1048576}p^{20} - \frac{3212589}{524288}p^{19} + \frac{593331}{262144}p^{18} \\
& + \frac{1270197}{131072}p^{17} + \frac{412005}{32768}p^{16} + \frac{174711}{16384}p^{15} + \frac{53649}{8192}p^{14} \\
& \left. + \frac{12137}{4096}p^{13} + \frac{3973}{4096}p^{12} + \frac{447}{2048}p^{11} + \frac{31}{1024}p^{10} + \frac{1}{512}p^9 \right)k^{20},
\end{aligned}$$

$$\begin{aligned}
f_{11} &= \sum_{n=0}^{\infty} f_{11}(n) = \frac{\eta^{44}(4z)\eta^6(6z)\eta^{12}(12z)}{\eta^{22}(2z)} = \left(-\frac{1}{2147483648}p^{37} - \frac{81}{4294967296}p^{36} \right. \\
& - \frac{195}{536870912}p^{35} - \frac{4749}{1073741824}p^{34} - \frac{41001}{1073741824}p^{33} - \frac{1066887}{4294967296}p^{32} \\
& - \frac{2711813}{2147483648}p^{31} - \frac{5511501}{1073741824}p^{30} - \frac{9084375}{536870912}p^{29} - \frac{3058487}{67108864}p^{28} \\
& - \frac{3369213}{33554432}p^{27} - \frac{3016497}{16777216}p^{26} - \frac{2154087}{8388608}p^{25} - \frac{2342073}{8388608}p^{24} \\
& - \frac{840123}{4194304}p^{23} - \frac{54587}{2097152}p^{22} + \frac{177327}{1048576}p^{21} + \frac{75753}{262144}p^{20} + \frac{37943}{131072}p^{19} \\
& \left. + \frac{13455}{65536}p^{18} + \frac{3495}{32768}p^{17} + \frac{2625}{65536}p^{16} + \frac{339}{32768}p^{15} + \frac{27}{16384}p^{14} + \frac{1}{8192}p^{13} \right)k^{20},
\end{aligned}$$

$$f_{12} = \sum_{n=0}^{\infty} f_{12}(n) = \frac{\eta^{15}(2z)\eta^{35}(4z)\eta^{11}(12z)}{\eta^{21}(6z)} = \left(\frac{1}{4194304}p^{31} + \frac{23}{4194304}p^{30} \right.$$

$$\begin{aligned}
& + \frac{123}{2097152}p^{29} + \frac{203}{524288}p^{28} + \frac{3703}{2097152}p^{27} + \frac{12369}{2097152}p^{26} \\
& + \frac{3913}{262144}p^{25} + \frac{30617}{1048576}p^{24} + \frac{187137}{4194304}p^{23} + \frac{224143}{4194304}p^{22} \\
& + \frac{104881}{2097152}p^{21} + \frac{37947}{1048576}p^{20} + \frac{10409}{524288}p^{19} + \frac{2093}{262144}p^{18} \\
& + \frac{291}{131072}p^{17} + \frac{25}{65536}p^{16} + \frac{1}{32768}p^{15})k^{20},
\end{aligned}$$

$$\begin{aligned}
f_{13} = \sum_{n=0}^{\infty} f_{12}(n) &= \frac{\eta^{25}(4z)\eta^{49}(6z)}{\eta^{23}(2z)\eta^{11}(12z)} = (-\frac{1}{131072}p^{30} - \frac{55}{262144}p^{29} \\
& - \frac{709}{262144}p^{28} - \frac{5687}{262144}p^{27} - \frac{31761}{262144}p^{26} - \frac{32715}{65536}p^{25} \\
& - \frac{205377}{131072}p^{24} - \frac{499143}{131072}p^{23} - \frac{470877}{65536}p^{22} - \frac{2717679}{262144}p^{21} \\
& - \frac{2845593}{262144}p^{20} - \frac{1777131}{262144}p^{19} + \frac{225975}{262144}p^{18} + \frac{1076385}{131072}p^{17} \\
& + \frac{188745}{16384}p^{16} + \frac{10371}{1024}p^{15} + \frac{52065}{8192}p^{14} + \frac{11943}{4096}p^{13} \\
& + \frac{493}{512}p^{12} + \frac{223}{1024}p^{11} + \frac{31}{1024}p^{10} + \frac{1}{512}p^9)k^{20},
\end{aligned}$$

$$\begin{aligned}
f_{14} = \sum_{n=0}^{\infty} f_{14}(n) &= \frac{\eta^{27}(4z)\eta^{11}(6z)\eta^{23}(12z)}{\eta^{21}(2z)} = (\frac{1}{1073741824}p^{35} + \frac{31}{1073741824}p^{34} \\
& + \frac{113}{268435456}p^{33} + \frac{2059}{536870912}p^{32} + \frac{26265}{1073741824}p^{31} + \frac{124515}{1073741824}p^{30} \\
& + \frac{227305}{536870912}p^{29} + \frac{163345}{134217728}p^{28} + \frac{93665}{33554432}p^{27} + \frac{345345}{67108864}p^{26} \\
& + \frac{256399}{33554432}p^{25} + \frac{38233}{4194304}p^{24} + \frac{36361}{4194304}p^{23} + \frac{27189}{4194304}p^{22} + \frac{7815}{2097152}p^{21} \\
& + \frac{833}{524288}p^{20} + \frac{31}{65536}p^{19} + \frac{23}{262144}p^{18} + \frac{1}{131072}p^{17})k^{20},
\end{aligned}$$

$$\begin{aligned}
f_{15} = \sum_{n=0}^{\infty} f_{15}(n) &= \frac{\eta^5(4z)\eta^{45}(6z)\eta^9(12z)}{\eta^{19}(2z)} = (\frac{1}{262144}p^{29} + \frac{17}{262144}p^{28} \\
& + \frac{133}{262144}p^{27} + \frac{635}{262144}p^{26} + \frac{517}{65536}p^{25} + \frac{2431}{131072}p^{24} + \frac{4257}{131072}p^{23} \\
& + \frac{5643}{131072}p^{22} + \frac{11385}{262144}p^{21} + \frac{8701}{262144}p^{20} + \frac{4961}{262144}p^{19} + \frac{2047}{262144}p^{18} \\
& + \frac{289}{131072}p^{17} + \frac{25}{65536}p^{16} + \frac{1}{32768}p^{15})k^{20},
\end{aligned}$$

$$f_{16} = \sum_{n=0}^{\infty} f_{16}(n) = \frac{\eta^{49}(4z)\eta(6z)\eta^{13}(12z)}{\eta^{23}(2z)} = (-\frac{1}{8589934592}p^{38} - \frac{87}{17179869184}p^{37}$$

$$\begin{aligned}
& -\frac{1805}{17\,179\,869\,184}p^{36} - \frac{23\,755}{17\,179\,869\,184}p^{35} - \frac{222\,473}{17\,179\,869\,184}p^{34} \\
& -\frac{788\,207}{8589\,934\,592}p^{33} - \frac{1096\,347}{2147\,483\,648}p^{32} - \frac{1226\,165}{536\,870\,912}p^{31} - \frac{8957\,265}{1073\,741\,824}p^{30} \\
& -\frac{13\,478\,467}{536\,870\,912}p^{29} - \frac{524\,229}{8388\,608}p^{28} - \frac{4309\,789}{33\,554\,432}p^{27} - \frac{7246\,505}{33\,554\,432}p^{26} \\
& -\frac{4872\,455}{16\,777\,216}p^{25} - \frac{1239\,997}{4194\,304}p^{24} - \frac{99\,807}{524\,288}p^{23} + \frac{13\,243}{2097\,152}p^{22} + \frac{219\,165}{1048\,576}p^{21} \\
& + \frac{84\,265}{262\,144}p^{20} + \frac{80\,829}{262\,144}p^{19} + \frac{55\,867}{262\,144}p^{18} + \frac{14\,269}{131\,072}p^{17} + \frac{1325}{32\,768}p^{16} \\
& + \frac{85}{8192}p^{15} + \frac{27}{16\,384}p^{14} + \frac{1}{8192}p^{13})k^{20},
\end{aligned}$$

$$\begin{aligned}
f_{17} &= \sum_{n=0}^{\infty} f_{17}(n) = \frac{\eta^{43}(4z)\eta^{31}(12z)}{\eta^{17}(2z)\eta^{17}(6z)} = (-\frac{1}{137\,438\,953\,472}p^{40} \\
& -\frac{83}{274\,877\,906\,944}p^{39} - \frac{1637}{274\,877\,906\,944}p^{38} - \frac{10\,199}{137\,438\,953\,472}p^{37} \\
& -\frac{22\,505}{34\,359\,738\,368}p^{36} - \frac{37\,373}{8589\,934\,592}p^{35} - \frac{387\,429}{17\,179\,869\,184}p^{34} \\
& -\frac{801\,363}{8589\,934\,592}p^{33} - \frac{167\,637}{536\,870\,912}p^{32} - \frac{457\,045}{536\,870\,912}p^{31} \\
& -\frac{1015\,189}{536\,870\,912}p^{30} - \frac{911\,183}{268\,435\,456}p^{29} - \frac{323\,323}{67\,108\,864}p^{28} \\
& -\frac{42\,959}{8388\,608}p^{27} - \frac{114\,665}{33\,554\,432}p^{26} + \frac{969}{16\,777\,216}p^{25} + \frac{969}{262\,144}p^{24} \\
& + \frac{23\,541}{4194\,304}p^{23} + \frac{21\,679}{4194\,304}p^{22} + \frac{6965}{2097\,152}p^{21} + \frac{791}{524\,288}p^{20} \\
& + \frac{61}{131\,072}p^{19} + \frac{23}{262\,144}p^{18} + \frac{1}{131\,072}p^{17})k^{20},
\end{aligned}$$

$$\begin{aligned}
f_{18} &= \sum_{n=0}^{\infty} f_{18}(n) = \frac{\eta^{50}(6z)\eta^8(12z)}{\eta^{18}(2z)} = (\frac{1}{65\,536}p^{28} + \frac{7}{32\,768}p^{27} \\
& + \frac{45}{32\,768}p^{26} + \frac{11}{2048}p^{25} + \frac{935}{65\,536}p^{24} + \frac{891}{32\,768}p^{23} \\
& + \frac{627}{16\,384}p^{22} + \frac{165}{4096}p^{21} + \frac{2079}{65\,536}p^{20} + \frac{605}{32\,768}p^{19} \\
& + \frac{253}{32\,768}p^{18} + \frac{9}{4096}p^{17} + \frac{25}{65\,536}p^{16} + \frac{1}{32\,768}p^{15})k^{20},
\end{aligned}$$

$$\begin{aligned}
f_{19} &= \sum_{n=0}^{\infty} f_{19}(n) = \frac{\eta^{12}(4z)\eta^{20}(6z)\eta^{20}(12z)}{\eta^{12}(2z)} = (-\frac{1}{8388\,608}p^{33} - \frac{45}{16\,777\,216}p^{32} \\
& -\frac{233}{8388\,608}p^{31} - \frac{1469}{8388\,608}p^{30} - \frac{6279}{8388\,608}p^{29} - \frac{9569}{4194\,304}p^{28}
\end{aligned}$$

$$\begin{aligned}
& -\frac{42\,427}{8\,388\,608}p^{27} - \frac{67\,875}{8\,388\,608}p^{26} - \frac{18\,503}{209\,7152}p^{25} - \frac{85\,279}{16\,777\,216}p^{24} \\
& + \frac{2061}{1048\,576}p^{23} + \frac{8323}{1048\,576}p^{22} + \frac{2443}{262\,144}p^{21} + \frac{3507}{524\,288}p^{20} \\
& + \frac{209}{65\,536}p^{19} + \frac{65}{65\,536}p^{18} + \frac{3}{16\,384}p^{17} + \frac{1}{65\,536}p^{16})k^{20},
\end{aligned}$$

$$\begin{aligned}
f_{20} &= \sum_{n=0}^{\infty} f_{20}(n) = \frac{\eta^{16}(4z)\eta^{16}(6z)\eta^{16}(12z)}{\eta^8(2z)} = \left(\frac{1}{4194\,304}p^{34} + \frac{25}{4194\,304}p^{33}\right. \\
& + \frac{1153}{16\,777\,216}p^{32} + \frac{1013}{209\,7152}p^{31} + \frac{2413}{1048\,576}p^{30} + \frac{32\,689}{4194\,304}p^{29} \\
& + \frac{159\,595}{8\,388\,608}p^{28} + \frac{137\,225}{4194\,304}p^{27} + \frac{9305}{262\,144}p^{26} + \frac{23\,315}{209\,7152}p^{25} \\
& - \frac{636\,863}{16\,777\,216}p^{24} - \frac{332\,915}{4194\,304}p^{23} - \frac{321\,619}{4194\,304}p^{22} - \frac{7957}{262\,144}p^{21} \\
& + \frac{10\,777}{524\,288}p^{20} + \frac{5423}{131\,072}p^{19} + \frac{4265}{131\,072}p^{18} + \frac{253}{16\,384}p^{17} \\
& \left. + \frac{301}{65\,536}p^{16} + \frac{13}{16\,384}p^{15} + \frac{1}{16\,384}p^{14})k^{20},
\right.
\end{aligned}$$

$$\begin{aligned}
f_{21} &= \sum_{n=0}^{\infty} f_{21}(n) = \frac{\eta^{20}(4z)\eta^{12}(6z)\eta^{12}(12z)}{\eta^4(2z)} = \left(-\frac{1}{209\,7152}p^{35} - \frac{55}{4194\,304}p^{34}\right. \\
& - \frac{1399}{8\,388\,608}p^{33} - \frac{21\,749}{16\,777\,216}p^{32} - \frac{57\,419}{8\,388\,608}p^{31} - \frac{215\,809}{8\,388\,608}p^{30} \\
& - \frac{584\,217}{8\,388\,608}p^{29} - \frac{553\,671}{4194\,304}p^{28} - \frac{1287\,873}{8\,388\,608}p^{27} - \frac{268\,045}{8\,388\,608}p^{26} \\
& + \frac{548\,197}{209\,7152}p^{25} + \frac{9135\,985}{16\,777\,216}p^{24} + \frac{1067\,927}{209\,7152}p^{23} + \frac{140\,821}{209\,7152}p^{22} \\
& - \frac{237\,277}{524\,288}p^{21} - \frac{643\,761}{1048\,576}p^{20} - \frac{23\,067}{65\,536}p^{19} + \frac{801}{65\,536}p^{18} + \frac{3049}{16\,384}p^{17} \\
& \left. + \frac{10\,463}{65\,536}p^{16} + \frac{611}{8192}p^{15} + \frac{173}{8192}p^{14} + \frac{7}{2048}p^{13} + \frac{1}{4096}p^{12})k^{20},
\right.
\end{aligned}$$

$$\begin{aligned}
f_{22} &= \sum_{n=0}^{\infty} f_{22}(n) = \frac{\eta^{15}(4z)\eta^{17}(6z)\eta^{11}(12z)}{\eta^3(2z)} = \left(-\frac{1}{524\,288}p^{34} - \frac{49}{1048\,576}p^{33}\right. \\
& - \frac{1101}{209\,7152}p^{32} - \frac{14\,955}{4194\,304}p^{31} - \frac{67\,959}{4194\,304}p^{30} - \frac{13\,425}{262\,144}p^{29} \\
& - \frac{58\,627}{524\,288}p^{28} - \frac{323\,927}{209\,7152}p^{27} - \frac{161\,475}{209\,7152}p^{26} + \frac{192\,845}{1048\,576}p^{25} \\
& + \frac{1027\,883}{209\,7152}p^{24} + \frac{2212\,977}{4194\,304}p^{23} + \frac{604\,429}{4194\,304}p^{22} - \frac{199\,955}{524\,288}p^{21} \\
& - \frac{621\,363}{1048\,576}p^{20} - \frac{48\,521}{131\,072}p^{19} - \frac{1651}{131\,072}p^{18} + \frac{705}{4096}p^{17} \\
& \left. + \frac{5085}{32\,768}p^{16} + \frac{1209}{16\,384}p^{15} + \frac{345}{16\,384}p^{14} + \frac{7}{2048}p^{13} + \frac{1}{4096}p^{12})k^{20},
\right.
\end{aligned}$$

$$\begin{aligned}
f_{23} = & \sum_{n=0}^{\infty} f_{23}(n) = \frac{\eta^{11}(2z) \eta^{17}(4z) \eta^{15}(6z)}{\eta^3(12z)} = \left(\frac{1}{4096} p^{35} + \frac{13}{2048} p^{34} + \frac{1231}{16384} p^{33} \right. \\
& + \frac{8699}{16384} p^{32} + \frac{160843}{65536} p^{31} + \frac{3859}{512} p^{30} + \frac{3725993}{262144} p^{29} + \frac{2426407}{262144} p^{28} \\
& - \frac{7956577}{262144} p^{27} - \frac{26126971}{262144} p^{26} - \frac{15257515}{131072} p^{25} + \frac{3681415}{131072} p^{24} \\
& + \frac{36704845}{131072} p^{23} + \frac{45874685}{131072} p^{22} + \frac{7685645}{262144} p^{21} - \frac{110718445}{262144} p^{20} \\
& - \frac{128147045}{262144} p^{19} - \frac{19395295}{262144} p^{18} + \frac{1407125}{4096} p^{17} + \frac{11434175}{32768} p^{16} \\
& + \frac{1114451}{16384} p^{15} - \frac{2170129}{16384} p^{14} - \frac{128201}{1024} p^{13} - \frac{4613}{128} p^{12} + \frac{15233}{1024} p^{11} \\
& \left. + \frac{18607}{1024} p^{10} + 8p^9 + \frac{251}{128} p^8 + \frac{17}{64} p^7 + \frac{1}{64} p^6 \right) k^{20},
\end{aligned}$$

$$\begin{aligned}
f_{24} = & \sum_{n=0}^{\infty} f_{24}(n) = \eta(2z) \eta^7(4z) \eta^{13}(6z) \eta^{19}(12z) = \left(-\frac{1}{524288} p^{34} \right. \\
& - \frac{41}{1048576} p^{33} - \frac{757}{2097152} p^{32} - \frac{8243}{4194304} p^{31} - \frac{28931}{4194304} p^{30} \\
& - \frac{8263}{524288} p^{29} - \frac{22219}{1048576} p^{28} - \frac{13967}{2097152} p^{27} + \frac{72145}{2097152} p^{26} \\
& + \frac{76489}{1048576} p^{25} + \frac{127391}{2097152} p^{24} - \frac{29975}{4194304} p^{23} - \frac{294799}{4194304} p^{22} \\
& - \frac{587}{8192} p^{21} - \frac{6505}{262144} p^{20} + \frac{2057}{131072} p^{19} + \frac{3131}{131072} p^{18} \\
& \left. + \frac{113}{8192} p^{17} + \frac{73}{16384} p^{16} + \frac{13}{16384} p^{15} + \frac{1}{16384} p^{14} \right) k^{20},
\end{aligned}$$

$$\begin{aligned}
f_{25} = & \sum_{n=0}^{\infty} f_{25}(n) = \eta(2z) \eta^{19}(4z) \eta^{13}(6z) \eta^7(12z) = \left(\frac{1}{262144} p^{35} \right. \\
& + \frac{27}{262144} p^{34} + \frac{671}{524288} p^{33} + \frac{1265}{131072} p^{32} + \frac{205129}{4194304} p^{31} \\
& + \frac{726649}{4194304} p^{30} + \frac{447603}{1048576} p^{29} + \frac{707329}{1048576} p^{28} + \frac{884187}{2097152} p^{27} \\
& - \frac{1859125}{2097152} p^{26} - \frac{2970747}{1048576} p^{25} - \frac{3605621}{1048576} p^{24} - \frac{3565271}{4194304} p^{23} \\
& + \frac{15426265}{4194304} p^{22} + \frac{776741}{131072} p^{21} + \frac{1766757}{524288} p^{20} - \frac{380171}{262144} p^{19} \\
& - \frac{1038465}{262144} p^{18} - \frac{23329}{8192} p^{17} - \frac{7929}{16384} p^{16} + \frac{12883}{16384} p^{15} \\
& \left. + \frac{12583}{16384} p^{14} + \frac{91}{256} p^{13} + \frac{197}{2048} p^{12} + \frac{15}{1024} p^{11} + \frac{1}{1024} p^{10} \right) k^{20},
\end{aligned}$$

$$\begin{aligned}
f_{26} &= \sum_{n=0}^{\infty} f_{26}(n) = \eta^2(2z) \eta^2(4z) \eta^{18}(6z) \eta^{18}(12z) = \left(-\frac{1}{131\,072} p^{33} \right. \\
&\quad - \frac{35}{262\,144} p^{32} - \frac{543}{524\,288} p^{31} - \frac{4853}{1048\,576} p^{30} - \frac{6709}{524\,288} p^{29} \\
&\quad - \frac{21\,951}{1048\,576} p^{28} - \frac{211}{16\,384} p^{27} + \frac{12\,505}{524\,288} p^{26} + \frac{17\,583}{262\,144} p^{25} \\
&\quad + \frac{34\,439}{524\,288} p^{24} + \frac{1949}{524\,288} p^{23} - \frac{66\,297}{1048\,576} p^{22} - \frac{37\,589}{524\,288} p^{21} \\
&\quad - \frac{29\,443}{1048\,576} p^{20} + \frac{3465}{262\,144} p^{19} + \frac{6019}{262\,144} p^{18} + \frac{223}{16\,384} p^{17} \\
&\quad \left. + \frac{291}{65\,536} p^{16} + \frac{13}{16\,384} p^{15} + \frac{1}{16\,384} p^{14} \right) k^{20},
\end{aligned}$$

$$\begin{aligned}
f_{27} &= \sum_{n=0}^{\infty} f_{27}(n) \frac{\eta^{12}(2z) \eta^{20}(6z) \eta^{20}(12z)}{\eta^{12}(4z)} = \left(\frac{1}{4096} p^{32} + \frac{5}{2048} p^{31} \right. \\
&\quad + \frac{79}{8192} p^{30} + \frac{137}{8192} p^{29} + \frac{65}{65\,536} p^{28} - \frac{385}{8192} p^{27} - \frac{2417}{32\,768} p^{26} \\
&\quad - \frac{215}{16\,384} p^{25} + \frac{5783}{65\,536} p^{24} + \frac{1693}{16\,384} p^{23} + \frac{7}{512} p^{22} - \frac{263}{4096} p^{21} \\
&\quad - \frac{3745}{65\,536} p^{20} - \frac{11}{1024} p^{19} + \frac{451}{32\,768} p^{18} + \frac{193}{16\,384} p^{17} + \frac{281}{65\,536} p^{16} \\
&\quad \left. + \frac{13}{16\,384} p^{15} + \frac{1}{16\,384} p^{14} \right) k^{20},
\end{aligned}$$

$$\begin{aligned}
f_{28} &= \sum_{n=0}^{\infty} f_{27}(n) = \eta^4(2z) \eta^{16}(4z) \eta^4(6z) \eta^{16}(12z) = \left(\frac{1}{1048\,576} p^{36} \right. \\
&\quad + \frac{13}{524\,288} p^{35} + \frac{619}{2097\,152} p^{34} + \frac{4441}{2097\,152} p^{33} + \frac{169\,601}{16\,777\,216} p^{32} \\
&\quad + \frac{69\,631}{2097\,152} p^{31} + \frac{308\,341}{4194\,304} p^{30} + \frac{99\,747}{1048\,576} p^{29} + \frac{86\,211}{8388\,608} p^{28} \\
&\quad - \frac{243\,167}{1048\,576} p^{27} - \frac{1998\,079}{4194\,304} p^{26} - \frac{803\,771}{2097\,152} p^{25} + \frac{2864\,897}{16\,777\,216} p^{24} \\
&\quad + \frac{1570\,171}{2097\,152} p^{23} + \frac{1536\,793}{2097\,152} p^{22} + \frac{57\,491}{524\,288} p^{21} - \frac{495\,153}{1048\,576} p^{20} \\
&\quad - \frac{33\,957}{65\,536} p^{19} - \frac{12\,701}{65\,536} p^{18} + \frac{1193}{16\,384} p^{17} + \frac{8111}{65\,536} p^{16} + \frac{559}{8192} p^{15} \\
&\quad \left. + \frac{169}{8192} p^{14} + \frac{7}{2048} p^{13} + \frac{1}{4096} p^{12} \right) k^{20},
\end{aligned}$$

$$\begin{aligned}
f_{29} &= \sum_{n=0}^{\infty} f_{27}(n) \frac{\eta^{16}(2z) \eta^{16}(4z) \eta^{16}(6z)}{\eta^8(4z)} = \left(-\frac{1}{2048} p^{33} - \frac{25}{4096} p^{32} \right. \\
&\quad - \frac{127}{4096} p^{31} - \frac{617}{8192} p^{30} - \frac{1709}{32\,768} p^{29} + \frac{11\,531}{65\,536} p^{28} + \frac{15\,399}{32\,768} p^{27} \\
&\quad \left. + \frac{11\,531}{65\,536} p^{26} + \frac{15\,399}{32\,768} p^{25} \right) k^{20},
\end{aligned}$$

$$\begin{aligned}
& + \frac{2363}{8192}p^{26} - \frac{4291}{8192}p^{25} - \frac{68109}{65536}p^{24} - \frac{6163}{16384}p^{23} + \frac{6163}{8192}p^{22} \\
& + \frac{31131}{32768}p^{21} + \frac{12241}{65536}p^{20} - \frac{13981}{32768}p^{19} - \frac{3}{8}p^{18} - \frac{1177}{16384}p^{17} \\
& + \frac{4721}{65536}p^{16} + \frac{481}{8192}p^{15} + \frac{163}{8192}p^{14} + \frac{7}{2048}p^{13} + \frac{1}{4096}p^{12})k^{20},
\end{aligned}$$

$$\begin{aligned}
f_{30} &= \sum_{n=0}^{\infty} f_{30}(n) = \frac{\eta^{16}(2z)\eta^{16}(4z)\eta^{16}(12z)}{\eta^8(6z)} = \left(\frac{1}{262144}p^{38} + \frac{27}{262144}p^{37}\right. \\
& + \frac{1327}{1048576}p^{36} + \frac{4865}{524288}p^{35} + \frac{186607}{4194304}p^{34} + \frac{594619}{4194304}p^{33} \\
& + \frac{4672321}{16777216}p^{32} + \frac{416849}{2097152}p^{31} - \frac{1218349}{2097152}p^{30} - \frac{8420993}{4194304}p^{29} \\
& - \frac{19945861}{8388608}p^{28} + \frac{2817175}{4194304}p^{27} + \frac{12544241}{2097152}p^{26} + \frac{14982911}{2097152}p^{25} \\
& - \frac{3598463}{16777216}p^{24} - \frac{40531697}{4194304}p^{23} - \frac{40741445}{4194304}p^{22} + \frac{125591}{524288}p^{21} \\
& + \frac{8678377}{1048576}p^{20} + \frac{1694737}{262144}p^{19} - \frac{31589}{262144}p^{18} - \frac{54377}{16384}p^{17} \\
& - \frac{139589}{65536}p^{16} - \frac{3263}{16384}p^{15} + \frac{7561}{16384}p^{14} + \frac{623}{2048}p^{13} + \frac{379}{4096}p^{12} \\
& \left. + \frac{15}{1024}p^{11} + \frac{1}{1024}p^{10}\right)k^{20},
\end{aligned}$$

$$\begin{aligned}
f_{31} &= \sum_{n=0}^{\infty} f_{31}(n) = \eta^6(2z)\eta^{18}(4z)\eta^{14}(6z)\eta^2(12z) = \left(-\frac{1}{32768}p^{35}\right. \\
& - \frac{53}{65536}p^{34} - \frac{643}{65536}p^{33} - \frac{9395}{131072}p^{32} - \frac{182205}{524288}p^{31} \\
& - \frac{1207689}{1048576}p^{30} - \frac{1324523}{524288}p^{29} - \frac{3141571}{1048576}p^{28} + \frac{270745}{262144}p^{27} \\
& + \frac{6017095}{524288}p^{26} + \frac{5454025}{262144}p^{25} + \frac{6621865}{524288}p^{24} - \frac{9587465}{524288}p^{23} \\
& - \frac{48840285}{1048576}p^{22} - \frac{18925215}{524288}p^{21} + \frac{12013865}{1048576}p^{20} \\
& + \frac{6394405}{131072}p^{19} + \frac{5160275}{131072}p^{18} + \frac{18605}{16384}p^{17} - \frac{1531265}{65536}p^{16} \\
& - \frac{80353}{4096}p^{15} - \frac{5053}{1024}p^{14} + \frac{6909}{2048}p^{13} + \frac{15255}{4096}p^{12} + \frac{865}{512}p^{11} \\
& \left. + \frac{223}{512}p^{10} + \frac{1}{16}p^9 + \frac{1}{256}p^8\right)k^{20},
\end{aligned}$$

$$f_{32} = \sum_{n=0}^{\infty} f_{31}(n) \frac{\eta^{16}(2z)\eta^{16}(4z)\eta^{16}(6z)}{\eta^8(12z)} = \left(-\frac{1}{512}p^{35} - \frac{51}{1024}p^{34}\right)$$

$$\begin{aligned}
& -\frac{1177}{2048}p^{33} - \frac{16063}{4096}p^{32} - \frac{140983}{8192}p^{31} - \frac{792265}{16384}p^{30} \\
& -\frac{2416403}{32768}p^{29} + \frac{848987}{65536}p^{28} + \frac{11032777}{32768}p^{27} + \frac{11680943}{16384}p^{26} \\
& +\frac{1684157}{4096}p^{25} - \frac{71367661}{65536}p^{24} - \frac{42492895}{16384}p^{23} - \frac{25681555}{16384}p^{22} \\
& +\frac{74893885}{32768}p^{21} + \frac{320871905}{65536}p^{20} + \frac{76630645}{32768}p^{19} - \frac{50018725}{16384}p^{18} \\
& -\frac{81913585}{16384}p^{17} - \frac{112286095}{65536}p^{16} + \frac{18233371}{8192}p^{15} + \frac{22343593}{8192}p^{14} \\
& +\frac{1523377}{2048}p^{13} - \frac{3040417}{4096}p^{12} - \frac{195571}{256}p^{11} - \frac{58885}{256}p^{10} + \frac{1091}{16}p^9 \\
& +\frac{22783}{256}p^8 + \frac{1207}{32}p^7 + \frac{281}{32}p^6 + \frac{9}{8}p^5 + \frac{1}{16}p^4)k^{20},
\end{aligned}$$

$$\begin{aligned}
f_{33} &= \sum_{n=0}^{\infty} f_{31}(n) \frac{\eta^{20}(2z)\eta^{20}(4z)\eta^{12}(12z)}{\eta^{12}(6z)} = (-\frac{1}{131072}p^{39} - \frac{59}{262144}p^{38} \\
& -\frac{1593}{524288}p^{37} - \frac{25855}{1048576}p^{36} - \frac{277319}{2097152}p^{35} - \frac{2013417}{4194304}p^{34} \\
& -\frac{9424611}{8388608}p^{33} - \frac{21067893}{16777216}p^{32} + \frac{12607245}{8388608}p^{31} + \frac{73634547}{8388608}p^{30} \\
& +\frac{121455075}{8388608}p^{29} + \frac{12552813}{4194304}p^{28} - \frac{259291893}{8388608}p^{27} - \frac{455648025}{8388608}p^{26} \\
& -\frac{36378639}{2097152}p^{25} + \frac{1128788289}{16777216}p^{24} + \frac{53223381}{524288}p^{23} + \frac{11456883}{524288}p^{22} \\
& -\frac{11679465}{131072}p^{21} - \frac{25909737}{262144}p^{20} - \frac{260253}{32768}p^{19} + \frac{2070867}{32768}p^{18} \\
& +\frac{405345}{8192}p^{17} + \frac{22275}{32768}p^{16} - \frac{42705}{2048}p^{15} - \frac{26019}{2048}p^{14} - \frac{567}{512}p^{13} \\
& +\frac{2471}{1024}p^{12} + \frac{95}{64}p^{11} + \frac{27}{64}p^{10} + \frac{1}{16}p^9 + \frac{1}{256}p^8)k^{20},
\end{aligned}$$

$$\begin{aligned}
f_{34} &= \sum_{n=0}^{\infty} f_{31}(n) \frac{\eta^{20}(2z)\eta^{20}(4z)\eta^{12}(6z)}{\eta^{12}(12z)} = (\frac{1}{256}p^{36} + \frac{7}{64}p^{35} \\
& +\frac{357}{256}p^{34} + \frac{2715}{256}p^{33} + \frac{107691}{2048}p^{32} + \frac{175683}{1024}p^{31} \\
& +\frac{1361387}{4096}p^{30} + \frac{612857}{4096}p^{29} - \frac{75245247}{65536}p^{28} \\
& -\frac{28318353}{8192}p^{27} - \frac{116574297}{32768}p^{26} + \frac{56751849}{16384}p^{25} \\
& +\frac{993722247}{65536}p^{24} + \frac{254525355}{16384}p^{23} - \frac{8622405}{1024}p^{22} \\
& -\frac{309436113}{8192}p^{21} - \frac{2028196401}{65536}p^{20} + \frac{73768671}{4096}p^{19}
\end{aligned}$$

$$\begin{aligned}
& + \frac{1790938347}{32768}p^{18} + \frac{511519629}{16384}p^{17} - \frac{1556400807}{65536}p^{16} \\
& - \frac{726710373}{16384}p^{15} - \frac{272100717}{16384}p^{14} + \frac{32062653}{2048}p^{13} \\
& + \frac{80116737}{4096}p^{12} + \frac{5463501}{1024}p^{11} - \frac{4641597}{1024}p^{10} \\
& - \frac{72211}{16}p^9 - \frac{329149}{256}p^8 + \frac{23205}{64}p^7 + \frac{28497}{64}p^6 \\
& + \frac{1425}{8}p^5 + \frac{627}{16}p^4 + \frac{19}{4}p^3 + \frac{1}{4}p^2)k^{20},
\end{aligned}$$

$$\begin{aligned}
f_{35} &= \sum_{n=0}^{\infty} f_{31}(n) \frac{\eta^{30}(2z)\eta^{30}(4z)}{\eta^{10}(6z)\eta^{10}(12z)} = \left(\frac{1}{1024}p^{40} + \frac{35}{1024}p^{39} \right. \\
& + \frac{2265}{4096}p^{38} + \frac{11155}{2048}p^{37} + \frac{295595}{8192}p^{36} + \frac{1363221}{8192}p^{35} \\
& + \frac{17191605}{32768}p^{34} + \frac{4057095}{4096}p^{33} + \frac{71399925}{262144}p^{32} \\
& - \frac{1188190405}{262144}p^{31} - \frac{14445550499}{1048576}p^{30} - \frac{7822818975}{524288}p^{29} \\
& + \frac{18252505885}{1048576}p^{28} + \frac{10685880835}{131072}p^{27} + \frac{49186342665}{524288}p^{26} \\
& - \frac{14772283785}{262144}p^{25} - \frac{153620170965}{524288}p^{24} - \frac{72106966395}{262144}p^{23} \\
& + \frac{202944951465}{1048576}p^{22} + \frac{346829786025}{524288}p^{21} + \frac{425217187881}{1048576}p^{20} \\
& - \frac{61403500425}{131072}p^{19} - \frac{116695005135}{131072}p^{18} - \frac{4209256665}{16384}p^{17} \\
& + \frac{40972802445}{65536}p^{16} + \frac{1377357363}{2048}p^{15} + \frac{7301475}{1024}p^{14} \\
& - \frac{444226045}{1024}p^{13} - \frac{563874175}{2048}p^{12} + \frac{14217465}{256}p^{11} \\
& + \frac{39397255}{256}p^{10} + \frac{505645}{8}p^9 - \frac{2273175}{128}p^8 - \frac{217515}{8}p^7 \\
& \left. - \frac{149025}{16}p^6 + \frac{7497}{8}p^5 + \frac{31765}{16}p^4 + \frac{1615}{2}p^3 + \frac{345}{2}p^2 + 20p + 1 \right)k^{20}.
\end{aligned}$$

TABLE 3

EXPRESSION of f_i IN TERMS OF NEWFO AND EISENSTEIN SERIES

$$\begin{aligned}
f_1 = & -\frac{1852\,489\,927}{6175\,693\,327\,564\,800}\Delta_{1,20}(z) + \frac{35\,197\,308\,613}{257\,320\,555\,315\,200}\Delta_{1,20}(2z) + \frac{234\,668\,157\,327}{8471\,458\,611\,200}\Delta_{1,20}(3z) \\
& -\frac{1852\,489\,927}{11\,779\,200\,225}\Delta_{1,20}(4z) - \frac{13\,376\,084\,967\,639}{1058\,932\,326\,400}\Delta_{1,20}(6z) + \frac{234\,668\,157\,327}{16\,158\,025}\Delta_{1,20}(12z) \\
& + \frac{9146\,363}{39\,634\,757\,222\,400}\Delta_{2,20,1}(z) - \frac{9146\,363}{77\,411\,635\,200}\Delta_{2,20,1}(2z) + \frac{1093\,529\,277}{54\,368\,665\,600}\Delta_{2,20,1}(3z) \\
& - \frac{1093\,529\,277}{106\,188\,800}\Delta_{2,20,1}(6z) + \frac{423\,636\,017}{8196\,393\,711\,697\,920}\Delta_{2,20,2}(z) + \frac{423\,636\,017}{16\,008\,581\,468\,160}\Delta_{2,20,2}(2z) \\
& + \frac{16\,175\,157\,255\,207}{910\,710\,412\,410\,880}\Delta_{2,20,2}(3z) + \frac{16\,175\,157\,255\,207}{1778\,731\,274\,240}\Delta_{2,20,2}(6z) - \frac{7767\,049}{24\,594\,953\,011\,200}\Delta_{3,20,1}(z) \\
& - \frac{178\,642\,127}{512\,394\,854\,400}\Delta_{3,20,1}(2z) - \frac{7767\,049}{46\,911\,150}\Delta_{3,20,1}(4z) + \left(\frac{96\,109\,105\,721}{1689\,494\,920\,011\,145\,543\,680}t\right. \\
& \left. - \frac{1034\,037\,172\,787}{3312\,735\,137\,276\,755\,968}\right)\Delta_{3,20,2}(z) + \left(\frac{32\,622\,793\,769\,489}{70\,395\,621\,667\,131\,064\,320}t\right. \\
& \left. - \frac{8573\,736\,452\,581}{34\,507\,657\,679\,966\,208}\right)\Delta_{3,20,2}(2z) + \left(\frac{192\,218\,211\,442}{6444\,911\,651\,653\,845}t\right. \\
& \left. + \frac{4136\,148\,691\,148}{25\,274\,163\,339\,819}\right)\Delta_{3,20,2}(4z) + \left(\frac{24\,784\,481\,264\,063}{70\,395\,621\,667\,131\,064\,320}\right. \\
& \left. - \frac{96\,109\,105\,721}{1689\,494\,920\,011\,145\,543\,680}t\right)\Delta_{3,20,3}(z) + \left(\frac{901\,796\,477\,152\,673}{11\,732\,603\,611\,188\,510\,720}\right. \\
& \left. - \frac{32\,622\,793\,769\,489}{70\,395\,621\,667\,131\,064\,320}t\right)\Delta_{3,20,3}(2z) + \left(\frac{396\,551\,700\,225\,008}{2148\,303\,883\,884\,615}\right. \\
& \left. - \frac{192\,218\,211\,442}{6444\,911\,651\,653\,845}t\right)\Delta_{3,20,3}(4z) - \frac{51}{9795\,518\,464}\Delta_{4,20}(z) \\
& - \frac{54\,481\,167}{1224\,439\,808}\Delta_{4,20}(3z) - \frac{38\,962\,873}{102\,584\,077\,516\,800}\Delta_{6,20,1}(z) \\
& + \frac{38\,962\,873}{200\,359\,526\,400}\Delta_{6,20,1}(2z) - \frac{26\,049\,097}{105\,287\,038\,009\,344}\Delta_{6,20,2}(z) \\
& - \frac{26\,049\,097}{205\,638\,746\,112}\Delta_{6,20,2}(2z) + \frac{14\,914\,687}{50\,332\,797\,370\,368}\Delta_{6,20,3}(z) \\
& + \frac{14\,914\,687}{98\,306\,244\,864}\Delta_{6,20,3}(2z) + \left(\frac{349\,380\,815}{14\,287\,456\,617\,111\,647\,944\,704}s\right. \\
& \left. + \frac{160\,439\,606\,104\,261}{264\,582\,529\,946\,511\,998\,976}\right)\Delta_{12,20,1}(z) + \left(\frac{139\,301\,368\,035\,131}{264\,582\,529\,946\,511\,998\,976}\right. \\
& \left. - \frac{349\,380\,815}{14\,287\,456\,617\,111\,647\,944\,704}s\right)\Delta_{12,20,2}(z) + \left(\frac{25\,086\,661}{2614\,352\,088\,918\,078\,259\,200}r\right.
\end{aligned}$$

$$\begin{aligned}
& -\frac{5488\,548\,894\,617}{9682\,785\,514\,511\,400\,960})\Delta_{12,20,3}(z) + (-\frac{25\,086\,661}{2614\,352\,088\,918\,078\,259\,200}r \\
& -\frac{5430\,498\,361\,063}{9682\,785\,514\,511\,400\,960})\Delta_{12,20,4}(z)
\end{aligned}$$

$$\begin{aligned}
f_2 = & -\frac{25\,701\,809}{96\,495\,208\,243\,200}\Delta_{1,20}(z) + \frac{488\,334\,371}{4020\,633\,676\,800}\Delta_{1,20}(2z) + \frac{1629\,022\,497}{66\,183\,270\,400}\Delta_{1,20}(3z) \\
& -\frac{1644\,915\,776}{11\,779\,200\,225}\Delta_{1,20}(4z) - \frac{92\,854\,282\,329}{8272\,908\,800}\Delta_{1,20}(6z) + \frac{208\,514\,879\,616}{16\,158\,025}\Delta_{1,20}(12z) \\
& + \frac{443\,351}{2167\,525\,785\,600}\Delta_{2,20,1}(z) - \frac{443\,351}{4233\,448\,800}\Delta_{2,20,1}(2z) + \frac{105\,942\,423}{5946\,572\,800}\Delta_{2,20,1}(3z) \\
& - \frac{105\,942\,423}{11\,614\,400}\Delta_{2,20,1}(6z) + \frac{591\,955}{12\,806\,865\,174\,528}\Delta_{2,20,2}(z) + \frac{591\,955}{25\,013\,408\,544}\Delta_{2,20,2}(2z) \\
& + \frac{45\,047\,321\,775}{2845\,970\,038\,784}\Delta_{2,20,2}(3z) + \frac{45\,047\,321\,775}{5558\,535\,232}\Delta_{2,20,2}(6z) - \frac{648\,853}{2305\,776\,844\,800}\Delta_{3,20,1}(z) \\
& - \frac{14\,923\,619}{48\,037\,017\,600}\Delta_{3,20,1}(2z) - \frac{10\,381\,648}{70\,366\,725}\Delta_{3,20,1}(4z) + (\frac{182\,581\,702\,207}{3547\,939\,332\,023\,405\,641\,728}t \\
& + \frac{9634\,120\,167\,797}{34\,783\,718\,941\,405\,937\,664})\Delta_{3,20,2}(z) + (\frac{15\,203\,137\,901\,395}{36\,957\,701\,375\,243\,808\,768}t \\
& - \frac{79\,752\,510\,297\,871}{362\,330\,405\,639\,645\,184})\Delta_{3,20,2}(2z) + (\frac{730\,326\,808\,828}{27\,068\,628\,936\,946\,149}t \\
& + \frac{77\,072\,961\,342\,376}{530\,757\,430\,136\,199})\Delta_{3,20,2}(4z) + (\frac{1653\,054\,482\,239}{5279\,671\,625\,034\,829\,824} \\
& - \frac{182\,581\,702\,207}{3547\,939\,332\,023\,405\,641\,728}t)\Delta_{3,20,3}(z) + (\frac{3776\,557\,673\,209}{54\,996\,579\,427\,446\,144} \\
& - \frac{15\,203\,137\,901\,395}{36\,957\,701\,375\,243\,808\,768}t)\Delta_{3,20,3}(2z) + (\frac{211\,590\,973\,726\,592}{1288\,982\,330\,330\,769} \\
& - \frac{730\,326\,808\,828}{27\,068\,628\,936\,946\,149}t)\Delta_{3,20,3}(4z) - \frac{25}{4897\,759\,232}\Delta_{4,20}(z) \\
& - \frac{193\,710\,879}{4897\,759\,232}\Delta_{4,20}(3z) - \frac{4316\,083}{12\,823\,009\,689\,600}\Delta_{6,20,1}(z) \\
& + \frac{4316\,083}{25\,044\,940\,800}\Delta_{6,20,1}(2z) - \frac{8706\,049}{39\,482\,639\,253\,504}\Delta_{6,20,2}(z) \\
& - \frac{8706\,049}{77\,114\,529\,792}\Delta_{6,20,2}(2z) + \frac{19\,932\,871}{75\,499\,196\,055\,552}\Delta_{6,20,3}(z) \\
& + \frac{19\,932\,871}{147\,459\,367\,296}\Delta_{6,20,3}(2z) + (\frac{19\,416\,601}{892\,966\,038\,569\,477\,996\,544}s \\
& + \frac{330\,202\,903\,241}{612\,459\,560\,061\,370\,368})\Delta_{12,20,1}(z) + (\frac{7740\,735\,193\,805}{16\,536\,408\,121\,656\,999\,936} \\
& - \frac{19\,416\,601}{892\,966\,038\,569\,477\,996\,544}s)\Delta_{12,20,2}(z) + (\frac{2226\,689}{261\,435\,208\,891\,807\,825\,920}r \\
& - \frac{54\,194\,654\,621}{107\,586\,505\,716\,793\,344})\Delta_{12,20,3}(z) - (\frac{2226\,689}{261\,435\,208\,891\,807\,825\,920}r
\end{aligned}$$

$$+\frac{482\,599\,333\,243}{968\,278\,551\,451\,140\,096})\Delta_{12,20,4}(z),$$

$$\begin{aligned} f_3 = & -\frac{3162\,543\,763}{65\,874\,062\,160\,691\,200}\Delta_{1,20}(z) + \frac{60\,088\,331\,497}{2744\,752\,590\,028\,800}\Delta_{1,20}(2z) \\ & + \frac{1194\,702\,485\,319}{271\,086\,675\,558\,400}\Delta_{1,20}(3z) - \frac{3162\,543\,763}{125\,644\,802\,400}\Delta_{1,20}(4z) \\ & - \frac{68\,098\,041\,663\,183}{33\,885\,834\,444\,800}\Delta_{1,20}(6z) + \frac{1194\,702\,485\,319}{517\,056\,800}\Delta_{1,20}(12z) \\ & + \frac{55\,717\,987}{1479\,697\,602\,969\,600}\Delta_{2,20,1}(z) - \frac{55\,717\,987}{2890\,034\,380\,800}\Delta_{2,20,1}(2z) \\ & + \frac{20\,099\,697\,129}{6089\,290\,547\,200}\Delta_{2,20,1}(3z) - \frac{20\,099\,697\,129}{11\,893\,145\,600}\Delta_{2,20,1}(6z) \\ & + \frac{201\,668\,189}{26\,228\,459\,877\,433\,344}\Delta_{2,20,2}(z) + \frac{201\,668\,189}{51\,227\,460\,698\,112}\Delta_{2,20,2}(2z) \\ & + \frac{7950\,605\,188\,653}{2914\,273\,319\,714\,816}\Delta_{2,20,2}(3z) + \frac{7950\,605\,188\,653}{5691\,940\,077\,568}\Delta_{2,20,2}(6z) \\ & - \frac{1418\,689}{29\,149\,573\,939\,200}\Delta_{3,20,1}(z) - \frac{32\,629\,847}{607\,282\,790\,400}\Delta_{3,20,1}(2z) \\ & - \frac{1418\,689}{55\,598\,400}\Delta_{3,20,1}(4z) + (\frac{81\,879\,615\,215}{11\,213\,240\,357\,999\,899\,312\,128}t \\ & + \frac{5532\,434\,155\,861}{109\,933\,728\,999\,999\,012\,864})\Delta_{3,20,2}(z) + (\frac{4346\,106\,000\,727}{58\,402\,293\,531\,249\,475\,584}t \\ & - \frac{46\,646\,419\,434\,623}{1145\,143\,010\,416\,656\,384})\Delta_{3,20,2}(2z) + (\frac{81\,879\,615\,215}{21\,387\,558\,666\,229\,056}t \\ & + \frac{5532\,434\,155\,861}{209\,681\,947\,708\,128})\Delta_{3,20,2}(4z) + (\frac{462\,639\,712\,633}{8343\,184\,790\,178\,496\,512} \\ & - \frac{81\,879\,615\,215}{11\,213\,240\,357\,999\,899\,312\,128}t)\Delta_{3,20,3}(z) + (\frac{31\,999\,953\,397\,361}{2781\,061\,596\,726\,165\,504} \\ & - \frac{4346\,106\,000\,727}{58\,402\,293\,531\,249\,475\,584}t)\Delta_{3,20,3}(2z) + (\frac{462\,639\,712\,633}{15\,913\,362\,102\,849} \\ & - \frac{81\,879\,615\,215}{21\,387\,558\,666\,229\,056}t)\Delta_{3,20,3}(4z) - \frac{729}{10\,030\,610\,907\,136}\Delta_{4,20}(z) \\ & - \frac{70\,607\,389\,041}{10\,030\,610\,907\,136}\Delta_{4,20}(3z) - \frac{2830\,523}{45\,592\,923\,340\,800}\Delta_{6,20,1}(z) \\ & + \frac{2830\,523}{89\,048\,678\,400}\Delta_{6,20,1}(2z) - \frac{296\,101}{7799\,039\,852\,544}\Delta_{6,20,2}(z) - \frac{296\,101}{15\,232\,499\,712}\Delta_{6,20,3}(z) \\ & + \frac{5441\,227}{119\,307\,371\,544\,576}\Delta_{6,20,2}(2z) + \frac{5441\,227}{233\,022\,210\,048}\Delta_{6,20,3}(2z) \\ & + (\frac{65\,336\,225}{16\,933\,281\,916\,576\,767\,934\,464}s + \frac{30\,018\,354\,788\,107}{313\,579\,294\,751\,421\,628\,416})\Delta_{12,20,1}(z) \\ & + (\frac{26\,065\,382\,503\,157}{313\,579\,294\,751\,421\,628\,416} - \frac{65\,336\,225}{16\,933\,281\,916\,576\,767\,934\,464}s)\Delta_{12,20,2}(z) \end{aligned}$$

$$\begin{aligned}
& + \left(\frac{38\,020\,777}{24\,787\,930\,917\,149\,186\,457\,600} r - \frac{8250\,520\,180\,589}{91\,807\,151\,544\,996\,986\,880} \right) \Delta_{12,20,3}(z) \\
& - \left(\frac{38\,020\,777}{24\,787\,930\,917\,149\,186\,457\,600} r + \frac{8162\,540\,102\,611}{91\,807\,151\,544\,996\,986\,880} \right) \Delta_{12,20,4}(z),
\end{aligned}$$

$$\begin{aligned}
f_4 = & \frac{233\,197\,909}{257\,320\,555\,315\,200} \Delta_{1,20}(z) - \frac{4430\,760\,271}{10\,721\,689\,804\,800} \Delta_{1,20}(2z) \\
& + \frac{175\,974\,051\,393}{1058\,932\,326\,400} \Delta_{1,20}(3z) + \frac{1865\,583\,272}{3926\,400\,075} \Delta_{1,20}(4z) - \frac{10\,030\,520\,929\,401}{132\,366\,540\,800} \Delta_{1,20}(6z) \\
& + \frac{1407\,792\,411\,144}{16\,158\,025} \Delta_{1,20}(12z) - \frac{23\,701\,847}{11\,560\,137\,523\,200} \Delta_{2,20,1}(z) + \frac{23\,701\,847}{22\,578\,393\,600} \Delta_{2,20,1}(2z) \\
& + \frac{486\,118\,341}{47\,572\,582\,400} \Delta_{2,20,1}(3z) - \frac{486\,118\,341}{92\,915\,200} \Delta_{2,20,1}(6z) + \frac{164\,156\,539}{204\,909\,842\,792\,448} \Delta_{2,20,2}(z) \\
& + \frac{164\,156\,539}{400\,214\,536\,704} \Delta_{2,20,2}(2z) + \frac{4906\,373\,674\,581}{22\,767\,760\,310\,272} \Delta_{2,20,2}(3z) + \frac{4906\,373\,674\,581}{44\,468\,281\,856} \Delta_{2,20,2}(6z) \\
& + \frac{74\,167}{113\,865\,523\,200} \Delta_{3,20,1}(z) + \frac{1705\,841}{2372\,198\,400} \Delta_{3,20,1}(2z) + \frac{296\,668}{868\,725} \Delta_{3,20,1}(4z) \\
& + \left(\frac{5179\,053\,403}{43\,801\,720\,148\,437\,106\,688} t - \frac{430\,178\,030\,215}{429\,428\,628\,906\,246\,144} \right) \Delta_{3,20,2}(z) \\
& + \left(\frac{4053\,388\,754\,645}{4473\,214\,884\,440\,064} - \frac{328\,319\,735\,071}{228\,133\,959\,106\,443\,264} t \right) \Delta_{3,20,2}(2z) + \left(\frac{20\,716\,213\,612}{334\,180\,604\,159\,829} t \right. \\
& \left. - \frac{3441\,424\,241\,720}{6552\,560\,865\,879} \right) \Delta_{3,20,2}(4z) - \left(\frac{5179\,053\,403}{43\,801\,720\,148\,437\,106\,688} t \right. \\
& \left. + \frac{29\,942\,309\,221}{32\,590\,565\,586\,634\,752} \right) \Delta_{3,20,3}(z) + \left(\frac{328\,319\,735\,071}{228\,133\,959\,106\,443\,264} t \right. \\
& \left. - \frac{1131\,315\,596\,807}{10\,863\,521\,862\,211\,584} \right) \Delta_{3,20,3}(2z) - \left(\frac{20\,716\,213\,612}{334\,180\,604\,159\,829} t \right. \\
& \left. + \frac{7665\,231\,160\,576}{15\,913\,362\,102\,849} \right) \Delta_{3,20,3}(4z) - \frac{98\,159}{132\,239\,499\,264} \Delta_{4,20}(z) + \frac{1224\,341\,649}{4897\,759\,232} \Delta_{4,20}(3z) \\
& + \frac{1846\,781}{712\,389\,427\,200} \Delta_{6,20,1}(z) - \frac{1846\,781}{1391\,385\,600} \Delta_{6,20,1}(2z) + \frac{59\,987}{243\,719\,995\,392} \Delta_{6,20,2}(z) \\
& + \frac{59\,987}{476\,015\,616} \Delta_{6,20,2}(2z) - \frac{1143\,149}{932\,088\,840\,192} \Delta_{6,20,3}(z) - \frac{1143\,149}{1820\,486\,016} \Delta_{6,20,3}(2z) \\
& + \left(\frac{10\,535\,377}{66\,145\,632\,486\,627\,999\,744} s + \frac{1842\,417\,660\,443}{1224\,919\,120\,122\,740\,736} \right) \Delta_{12,20,1}(z) \\
& + \left(\frac{1205\,006\,281\,189}{1224\,919\,120\,122\,740\,736} - \frac{10\,535\,377}{66\,145\,632\,486\,627\,999\,744} s \right) \Delta_{12,20,2}(z) \\
& + \left(\frac{2111\,539}{48\,413\,927\,572\,557\,004\,800} r - \frac{158\,943\,337\,343}{179\,310\,842\,861\,322\,240} \right) \Delta_{12,20,3}(z) \\
& - \left(\frac{2111\,539}{48\,413\,927\,572\,557\,004\,800} r + \frac{154\,057\,236\,097}{179\,310\,842\,861\,322\,240} \right) \Delta_{12,20,4}(z),
\end{aligned}$$

$$\begin{aligned}
f_5 = & -\frac{1404\,134\,743}{32\,937\,031\,080\,345\,600}\Delta_{1,20}(z) + \frac{26\,678\,560\,117}{1372\,376\,295\,014\,400}\Delta_{1,20}(2z) \\
& + \frac{530\,510\,997\,609}{135\,543\,337\,779\,200}\Delta_{1,20}(3z) - \frac{1404\,134\,743}{62\,822\,401\,200}\Delta_{1,20}(4z) - \frac{30\,239\,126\,863\,713}{16\,942\,917\,222\,400}\Delta_{1,20}(6z) \\
& + \frac{530\,510\,997\,609}{258\,528\,400}\Delta_{1,20}(12z) + \frac{24\,693\,247}{739\,848\,801\,484\,800}\Delta_{2,20,1}(z) - \frac{24\,693\,247}{1445\,017\,190\,400}\Delta_{2,20,1}(2z) \\
& + \frac{8906\,636\,799}{3044\,645\,273\,600}\Delta_{2,20,1}(3z) - \frac{8906\,636\,799}{5946\,572\,800}\Delta_{2,20,1}(6z) + \frac{89\,960\,929}{13\,114\,229\,938\,716\,672}\Delta_{2,20,2}(z) \\
& + \frac{89\,960\,929}{25\,613\,730\,349\,056}\Delta_{2,20,2}(2z) + \frac{3543\,777\,885\,627}{1457\,136\,659\,857\,408}\Delta_{2,20,2}(3z) \\
& + \frac{3543\,777\,885\,627}{2845\,970\,038\,784}\Delta_{2,20,2}(6z) - \frac{1895\,507}{43\,724\,360\,908\,800}\Delta_{3,20,1}(z) \\
& - \frac{43\,596\,661}{910\,924\,185\,600}\Delta_{3,20,1}(2z) - \frac{1895\,507}{83\,397\,600}\Delta_{3,20,1}(4z) \\
& + \left(\frac{55\,637\,820\,043}{8409\,930\,268\,499\,924\,484\,096}t + \frac{3682\,203\,369\,617}{82\,450\,296\,749\,999\,259\,648}\right)\Delta_{3,20,2}(z) \\
& + \left(\frac{11\,574\,294\,162\,707}{175\,206\,880\,593\,748\,426\,752}t - \frac{31\,004\,145\,126\,331}{858\,857\,257\,812\,492\,288}\right)\Delta_{3,20,2}(2z) \\
& + \left(\frac{55\,637\,820\,043}{16\,040\,668\,999\,671\,792}t + \frac{3682\,203\,369\,617}{157\,261\,460\,781\,096}\right)\Delta_{3,20,2}(4z) \\
& + \left(\frac{1234\,055\,039\,795}{25\,029\,554\,370\,535\,489\,536} - \frac{55\,637\,820\,043}{8409\,930\,268\,499\,924\,484\,096}t\right)\Delta_{3,20,3}(z) \\
& + \left(\frac{42\,864\,497\,534\,495}{4171\,592\,395\,089\,248\,256} - \frac{11\,574\,294\,162\,707}{175\,206\,880\,593\,748\,426\,752}t\right)\Delta_{3,20,3}(2z) \\
& + \left(\frac{1234\,055\,039\,795}{47\,740\,086\,308\,547} - \frac{55\,637\,820\,043}{16\,040\,668\,999\,671\,792}t\right)\Delta_{3,20,3}(4z) \\
& - \frac{405}{5015\,305\,453\,568}\Delta_{4,20}(z) - \frac{31\,381\,063\,983}{5015\,305\,453\,568}\Delta_{4,20}(3z) \\
& - \frac{15\,052\,331}{273\,557\,540\,044\,800}\Delta_{6,20,1}(z) + \frac{15\,052\,331}{534\,292\,070\,400}\Delta_{6,20,1}(2z) \\
& - \frac{3167\,893}{93\,588\,478\,230\,528}\Delta_{6,20,2}(z) - \frac{3167\,893}{182\,789\,996\,544}\Delta_{6,20,2}(2z) \\
& + \frac{3637\,943}{89\,480\,528\,658\,432}\Delta_{6,20,3}(z) + \frac{3637\,943}{174\,766\,657\,536}\Delta_{6,20,3}(2z) \\
& + \left(\frac{10\,889\,135}{3174\,990\,359\,358\,143\,987\,712}s + \frac{5003\,289\,286\,189}{58\,796\,117\,765\,891\,555\,328}\right)\Delta_{12,20,1}(z) \\
& + \left(\frac{4344\,474\,840\,419}{58\,796\,117\,765\,891\,555\,328} - \frac{10\,889\,135}{3174\,990\,359\,358\,143\,987\,712}s\right)\Delta_{12,20,2}(z) \\
& + \left(\frac{25\,355\,693}{18\,590\,948\,187\,861\,889\,843\,200}r - \frac{5500\,078\,490\,881}{68\,855\,363\,658\,747\,740\,160}\right)\Delta_{12,20,3}(z) \\
& - \left(\frac{25\,355\,693}{18\,590\,948\,187\,861\,889\,843\,200}r + \frac{5441\,405\,417\,279}{68\,855\,363\,658\,747\,740\,160}\right)\Delta_{12,20,4}(z),
\end{aligned}$$

$$\begin{aligned}
f_6 = & -\frac{233\,774\,843}{6175\,693\,327\,564\,800}\Delta_{1,20}(z) + \frac{4441\,722\,017}{257\,320\,555\,315\,200}\Delta_{1,20}(2z) \\
& + \frac{29\,447\,309\,043}{8471\,458\,611\,200}\Delta_{1,20}(3z) - \frac{233\,774\,843}{11\,779\,200\,225}\Delta_{1,20}(4z) \\
& - \frac{1678\,496\,615\,451}{1058\,932\,326\,400}\Delta_{1,20}(6z) + \frac{29\,447\,309\,043}{16\,158\,025}\Delta_{1,20}(12z) \\
& + \frac{16\,415\,873}{554\,886\,601\,113\,600}\Delta_{2,20,1}(z) - \frac{16\,415\,873}{1083\,762\,892\,800}\Delta_{2,20,1}(2z) \\
& + \frac{1973\,328\,867}{761\,161\,318\,400}\Delta_{2,20,1}(3z) - \frac{1973\,328\,867}{1486\,643\,200}\Delta_{2,20,1}(6z) \\
& + \frac{100\,349\,357}{16\,392\,787\,423\,395\,840}\Delta_{2,20,2}(z) + \frac{100\,349\,357}{32\,017\,162\,936\,320}\Delta_{2,20,2}(2z) \\
& + \frac{3948\,804\,963\,927}{1821\,420\,824\,821\,760}\Delta_{2,20,2}(3z) + \frac{3948\,804\,963\,927}{3557\,462\,548\,480}\Delta_{2,20,2}(6z) \\
& - \frac{949\,721}{24\,594\,953\,011\,200}\Delta_{3,20,1}(z) - \frac{21\,843\,583}{512\,394\,854\,400}\Delta_{3,20,1}(2z) - \frac{949\,721}{46\,911\,150}\Delta_{3,20,1}(4z) \\
& + (\frac{141\,723\,062\,147}{23\,652\,928\,880\,156\,037\,611\,520}t + \frac{1838\,021\,402\,837}{46\,378\,291\,921\,874\,583\,552})\Delta_{3,20,2}(z) \\
& + (\frac{28\,896\,854\,728\,069}{492\,769\,351\,669\,917\,450\,240}t - \frac{15\,455\,004\,328\,471}{483\,107\,207\,519\,526\,912})\Delta_{3,20,2}(2z) \\
& + (\frac{141\,723\,062\,147}{45\,114\,381\,561\,576\,915}t + \frac{3676\,042\,805\,674}{176\,919\,143\,378\,733})\Delta_{3,20,2}(4z) \\
& + (\frac{3085\,953\,884\,149}{70\,395\,621\,667\,131\,064\,320} - \frac{141\,723\,062\,147}{23\,652\,928\,880\,156\,037\,611\,520}t)\Delta_{3,20,3}(z) \\
& + (\frac{107\,654\,466\,763\,429}{11\,732\,603\,611\,188\,510\,720} - \frac{28\,896\,854\,728\,069}{492\,769\,351\,669\,917\,450\,240}t)\Delta_{3,20,3}(2z) \\
& + (\frac{49\,375\,262\,146\,384}{2148\,303\,883\,884\,615} - \frac{141\,723\,062\,147}{45\,114\,381\,561\,576\,915}t)\Delta_{3,20,3}(4z) \\
& - \frac{57}{626\,913\,181\,696}\Delta_{4,20}(z) - \frac{3486\,785\,211}{626\,913\,181\,696}\Delta_{4,20}(3z) \\
& - \frac{10\,005\,859}{205\,168\,155\,033\,600}\Delta_{6,20,1}(z) + \frac{10\,005\,859}{400\,719\,052\,800}\Delta_{6,20,1}(2z) \\
& - \frac{6354\,907}{210\,574\,076\,018\,688}\Delta_{6,20,2}(z) - \frac{6354\,907}{411\,277\,492\,224}\Delta_{6,20,2}(2z) \\
& + \frac{7296\,725}{201\,331\,189\,481\,472}\Delta_{6,20,3}(z) + \frac{7296\,725}{393\,224\,979\,456}\Delta_{6,20,3}(2z) \\
& + (\frac{87\,111\,233}{28\,574\,913\,234\,223\,295\,889\,408}s + \frac{40\,028\,789\,498\,923}{529\,165\,059\,893\,023\,997\,952})\Delta_{12,20,1}(z) \\
& + (\frac{34\,758\,385\,679\,957}{529\,165\,059\,893\,023\,997\,952} - \frac{87\,111\,233}{28\,574\,913\,234\,223\,295\,889\,408}s)\Delta_{12,20,2}(z) \\
& + (\frac{25\,365\,823}{20\,914\,816\,711\,344\,626\,073\,600}r - \frac{5499\,719\,357\,531}{77\,462\,284\,116\,091\,207\,680})\Delta_{12,20,3}(z) \\
& - (\frac{25\,365\,823}{20\,914\,816\,711\,344\,626\,073\,600}r + \frac{5441\,022\,843\,109}{77\,462\,284\,116\,091\,207\,680})\Delta_{12,20,4}(z),
\end{aligned}$$

$$\begin{aligned}
f_7 = & -\frac{204\,062\,387\,361\,290\,792\,002\,069}{39\,752\,072\,759\,602\,199\,081\,779\,200}\Delta_{1,20}(z) + \frac{3877\,185\,359\,864\,525\,048\,039\,311}{1656\,336\,364\,983\,424\,961\,740\,800}\Delta_{1,20}(2z) \\
& + \frac{1446\,939\,939\,496\,884\,615\,716\,206\,001}{2944\,597\,982\,192\,755\,487\,539\,200}\Delta_{1,20}(3z) - \frac{204\,062\,387\,361\,290\,792\,002\,069}{75\,821\,061\,629\,490\,278\,400}\Delta_{1,20}(4z) \\
& - \frac{27\,491\,858\,850\,440\,807\,698\,607\,914\,019}{122\,691\,582\,591\,364\,811\,980\,800}\Delta_{1,20}(6z) \\
& + \frac{1446\,939\,939\,496\,884\,615\,716\,206\,001}{5616\,374\,935\,517\,798\,400}\Delta_{1,20}(12z) \\
& + \frac{365\,655\,996\,114\,267\,613}{79\,264\,441\,195\,875\,532\,800}\Delta_{2,20,1}(z) - \frac{365\,655\,996\,114\,267\,613}{154\,813\,361\,710\,694\,400}\Delta_{2,20,1}(2z) \\
& + \frac{2299\,904\,514\,489\,200\,588\,383}{5871\,440\,088\,583\,372\,800}\Delta_{2,20,1}(3z) - \frac{2299\,904\,514\,489\,200\,588\,383}{11\,467\,656\,423\,014\,400}\Delta_{2,20,1}(6z) \\
& + \frac{18\,341\,843\,825\,699\,818\,561}{16\,724\,105\,328\,567\,578\,001\,408}\Delta_{2,20,2}(z) + \frac{18\,341\,843\,825\,699\,818\,561}{32\,664\,268\,219\,858\,550\,784}\Delta_{2,20,2}(2z) \\
& + \frac{3427\,992\,463\,818\,262\,313\,635\,171}{11\,149\,403\,552\,378\,385\,334\,272}\Delta_{2,20,2}(3z) + \frac{3427\,992\,463\,818\,262\,313\,635\,171}{21\,776\,178\,813\,239\,033\,856}\Delta_{2,20,2}(6z) \\
& - \frac{118\,096\,447\,264\,054\,099}{22\,532\,387\,458\,410\,086\,400}\Delta_{3,20,1}(z) - \frac{2716\,218\,287\,073\,244\,277}{469\,424\,738\,716\,876\,800}\Delta_{3,20,1}(2z) \\
& - \frac{118\,096\,447\,264\,054\,099}{42\,977\,118\,412\,800}\Delta_{3,20,1}(4z) + \left(\frac{284\,172\,590\,730\,253\,606\,528\,103}{366\,137\,953\,582\,635\,816\,310\,605\,348\,864}t\right. \\
& + \frac{673\,909\,646\,723\,562\,256\,475\,365}{112\,174\,618\,131\,934\,992\,742\,219\,776})\Delta_{3,20,2}(z) + \left(\frac{541\,175\,451\,632\,868\,281\,753\,934\,733}{61\,022\,992\,263\,772\,636\,051\,767\,558\,144}t\right. \\
& - \frac{183\,117\,161\,254\,834\,345\,622\,530\,715}{37\,391\,539\,377\,311\,664\,247\,406\,592})\Delta_{3,20,2}(2z) + \left(\frac{284\,172\,590\,730\,253\,606\,528\,103}{698\,352\,725\,186\,607\,010\,480\,128}t\right. \\
& + \frac{673\,909\,646\,723\,562\,256\,475\,365}{213\,956\,104\,530\,210\,481\,152})\Delta_{3,20,2}(4z) + \left(\frac{57\,122\,148\,704\,722\,505\,640\,912\,373}{8717\,570\,323\,396\,090\,864\,538\,222\,592}\right. \\
& - \frac{284\,172\,590\,730\,253\,606\,528\,103}{366\,137\,953\,582\,635\,816\,310\,605\,348\,864}t)\Delta_{3,20,3}(z) + \left(\frac{1929\,951\,425\,675\,806\,707\,983\,144\,183}{1452\,928\,387\,232\,681\,810\,756\,370\,432}\right. \\
& - \frac{541\,175\,451\,632\,868\,281\,753\,934\,733}{61\,022\,992\,263\,772\,636\,051\,767\,558\,144}t)\Delta_{3,20,3}(2z) + \left(\frac{57\,122\,148\,704\,722\,505\,640\,912\,373}{16\,627\,445\,837\,776\,357\,392\,384}\right. \\
& - \frac{284\,172\,590\,730\,253\,606\,528\,103}{698\,352\,725\,186\,607\,010\,480\,128}t)\Delta_{3,20,3}(4z) - \frac{2990\,619\,063\,391\,103}{5615\,858\,189\,800\,046\,592}\Delta_{4,20}(z) \\
& + \frac{499\,227\,471\,063\,991\,447\,145}{1247\,968\,486\,622\,232\,576}\Delta_{4,20}(3z) - \frac{575\,559\,898\,329\,880\,787}{83\,196\,507\,538\,744\,934\,400}\Delta_{6,20,1}(z) \\
& + \frac{575\,559\,898\,329\,880\,787}{162\,493\,178\,786\,611\,200}\Delta_{6,20,1}(2z) - \frac{10\,512\,672\,092\,489\,587}{2587\,534\,246\,117\,638\,144}\Delta_{6,20,2}(z) \\
& - \frac{10\,512\,672\,092\,489\,587}{5053\,777\,824\,448\,512}\Delta_{6,20,2}(2z) + \frac{328\,356\,421\,102\,633\,409}{61\,848\,941\,408\,708\,198\,400}\Delta_{6,20,3}(z) \\
& + \frac{328\,356\,421\,102\,633\,409}{120\,798\,713\,688\,883\,200}\Delta_{6,20,3}(2z) - \left(\frac{13\,559\,871\,437\,609\,695\,481}{56\,882\,822\,479\,186\,009\,302\,025\,371\,648}s\right. \\
& + \frac{6215\,211\,347\,489\,410\,465\,778\,963}{1053\,385\,601\,466\,407\,579\,667\,136\,512})\Delta_{12,20,1}(z) + \left(\frac{13\,559\,871\,437\,609\,695\,481}{56\,882\,822\,479\,186\,009\,302\,025\,371\,648}s\right.
\end{aligned}$$

$$\begin{aligned}
& - \frac{1798\,270\,668\,590\,382\,889\,929\,167}{351\,128\,533\,822\,135\,859\,889\,045\,504} \Delta_{12,20,2}(z) + \left(\frac{578\,586\,654\,381\,632\,956\,727\,051}{123\,360\,608\,519\,521\,327\,292\,350\,464} \right. \\
& \quad \left. - \frac{2658\,307\,922\,204\,691\,119}{33\,307\,364\,300\,270\,758\,368\,934\,625\,280} r \right) \Delta_{12,20,3}(z) + \left(\frac{2658\,307\,922\,204\,691\,119}{33\,307\,364\,300\,270\,758\,368\,934\,625\,280} r \right. \\
& \quad \left. + \frac{190\,811\,776\,616\,550\,433\,825\,895}{41\,120\,202\,839\,840\,442\,430\,783\,488} \right) \Delta_{12,20,4}(z) - \frac{1774\,433\,033}{34\,342\,605\,230\,323\,671\,194\,664\,960\,000} E_{20}(z) \\
& \quad + \frac{310\,105\,240\,146\,179}{11\,447\,535\,076\,774\,557\,064\,888\,320\,000} E_{20}(2z) + \frac{12\,410\,579\,361\,432\,453\,991}{68\,685\,210\,460\,647\,342\,389\,329\,920\,000} E_{20}(3z) \\
& \quad - \frac{1774\,433\,033}{65\,503\,321\,133\,277\,265\,920\,000} E_{20}(4z) - \frac{2168\,910\,080\,942\,019\,956\,829\,133}{22\,895\,070\,153\,549\,114\,129\,776\,640\,000} E_{20}(6z) \\
& \quad + \frac{12\,410\,579\,361\,432\,453\,991}{131\,006\,642\,266\,554\,531\,840\,000} E_{20}(12z),
\end{aligned}$$

$$\begin{aligned}
f_8 = & - \frac{204\,062\,387\,361\,290\,792\,002\,069}{39\,752\,072\,759\,602\,199\,081\,779\,200} \Delta_{1,20}(z) + \frac{3877\,185\,359\,864\,525\,048\,039\,311}{1656\,336\,364\,983\,424\,961\,740\,800} \Delta_{1,20}(2z) \\
& + \frac{1446\,939\,939\,496\,884\,615\,716\,206\,001}{2944\,597\,982\,192\,755\,487\,539\,200} \Delta_{1,20}(3z) - \frac{204\,062\,387\,361\,290\,792\,002\,069}{75\,821\,061\,629\,490\,278\,400} \Delta_{1,20}(4z) \\
& - \frac{27\,491\,858\,850\,440\,807\,698\,607\,914\,019}{122\,691\,582\,591\,364\,811\,980\,800} \Delta_{1,20}(6z) + \frac{1446\,939\,939\,496\,884\,615\,716\,206\,001}{5616\,374\,935\,517\,798\,400} \Delta_{1,20}(12z) \\
& + \frac{365\,655\,996\,114\,267\,613}{79\,264\,441\,195\,875\,532\,800} \Delta_{2,20,1}(z) - \frac{365\,655\,996\,114\,267\,613}{154\,813\,361\,710\,694\,400} \Delta_{2,20,1}(2z) \\
& + \frac{2299\,904\,514\,489\,200\,588\,383}{5871\,440\,088\,583\,372\,800} \Delta_{2,20,1}(3z) - \frac{2299\,904\,514\,489\,200\,588\,383}{11\,467\,656\,423\,014\,400} \Delta_{2,20,1}(6z) \\
& + \frac{18\,341\,843\,825\,699\,818\,561}{16\,724\,105\,328\,567\,578\,001\,408} \Delta_{2,20,2}(z) + \frac{18\,341\,843\,825\,699\,818\,561}{32\,664\,268\,219\,858\,550\,784} \Delta_{2,20,2}(2z) \\
& + \frac{3427\,992\,463\,818\,262\,313\,635\,171}{11\,149\,403\,552\,378\,385\,334\,272} \Delta_{2,20,2}(3z) + \frac{3427\,992\,463\,818\,262\,313\,635\,171}{21\,776\,178\,813\,239\,033\,856} \Delta_{2,20,2}(6z) \\
& - \frac{118\,096\,447\,264\,054\,099}{22\,532\,387\,458\,410\,086\,400} + \Delta_{3,20,1}(z) - \frac{2716\,218\,287\,073\,244\,277}{469\,424\,738\,716\,876\,800} \Delta_{3,20,1}(2z) \\
& - \frac{118\,096\,447\,264\,054\,099}{42\,977\,118\,412\,800} \Delta_{3,20,1}(4z) + \left(\frac{284\,172\,590\,730\,253\,606\,528\,103}{366\,137\,953\,582\,635\,816\,310\,605\,348\,864} t \right. \\
& \quad \left. + \frac{673\,909\,646\,723\,562\,256\,475\,365}{112\,174\,618\,131\,934\,992\,742\,219\,776} \right) \Delta_{3,20,2}(z) + \left(\frac{541\,175\,451\,632\,868\,281\,753\,934\,733}{61\,022\,992\,263\,772\,636\,051\,767\,558\,144} t \right. \\
& \quad \left. - \frac{183\,117\,161\,254\,834\,345\,622\,530\,715}{37\,391\,539\,377\,311\,664\,247\,406\,592} \right) \Delta_{3,20,2}(2z) + \left(\frac{284\,172\,590\,730\,253\,606\,528\,103}{698\,352\,725\,186\,607\,010\,480\,128} t \right. \\
& \quad \left. + \frac{673\,909\,646\,723\,562\,256\,475\,365}{213\,956\,104\,530\,210\,481\,152} \right) \Delta_{3,20,2}(4z) + \left(\frac{57\,122\,148\,704\,722\,505\,640\,912\,373}{8717\,570\,323\,396\,090\,864\,538\,222\,592} \right. \\
& \quad \left. - \frac{284\,172\,590\,730\,253\,606\,528\,103}{366\,137\,953\,582\,635\,816\,310\,605\,348\,864} t \right) \Delta_{3,20,3}(z) + \left(\frac{1929\,951\,425\,675\,806\,707\,983\,144\,183}{1452\,928\,387\,232\,681\,810\,756\,370\,432} \right. \\
& \quad \left. - \frac{541\,175\,451\,632\,868\,281\,753\,934\,733}{61\,022\,992\,263\,772\,636\,051\,767\,558\,144} t \right) \Delta_{3,20,3}(2z) + \left(\frac{57\,122\,148\,704\,722\,505\,640\,912\,373}{16\,627\,445\,837\,776\,357\,392\,384} \right. \\
& \quad \left. - \frac{284\,172\,590\,730\,253\,606\,528\,103}{698\,352\,725\,186\,607\,010\,480\,128} t \right) \Delta_{3,20,3}(4z) - \frac{2990\,619\,063\,391\,103}{5615\,858\,189\,800\,046\,592} \Delta_{4,20}(z) \\
& \quad + \frac{499\,227\,471\,063\,991\,447\,145}{1247\,968\,486\,622\,232\,576} \Delta_{4,20}(3z) - \frac{575\,559\,898\,329\,880\,787}{83\,196\,507\,538\,744\,934\,400} \Delta_{6,20,1}(z)
\end{aligned}$$

$$\begin{aligned}
& + \frac{575\,559\,898\,329\,880\,787}{162\,493\,178\,786\,611\,200} \Delta_{6,20,1}(2z) - \frac{10\,512\,672\,092\,489\,587}{2587\,534\,246\,117\,638\,144} \Delta_{6,20,2}(z) \\
& - \frac{10\,512\,672\,092\,489\,587}{5053\,777\,824\,448\,512} \Delta_{6,20,2}(2z) + \frac{328\,356\,421\,102\,633\,409}{61\,848\,941\,408\,708\,198\,400} \Delta_{6,20,3}(z) \\
& + \frac{328\,356\,421\,102\,633\,409}{120\,798\,713\,688\,883\,200} \Delta_{6,20,3}(2z) - \left(\frac{13\,559\,871\,437\,609\,695\,481}{56\,882\,822\,479\,186\,009\,302\,025\,371\,648} s \right. \\
& + \frac{6215\,211\,347\,489\,410\,465\,778\,963}{1053\,385\,601\,466\,407\,579\,667\,136\,512} \Delta_{12,20,1}(z) + \left(\frac{13\,559\,871\,437\,609\,695\,481}{56\,882\,822\,479\,186\,009\,302\,025\,371\,648} s \right. \\
& - \frac{1798\,270\,668\,590\,382\,889\,929\,167}{351\,128\,533\,822\,135\,859\,889\,045\,504} \Delta_{12,20,2}(z) + \left(\frac{578\,586\,654\,381\,632\,956\,727\,051}{123\,360\,608\,519\,521\,327\,292\,350\,464} \right. \\
& - \frac{2658\,307\,922\,204\,691\,119}{33\,307\,364\,300\,270\,758\,368\,934\,625\,280} r \Delta_{12,20,3}(z) + \left(\frac{2658\,307\,922\,204\,691\,119}{33\,307\,364\,300\,270\,758\,368\,934\,625\,280} r \right. \\
& + \frac{190\,811\,776\,616\,550\,433\,825\,895}{41\,120\,202\,839\,840\,442\,430\,783\,488} \Delta_{12,20,4}(z),
\end{aligned}$$

$$\begin{aligned}
f_9 = & - \frac{14\,756\,756\,462\,068\,604\,167\,312\,796\,243}{1908\,099\,492\,460\,905\,555\,925\,401\,600} \Delta_{1,20}(z) + \frac{280\,378\,372\,779\,303\,479\,178\,943\,128\,617}{79\,504\,145\,519\,204\,398\,163\,558\,400} \Delta_{1,20}(2z) \\
& + \frac{52\,375\,298\,305\,303\,130\,405\,807\,625\,614\,261}{70\,670\,351\,572\,626\,131\,700\,940\,800} \Delta_{1,20}(3z) \\
& - \frac{14\,756\,756\,462\,068\,604\,167\,312\,796\,243}{3639\,410\,958\,215\,533\,363\,200} \Delta_{1,20}(4z) \\
& - \frac{995\,130\,667\,800\,759\,477\,710\,344\,886\,670\,959}{2944\,597\,982\,192\,755\,487\,539\,200} \Delta_{1,20}(6z) \\
& + \frac{52\,375\,298\,305\,303\,130\,405\,807\,625\,614\,261}{134\,792\,998\,452\,427\,161\,600} \Delta_{1,20}(12z) \\
& + \frac{3789\,825\,271\,367\,490\,007\,013}{543\,527\,596\,771\,717\,939\,200} \Delta_{2,20,1}(z) - \frac{3789\,825\,271\,367\,490\,007\,013}{1061\,577\,337\,444\,761\,600} \Delta_{2,20,1}(2z) \\
& + \frac{11\,909\,358\,423\,623\,450\,295\,448\,429}{20\,130\,651\,732\,285\,849\,600} \Delta_{2,20,1}(3z) \\
& - \frac{11\,909\,358\,423\,623\,450\,295\,448\,429}{39\,317\,679\,164\,620\,800} \Delta_{2,20,1}(6z) \\
& + \frac{1335\,937\,730\,331\,212\,515\,493\,695}{802\,757\,055\,771\,243\,744\,067\,584} \Delta_{2,20,2}(z) + \frac{1335\,937\,730\,331\,212\,515\,493\,695}{1567\,884\,874\,553\,210\,437\,632} \Delta_{2,20,2}(2z) \\
& + \frac{124\,196\,236\,279\,018\,942\,028\,536\,755\,215}{267\,585\,685\,257\,081\,248\,022\,528} \Delta_{2,20,2}(3z) \\
& + \frac{124\,196\,236\,279\,018\,942\,028\,536\,755\,215}{522\,628\,291\,517\,736\,812\,544} \Delta_{2,20,2}(6z) \\
& - \frac{173\,048\,494\,669\,895\,185\,424\,687}{21\,901\,480\,609\,574\,603\,980\,800} \Delta_{3,20,1}(z) - \frac{3980\,115\,377\,407\,589\,264\,767\,801}{456\,280\,846\,032\,804\,249\,600} \Delta_{3,20,1}(2z) \\
& - \frac{173\,048\,494\,669\,895\,185\,424\,687}{41\,773\,759\,097\,241\,600} \Delta_{3,20,1}(4z) + \left(\frac{9939\,263\,308\,971\,181\,046\,280\,151\,241}{8473\,478\,354\,341\,000\,320\,331\,152\,359\,424} t \right. \\
& + \frac{23\,563\,108\,368\,625\,741\,593\,427\,003\,163}{2596\,041\,162\,481\,924\,117\,748\,514\,816} \Delta_{3,20,2}(z) \\
& + \left(\frac{18\,922\,171\,328\,961\,257\,247\,909\,282\,081\,155}{1412\,246\,392\,390\,166\,720\,055\,192\,059\,904} t \right.
\end{aligned}$$

$$\begin{aligned}
& - \frac{6402\,533\,609\,050\,485\,478\,681\,625\,792\,213}{865\,347\,054\,160\,641\,372\,582\,838\,272})\Delta_{3,20,2}(2z) \\
& + (\frac{9939\,263\,308\,971\,181\,046\,280\,151\,241}{16\,161\,877\,354\,318\,619\,385\,397\,248}t \\
& + \frac{23\,563\,108\,368\,625\,741\,593\,427\,003\,163}{4951\,555\,561\,984\,871\,135\,232})\Delta_{3,20,2}(4z) \\
& + (\frac{13\,981\,224\,759\,682\,031\,609\,239\,067\,415\,869}{1412\,246\,392\,390\,166\,720\,055\,192\,059\,904} \\
& - \frac{9939\,263\,308\,971\,181\,046\,280\,151\,241}{8473\,478\,354\,341\,000\,320\,331\,152\,359\,424}t)\Delta_{3,20,3}(z) \\
& + (\frac{472\,404\,903\,826\,735\,047\,803\,983\,788\,013\,199}{235\,374\,398\,731\,694\,453\,342\,532\,009\,984} \\
& - \frac{18\,922\,171\,328\,961\,257\,247\,909\,282\,081\,155}{1412\,246\,392\,390\,166\,720\,055\,192\,059\,904}t)\Delta_{3,20,3}(2z) \\
& + (\frac{13\,981\,224\,759\,682\,031\,609\,239\,067\,415\,869}{2693\,646\,225\,719\,769\,897\,566\,208} \\
& - \frac{9939\,263\,308\,971\,181\,046\,280\,151\,241}{16\,161\,877\,354\,318\,619\,385\,397\,248}t)\Delta_{3,20,3}(4z) - \frac{222\,608\,855\,468\,884\,520\,809}{269\,561\,193\,110\,402\,236\,416}\Delta_{4,20}(z) \\
& + \frac{18\,083\,138\,851\,502\,401\,050\,002\,957}{29\,951\,243\,678\,933\,581\,824}\Delta_{4,20}(3z) - \frac{10\,413\,009\,310\,612\,957\,638\,031}{998\,358\,090\,464\,939\,212\,800}\Delta_{6,20,1}(z) \\
& + \frac{10\,413\,009\,310\,612\,957\,638\,031}{1949\,918\,145\,439\,334\,400}\Delta_{6,20,1}(2z) - \frac{1711\,577\,684\,675\,603\,527\,463}{279\,453\,698\,580\,704\,919\,552}\Delta_{6,20,2}(z) \\
& - \frac{1711\,577\,684\,675\,603\,527\,463}{545\,808\,005\,040\,439\,296}\Delta_{6,20,2}(2z) + \frac{26\,790\,204\,096\,060\,226\,081\,571}{3339\,842\,836\,070\,242\,713\,600}\Delta_{6,20,3}(z) \\
& + \frac{26\,790\,204\,096\,060\,226\,081\,571}{6523\,130\,539\,199\,692\,800}\Delta_{6,20,3}(2z) - (\frac{27\,342\,992\,670\,738\,342\,391\,237}{75\,843\,763\,305\,581\,345\,736\,033\,828\,864}s \\
& + \frac{12\,532\,560\,243\,552\,739\,552\,278\,211\,159}{1404\,514\,135\,288\,543\,439\,556\,182\,016})\Delta_{12,20,1}(z) \\
& + (\frac{27\,342\,992\,670\,738\,342\,391\,237}{75\,843\,763\,305\,581\,345\,736\,033\,828\,864}s \\
& - \frac{3626\,084\,833\,662\,576\,120\,307\,863\,395}{468\,171\,378\,429\,514\,479\,852\,060\,672})\Delta_{12,20,2}(z) \\
& + (\frac{2903\,954\,995\,245\,261\,056\,051\,064\,757}{411\,202\,028\,398\,404\,424\,307\,834\,880} \\
& - \frac{13\,342\,151\,278\,619\,724\,356\,881}{111\,024\,547\,667\,569\,194\,563\,115\,417\,600}r)\Delta_{12,20,3}(z) \\
& + (\frac{13\,342\,151\,278\,619\,724\,356\,881}{111\,024\,547\,667\,569\,194\,563\,115\,417\,600}r \\
& + \frac{957\,693\,752\,395\,511\,671\,296\,414\,041}{137\,067\,342\,799\,468\,141\,435\,944\,960})\Delta_{12,20,4}(z) \\
& - \frac{44\,520\,494\,570\,533}{549\,481\,683\,685\,178\,739\,114\,639\,360\,000}E_{20}(z) \\
& + \frac{7780\,535\,192\,630\,058\,679}{183\,160\,561\,228\,392\,913\,038\,213\,120\,000}E_{20}(2z) \\
& + \frac{155\,315\,149\,984\,380\,457\,314\,433}{549\,481\,683\,685\,178\,739\,114\,639\,360\,000}E_{20}(3z)
\end{aligned}$$

$$\begin{aligned}
& -\frac{44\,520\,494\,570\,533}{1048\,053\,138\,132\,436\,254\,720\,000}E_{20}(4z) \\
& -\frac{27\,143\,341\,556\,720\,281\,861\,642\,254\,379}{183\,160\,561\,228\,392\,913\,038\,213\,120\,000}E_{20}(6z) \\
& +\frac{155\,315\,149\,984\,380\,457\,314\,433}{1048\,053\,138\,132\,436\,254\,720\,000}E_{20}(12z),
\end{aligned}$$

$$\begin{aligned}
f_{10} = & -\frac{2879\,777}{96\,495\,208\,243\,200}\Delta_{1,20}(z) + \frac{54\,715\,763}{4020\,633\,676\,800}\Delta_{1,20}(2z) \\
& +\frac{544\,414\,993}{198\,549\,811\,200}\Delta_{1,20}(3z) - \frac{184\,305\,728}{11\,779\,200\,225}\Delta_{1,20}(4z) - \frac{10\,343\,884\,867}{8272\,908\,800}\Delta_{1,20}(6z) \\
& +\frac{69\,685\,119\,104}{48\,474\,075}\Delta_{1,20}(12z) + \frac{100\,771}{4335\,051\,571\,200}\Delta_{2,20,1}(z) - \frac{100\,771}{8466\,897\,600}\Delta_{2,20,1}(2z) \\
& +\frac{18\,161\,011}{8919\,859\,200}\Delta_{2,20,1}(3z) - \frac{18\,161\,011}{17\,421\,600}\Delta_{2,20,1}(6z) + \frac{124\,943}{25\,613\,730\,349\,056}\Delta_{2,20,2}(z) \\
& +\frac{124\,943}{50\,026\,817\,088}\Delta_{2,20,2}(2z) + \frac{2451\,357\,459}{1422\,985\,019\,392}\Delta_{2,20,2}(3z) + \frac{2451\,357\,459}{2779\,267\,616}\Delta_{2,20,2}(6z) \\
& -\frac{211\,927}{6917\,330\,534\,400}\Delta_{3,20,1}(z) - \frac{4874\,321}{144\,111\,052\,800}\Delta_{3,20,1}(2z) - \frac{3390\,832}{211\,100\,175}\Delta_{3,20,1}(4z) \\
& +(\frac{52\,265\,101\,297}{10\,643\,817\,996\,070\,216\,925\,184}t + \frac{3256\,453\,559\,963}{104\,351\,156\,824\,217\,812\,992})\Delta_{3,20,2}(z) \\
& +(\frac{5123\,112\,928\,669}{110\,873\,104\,125\,731\,426\,304}t - \frac{27\,306\,318\,616\,609}{1086\,991\,216\,918\,935\,552})\Delta_{3,20,2}(2z) \\
& +(\frac{209\,060\,405\,188}{81\,205\,886\,810\,838\,447}t + \frac{26\,051\,628\,479\,704}{1592\,272\,290\,408\,597})\Delta_{3,20,2}(4z) \\
& +(\frac{548\,881\,494\,385}{15\,839\,014\,875\,104\,489\,472} - \frac{52\,265\,101\,297}{10\,643\,817\,996\,070\,216\,925\,184}t)\Delta_{3,20,3}(z) \\
& +(\frac{1207\,114\,251\,535}{164\,989\,738\,282\,338\,432} - \frac{5123\,112\,928\,669}{110\,873\,104\,125\,731\,426\,304}t)\Delta_{3,20,3}(2z) \\
& +(\frac{70\,256\,831\,281\,280}{3866\,946\,990\,992\,307} - \frac{209\,060\,405\,188}{81\,205\,886\,810\,838\,447}t)\Delta_{3,20,3}(4z) \\
& -\frac{5}{44\,079\,833\,088}\Delta_{4,20}(z) - \frac{21\,523\,371}{4897\,759\,232}\Delta_{4,20}(3z) \\
& -\frac{491\,269}{12\,823\,009\,689\,600}\Delta_{6,20,1}(z) + \frac{491\,269}{25\,044\,940\,800}\Delta_{6,20,1}(2z) \\
& -\frac{2841\,589}{118\,447\,917\,760\,512}\Delta_{6,20,2}(z) - \frac{2841\,589}{231\,343\,589\,376}\Delta_{6,20,2}(2z) \\
& +\frac{6522\,793}{226\,497\,588\,166\,656}\Delta_{6,20,3}(z) + \frac{6522\,793}{442\,378\,101\,888}\Delta_{6,20,3}(2z) \\
& +(\frac{19\,357\,075}{8036\,694\,347\,125\,301\,968\,896}s + \frac{8896\,803\,779\,761}{148\,827\,673\,094\,912\,999\,424})\Delta_{12,20,1}(z) \\
& +(\frac{2575\,220\,676\,037}{49\,609\,224\,364\,970\,999\,808} - \frac{19\,357\,075}{8036\,694\,347\,125\,301\,968\,896}s)\Delta_{12,20,2}(z) \\
& +(\frac{11\,285\,473}{11\,764\,584\,400\,131\,352\,166\,400}r - \frac{2443\,880\,071\,141}{43\,572\,534\,815\,301\,304\,320})\Delta_{12,20,3}(z)
\end{aligned}$$

$$-(\frac{11\,285\,473}{11\,764\,584\,400\,131\,352\,166\,400}r + \frac{805\,921\,828\,873}{14\,524\,178\,271\,767\,101\,440})\Delta_{12,20,4}(z),$$

$$\begin{aligned} f_{11} = & -\frac{534\,560\,633}{702\,656\,663\,047\,372\,800}\Delta_{1,20}(z) + \frac{10\,156\,652\,027}{29\,277\,360\,960\,307\,200}\Delta_{1,20}(2z) \\ & + \frac{607\,100\,303\,637}{8674\,773\,617\,868\,800}\Delta_{1,20}(3z) - \frac{534\,560\,633}{1340\,211\,225\,600}\Delta_{1,20}(4z) \\ & - \frac{34\,604\,717\,307\,309}{1084\,346\,702\,233\,600}\Delta_{1,20}(6z) + \frac{607\,100\,303\,637}{16\,545\,817\,600}\Delta_{1,20}(12z) \\ & + \frac{9796\,057}{15\,783\,441\,098\,342\,400}\Delta_{2,20,1}(z) - \frac{9796\,057}{30\,827\,033\,395\,200}\Delta_{2,20,1}(2z) \\ & + \frac{10\,581\,349\,707}{194\,857\,297\,510\,400}\Delta_{2,20,1}(3z) - \frac{10\,581\,349\,707}{380\,580\,659\,200}\Delta_{2,20,1}(6z) \\ & + \frac{161\,389\,123}{1398\,851\,193\,463\,111\,680}\Delta_{2,20,2}(z) + \frac{161\,389\,123}{2732\,131\,237\,232\,640}\Delta_{2,20,2}(2z) \\ & + \frac{18\,845\,148\,877\,299}{466\,283\,731\,154\,370\,560}\Delta_{2,20,2}(3z) + \frac{18\,845\,148\,877\,299}{910\,710\,412\,410\,880}\Delta_{2,20,2}(6z) \\ & - \frac{37\,969}{51\,821\,464\,780\,800}\Delta_{3,20,1}(z) - \frac{873\,287}{1079\,613\,849\,600}\Delta_{3,20,1}(2z) \\ & - \frac{37\,969}{98\,841\,600}\Delta_{3,20,1}(4z) + (\frac{172\,604\,147}{2336\,091\,741\,249\,979\,023\,360}t \\ & + \frac{236\,888\,005\,477}{293\,156\,610\,666\,664\,034\,304})\Delta_{3,20,2}(z) + (\frac{29\,601\,924\,188\,983}{24\,918\,311\,906\,666\,442\,915\,840}t \\ & - \frac{511\,297\,461\,439}{763\,428\,673\,611\,104\,256})\Delta_{3,20,2}(4z) + (\frac{172\,604\,147}{4455\,741\,388\,797\,720}t \\ & + \frac{236\,888\,005\,477}{559\,151\,860\,555\,008})\Delta_{3,20,3}(z) + (\frac{3559\,758\,843\,809\,491\,845\,120}{172\,604\,147}t \\ & - \frac{2336\,091\,741\,249\,979\,023\,360}{29\,601\,924\,188\,983})\Delta_{3,20,2}(2z) + (\frac{593\,293\,140\,634\,915\,307\,520}{3061\,134\,331\,183}t \\ & - \frac{24\,918\,311\,906\,666\,442\,915\,840}{172\,604\,147})\Delta_{3,20,3}(2z) + (\frac{6789\,701\,163\,882\,240}{46\,747}t \\ & - \frac{4455\,741\,388\,797\,720}{8666\,447\,823\,765\,504})\Delta_{4,20}(z) \\ & - \frac{35\,303\,133\,555}{320\,979\,549\,028\,352}\Delta_{4,20}(3z) - \frac{5969\,311}{5835\,894\,187\,622\,400}\Delta_{6,20,1}(z) \\ & + \frac{5969\,311}{11\,398\,230\,835\,200}\Delta_{6,20,1}(2z) - \frac{124\,837}{221\,839\,355\,805\,696}\Delta_{6,20,2}(z) \\ & - \frac{124\,837}{433\,279\,991\,808}\Delta_{6,20,2}(2z) + \frac{23\,863}{35\,350\,332\,309\,504}\Delta_{6,20,3}(z) + \frac{23\,863}{69\,043\,617\,792}\Delta_{6,20,3}(2z) \\ & + (\frac{10\,903\,301}{180\,621\,673\,776\,818\,857\,967\,616}s + \frac{556\,340\,692\,639}{371\,649\,534\,520\,203\,411\,456})\Delta_{12,20,1}(z) \\ & + (\frac{4347\,394\,716\,649}{3344\,845\,810\,681\,830\,703\,104} - \frac{10\,903\,301}{180\,621\,673\,776\,818\,857\,967\,616}s)\Delta_{12,20,2}(z) \end{aligned}$$

$$\begin{aligned}
& + \left(\frac{790\,067}{33\,050\,574\,556\,198\,915\,276\,800} r - \frac{57\,251\,357\,653}{40\,803\,178\,464\,443\,105\,280} \right) \Delta_{12,20,3}(z) \\
& + \left(-\frac{790\,067}{33\,050\,574\,556\,198\,915\,276\,800} r - \frac{169\,925\,857\,921}{122\,409\,535\,393\,329\,315\,840} \right) \Delta_{12,20,4}(z),
\end{aligned}$$

$$\begin{aligned}
f_{12} = & \frac{2089\,082\,183\,808\,197\,600\,557\,733}{636\,033\,164\,153\,635\,185\,308\,467\,200} \Delta_{1,20}(z) - \frac{39\,692\,561\,492\,355\,754\,410\,596\,927}{26\,501\,381\,839\,734\,799\,387\,852\,800} \Delta_{1,20}(2z) \\
& - \frac{7420\,798\,091\,326\,739\,507\,232\,430\,751}{23\,556\,783\,857\,542\,043\,900\,313\,600} \Delta_{1,20}(3z) + \frac{2089\,082\,183\,808\,197\,600\,557\,733}{1213\,136\,986\,071\,844\,454\,400} \Delta_{1,20}(4z) \\
& + \frac{140\,995\,163\,735\,208\,050\,637\,416\,184\,269}{981\,532\,660\,730\,918\,495\,846\,400} \Delta_{1,20}(6z) - \frac{7420\,798\,091\,326\,739\,507\,232\,430\,751}{44\,930\,999\,484\,142\,387\,200} \Delta_{1,20}(12z) \\
& - \frac{3764\,760\,707\,832\,667\,061}{1268\,231\,059\,134\,008\,524\,800} \Delta_{2,20,1}(z) + \frac{3764\,760\,707\,832\,667\,061}{2477\,013\,787\,371\,110\,400} \Delta_{2,20,1}(2z) \\
& - \frac{11\,823\,760\,036\,131\,061\,069\,873}{46\,971\,520\,708\,666\,982\,400} \Delta_{2,20,1}(3z) + \frac{11\,823\,760\,036\,131\,061\,069\,873}{91\,741\,251\,384\,115\,200} \Delta_{2,20,1}(6z) \\
& - \frac{8556\,550\,585\,603\,491\,084\,133}{12\,041\,355\,836\,568\,656\,161\,013\,760} \Delta_{2,20,2}(z) - \frac{8556\,550\,585\,603\,491\,084\,133}{23\,518\,273\,118\,298\,156\,564\,480} \Delta_{2,20,2}(2z) \\
& - \frac{792\,389\,534\,175\,140\,916\,029\,637\,929}{4013\,785\,278\,856\,218\,720\,337\,920} \Delta_{2,20,2}(3z) - \frac{792\,389\,534\,175\,140\,916\,029\,637\,929}{7839\,424\,372\,766\,052\,188\,160} \Delta_{2,20,2}(6z) \\
& + \frac{6684\,505\,900\,973\,538\,511}{1991\,043\,691\,779\,509\,452\,800} \Delta_{3,20,1}(z) + \frac{153\,743\,635\,722\,391\,385\,753}{41\,480\,076\,912\,073\,113\,600} \Delta_{3,20,1}(2z) \\
& + \frac{6684\,505\,900\,973\,538\,511}{3797\,614\,463\,385\,600} \Delta_{3,20,1}(4z) - \left(\frac{74\,047\,988\,104\,625\,099\,785\,357\,997}{148\,285\,871\,200\,967\,505\,605\,795\,166\,289\,920} t \right. \\
& + \frac{35\,099\,640\,560\,796\,072\,755\,225\,119}{9086\,144\,068\,686\,734\,412\,119\,801\,856} \Delta_{3,20,2}(z) + \left(\frac{9537\,073\,591\,763\,907\,366\,622\,572\,949}{3028\,714\,689\,562\,244\,804\,039\,933\,952} \right. \\
& - \frac{140\,933\,010\,405\,761\,713\,968\,456\,064\,847}{24\,714\,311\,866\,827\,917\,600\,965\,861\,048\,320} t \Delta_{3,20,2}(2z) - \left(\frac{74\,047\,988\,104\,625\,099\,785\,357\,997}{282\,832\,853\,700\,575\,839\,244\,451\,840} t \right. \\
& - \frac{35\,099\,640\,560\,796\,072\,755\,225\,119}{17\,330\,444\,466\,947\,048\,973\,312} \Delta_{3,20,2}(4z) + \left. \frac{74\,047\,988\,104\,625\,099\,785\,357\,997}{148\,285\,871\,200\,967\,505\,605\,795\,166\,289\,920} t \right. \\
& - \frac{14\,876\,376\,704\,800\,922\,081\,299\,887\,047}{3530\,615\,980\,975\,416\,800\,137\,980\,149\,760} \Delta_{3,20,3}(z) + \left(\frac{140\,933\,010\,405\,761\,713\,968\,456\,064\,847}{24\,714\,311\,866\,827\,917\,600\,965\,861\,048\,320} \right. \\
& - \frac{502\,677\,447\,525\,029\,502\,243\,237\,196\,637}{588\,435\,996\,829\,236\,133\,356\,330\,024\,960} \Delta_{3,20,3}(2z) + \left(\frac{74\,047\,988\,104\,625\,099\,785\,357\,997}{282\,832\,853\,700\,575\,839\,244\,451\,840} t \right. \\
& - \frac{14\,876\,376\,704\,800\,922\,081\,299\,887\,047}{6734\,115\,564\,299\,424\,743\,915\,520} \Delta_{3,20,3}(4z) + \frac{3576\,038\,821\,935\,047}{9983\,747\,892\,977\,860\,608} \Delta_{4,20}(z) \\
& - \frac{94\,941\,407\,931\,758\,071\,781}{369\,768\,440\,480\,661\,504} \Delta_{4,20}(3z) + \frac{134\,088\,133\,402\,607\,621}{30\,253\,275\,468\,634\,521\,600} \Delta_{6,20,1}(z) \\
& - \frac{134\,088\,133\,402\,607\,621}{59\,088\,428\,649\,676\,800} \Delta_{6,20,1}(2z) + \frac{727\,254\,823\,949\,127\,725}{279\,453\,698\,580\,704\,919\,552} \Delta_{6,20,2}(z) \\
& + \frac{727\,254\,823\,949\,127\,725}{5701\,205\,566\,948\,569\,253} \Delta_{6,20,2}(2z) - \frac{5701\,205\,566\,948\,569\,253}{1669\,921\,418\,035\,121\,356\,800} \Delta_{6,20,3}(z) \\
& - \frac{5701\,205\,566\,948\,569\,253}{3261\,565\,269\,599\,846\,400} \Delta_{6,20,3}(2z) + \left(\frac{34\,938\,128\,394\,587\,316\,325}{227\,531\,289\,916\,744\,037\,208\,101\,486\,592} s \right. \\
& + \left. \frac{16\,013\,499\,521\,053\,802\,405\,057\,335}{4213\,542\,405\,865\,630\,318\,668\,546\,048} \right) \Delta_{12,20,1}(z) + \left(\frac{4633\,224\,292\,308\,160\,197\,587\,395}{1404\,514\,135\,288\,543\,439\,556\,182\,016} \right.
\end{aligned}$$

$$\begin{aligned}
& -\frac{34\,938\,128\,394\,587\,316\,325}{227\,531\,289\,916\,744\,037\,208\,101\,486\,592}s)\Delta_{12,20,2}(z) \\
& +(\frac{8496\,116\,591\,382\,964\,277}{166\,536\,821\,501\,353\,791\,844\,673\,126\,400}r \\
& -\frac{1849\,207\,622\,782\,179\,068\,630\,249}{616\,803\,042\,597\,606\,636\,461\,752\,320})\Delta_{12,20,3}(z) \\
& -(\frac{8496\,116\,591\,382\,964\,277}{166\,536\,821\,501\,353\,791\,844\,673\,126\,400}r \\
& +\frac{609\,849\,202\,996\,572\,963\,097\,757}{205\,601\,014\,199\,202\,212\,153\,917\,440})\Delta_{12,20,4}(z) \\
& +\frac{15\,667\,364\,147}{449\,575\,923\,015\,146\,241\,093\,795\,840\,000}E_{20}(z) \\
& -\frac{2738\,075\,560\,422\,161}{149\,858\,641\,005\,048\,747\,031\,265\,280\,000}E_{20}(2z) \\
& -\frac{54\,632\,862\,510\,301\,884\,947}{449\,575\,923\,015\,146\,241\,093\,795\,840\,000}E_{20}(3z) \\
& +\frac{15\,667\,364\,147}{857\,498\,022\,108\,356\,935\,680\,000}E_{20}(4z) \\
& +\frac{9547\,802\,950\,887\,888\,318\,992\,561}{149\,858\,641\,005\,048\,747\,031\,265\,280\,000}E_{20}(6z) \\
& -\frac{54\,632\,862\,510\,301\,884\,947}{857\,498\,022\,108\,356\,935\,680\,000}E_{20}(12z),
\end{aligned}$$

$$\begin{aligned}
f_{13} = & -\frac{239\,711}{9046\,425\,772\,800}\Delta_{1,20}(z) + \frac{4554\,509}{376\,934\,407\,200}\Delta_{1,20}(2z) \\
& +\frac{2175\,957\,517}{893\,474\,150\,400}\Delta_{1,20}(3z) - \frac{490\,928\,128}{35\,337\,600\,675}\Delta_{1,20}(4z) \\
& -\frac{41\,343\,192\,823}{37\,228\,089\,600}\Delta_{1,20}(6z) + \frac{557\,045\,124\,352}{436\,266\,675}\Delta_{1,20}(12z) \\
& +\frac{133\,993}{6502\,577\,356\,800}\Delta_{2,20,1}(z) - \frac{133\,993}{12\,700\,346\,400}\Delta_{2,20,1}(2z) \\
& +\frac{144\,841\,073}{80\,278\,732\,800}\Delta_{2,20,1}(3z) - \frac{144\,841\,073}{156\,794\,400}\Delta_{2,20,1}(6z) \\
& +\frac{836\,713}{192\,102\,977\,617\,920}\Delta_{2,20,2}(z) + \frac{836\,713}{375\,201\,128\,160}\Delta_{2,20,2}(2z) \\
& +\frac{32\,776\,068\,833}{21\,344\,775\,290\,880}\Delta_{2,20,2}(3z) + \frac{32\,776\,068\,833}{41\,689\,014\,240}\Delta_{2,20,2}(6z) \\
& -\frac{70\,789}{2593\,998\,950\,400}\Delta_{3,20,1}(z) - \frac{1628\,147}{54\,041\,644\,800}\Delta_{3,20,1}(2z) \\
& -\frac{9060\,992}{633\,300\,525}\Delta_{3,20,1}(4z) + (\frac{177\,357\,034\,957}{39\,914\,317\,485\,263\,313\,469\,440}t \\
& +\frac{2167\,198\,916\,611}{78\,263\,367\,618\,163\,359\,744})\Delta_{3,20,2}(z) + (\frac{17\,053\,120\,527\,337}{415\,774\,140\,471\,492\,848\,640}t \\
& -\frac{18\,147\,172\,846\,553}{815\,243\,412\,689\,201\,664})\Delta_{3,20,2}(2z) + (\frac{2837\,712\,559\,312}{1218\,088\,302\,162\,576\,705}t
\end{aligned}$$

$$\begin{aligned}
& + \frac{69\,350\,365\,331\,552}{4776\,816\,871\,225\,791})\Delta_{3,20,2}(4z) + (\frac{1830\,023\,937\,517}{59\,396\,305\,781\,641\,835\,520} \\
& - \frac{177\,357\,034\,957}{39\,914\,317\,485\,263\,313\,469\,440}t)\Delta_{3,20,3}(z) + (\frac{4042\,012\,586\,977}{618\,711\,518\,558\,769\,120} \\
& - \frac{17\,053\,120\,527\,337}{415\,774\,140\,471\,492\,848\,640}t)\Delta_{3,20,3}(2z) + (\frac{936\,972\,256\,008\,704}{58\,004\,204\,864\,884\,605} \\
& - \frac{2837\,712\,559\,312}{1218\,088\,302\,162\,576\,705}t)\Delta_{3,20,3}(4z) - \frac{37}{297\,538\,873\,344}\Delta_{4,20}(z) \\
& - \frac{43\,046\,749}{11\,019\,958\,272}\Delta_{4,20}(3z) - \frac{653\,137}{19\,234\,514\,534\,400}\Delta_{6,20,1}(z) \\
& + \frac{653\,137}{37\,567\,411\,200}\Delta_{6,20,1}(2z) - \frac{3800\,353}{177\,671\,876\,640\,768}\Delta_{6,20,2}(z) \\
& - \frac{3800\,353}{347\,015\,384\,064}\Delta_{6,20,2}(2z) + \frac{4360\,721}{169\,873\,191\,124\,992}\Delta_{6,20,3}(z) \\
& + \frac{4360\,721}{331\,783\,576\,416}\Delta_{6,20,3}(2z) + (\frac{232\,277\,557}{108\,495\,373\,686\,191\,576\,580\,096}s \\
& + \frac{106\,773\,234\,944\,743}{2009\,173\,586\,781\,325\,492\,224})\Delta_{12,20,1}(z) + (\frac{30\,906\,659\,397\,043}{669\,724\,528\,927\,108\,497\,408} \\
& - \frac{232\,277\,557}{108\,495\,373\,686\,191\,576\,580\,096}s)\Delta_{12,20,2}(z) + (\frac{67\,757\,561}{79\,410\,944\,700\,886\,627\,123\,200}r \\
& - \frac{14\,661\,601\,520\,477}{294\,114\,610\,003\,283\,804\,160})\Delta_{12,20,3}(z) + (-\frac{67\,757\,561}{79\,410\,944\,700\,886\,627\,123\,200}r \\
& - \frac{4834\,936\,841\,441}{98\,038\,203\,334\,427\,934\,720})\Delta_{12,20,4}(z),
\end{aligned}$$

$$\begin{aligned}
f_{14} \quad : \quad & = \frac{3918\,467\,942\,333}{184\,037\,373\,887\,047\,217\,971\,200}\Delta_{1,20}(z) - \frac{74\,450\,890\,904\,327}{7668\,223\,911\,960\,300\,748\,800}\Delta_{1,20}(2z) \\
& - \frac{4449\,155\,459\,260\,157}{2272\,066\,344\,284\,533\,555\,200}\Delta_{1,20}(3z) + \frac{3918\,467\,942\,333}{351\,023\,433\,469\,862\,400}\Delta_{1,20}(4z) \\
& + \frac{84\,533\,953\,725\,942\,983}{94\,669\,431\,011\,855\,564\,800}\Delta_{1,20}(6z) - \frac{4449\,155\,459\,260\,157}{4333\,622\,635\,430\,400}\Delta_{1,20}(12z) \\
& - \frac{12\,684\,817}{733\,930\,011\,072\,921\,600}\Delta_{2,20,1}(z) + \frac{12\,684\,817}{1433\,457\,052\,876\,800}\Delta_{2,20,1}(2z) \\
& - \frac{13\,706\,031\,407}{9060\,864\,334\,233\,600}\Delta_{2,20,1}(3z) + \frac{13\,706\,031\,407}{17\,697\,000\,652\,800}\Delta_{2,20,1}(6z) \\
& - \frac{93\,567\,679}{28\,676\,449\,465\,993\,789\,440}\Delta_{2,20,2}(z) - \frac{93\,567\,679}{56\,008\,690\,363\,269\,120}\Delta_{2,20,2}(2z) \\
& - \frac{10\,915\,661\,644\,827}{9558\,816\,488\,664\,596\,480}\Delta_{2,20,2}(3z) - \frac{10\,915\,661\,644\,827}{18\,669\,563\,454\,423\,040}\Delta_{2,20,2}(6z) \\
& + \frac{785\,496\,851}{38\,023\,403\,836\,067\,020\,800}\Delta_{3,20,1}(z) + \frac{18\,066\,427\,573}{792\,154\,246\,584\,729\,600}\Delta_{3,20,1}(2z) \\
& + \frac{785\,496\,851}{72\,523\,887\,321\,600}\Delta_{3,20,1}(4z) - (\frac{143\,288\,192\,692\,181}{64\,360\,187\,153\,197\,702\,085\,848\,596\,480}t
\end{aligned}$$

$$\begin{aligned}
& + \frac{1424\,432\,151\,167\,779}{63\,098\,222\,699\,213\,433\,417\,498\,624} \Delta_{3,20,2}(z) + \left(\frac{24\,518\,779\,891\,527\,109}{1314\,546\,306\,233\,613\,196\,197\,888} \right. \\
& \quad \left. - \frac{356\,277\,050\,478\,923\,561}{10\,726\,697\,858\,866\,283\,680\,974\,766\,080} t \right) \Delta_{3,20,2}(2z) \\
& + \left(-\frac{143\,288\,192\,692\,181}{122\,757\,314\,974\,208\,263\,560\,960} t - \frac{1424\,432\,151\,167\,779}{120\,350\,308\,798\,243\,395\,648} \right) \Delta_{3,20,2}(4z) \\
& + \left(\frac{143\,288\,192\,692\,181}{64\,360\,187\,153\,197\,702\,085\,848\,596\,480} t - \frac{36\,988\,312\,034\,786\,801}{1532\,385\,408\,409\,469\,097\,282\,109\,440} \right) \Delta_{3,20,3}(z) \\
& + \left(\frac{356\,277\,050\,478\,923\,561}{10\,726\,697\,858\,866\,283\,680\,974\,766\,080} t - \frac{1191\,267\,750\,508\,169\,771}{255\,397\,568\,068\,244\,849\,547\,018\,240} \right) \Delta_{3,20,3}(2z) \\
& + \left(\frac{143\,288\,192\,692\,181}{122\,757\,314\,974\,208\,263\,560\,960} t - \frac{36\,988\,312\,034\,786\,801}{2922\,793\,213\,671\,625\,322\,880} \right) \Delta_{3,20,3}(4z) \\
& + \frac{623}{4333\,223\,911\,882\,752} \Delta_{4,20}(z) + \frac{495\,037\,811}{160\,489\,774\,514\,176} \Delta_{4,20}(3z) \\
& + \frac{2742\,551}{96\,292\,254\,095\,769\,600} \Delta_{6,20,1}(z) - \frac{2742\,551}{188\,070\,808\,780\,800} \Delta_{6,20,1}(2z) \\
& + \frac{3857\,599}{242\,581\,335\,573\,528\,576} \Delta_{6,20,2}(z) + \frac{3857\,599}{473\,791\,671\,042\,048} \Delta_{6,20,2}(2z) \\
& - \frac{27\,650\,687}{1449\,584\,564\,266\,598\,400} \Delta_{6,20,3}(z) - \frac{27\,650\,687}{2831\,219\,852\,083\,200} \Delta_{6,20,3}(2z) \\
& - \left(\frac{334\,227\,547}{197\,509\,800\,274\,951\,421\,187\,588\,096} s + \frac{153\,538\,121\,873\,545}{3657\,588\,893\,980\,581\,873\,844\,224} \right) \Delta_{12,20,1}(z) \\
& + \left(\frac{334\,227\,547}{197\,509\,800\,274\,951\,421\,187\,588\,096} s - \frac{44\,438\,895\,608\,317}{1219\,196\,297\,993\,527\,291\,281\,408} \right) \Delta_{12,20,2}(z) \\
& + \left(\frac{10\,534\,713\,409\,003}{267\,709\,653\,905\,211\,213\,742\,080} - \frac{48\,475\,279}{72\,281\,606\,554\,407\,027\,710\,361\,600} r \right) \Delta_{12,20,3}(z) \\
& + \left(\frac{48\,475\,279}{72\,281\,606\,554\,407\,027\,710\,361\,600} r + \frac{3474\,180\,537\,799}{89\,236\,551\,301\,737\,071\,247\,360} \right) \Delta_{12,20,4}(z) \\
& + \frac{9}{20\,446\,700\,454\,344\,130\,560\,000} E_{20}(z) - \frac{4718\,601}{20\,446\,700\,454\,344\,130\,560\,000} E_{20}(2z) \\
& - \frac{9}{20\,446\,700\,454\,344\,130\,560\,000} E_{20}(3z) + \frac{9}{38\,998\,986\,157\,120\,000} E_{20}(4z) \\
& + \frac{4718\,601}{20\,446\,700\,454\,344\,130\,560\,000} E_{20}(6z) - \frac{9}{38\,998\,986\,157\,120\,000} E_{20}(12z),
\end{aligned}$$

$$\begin{aligned}
f_{15} \quad : \quad & = \frac{16\,720\,838\,813}{454\,926\,369\,776\,941\,670\,400} \Delta_{1,20}(z) + \frac{317\,695\,937\,447}{18\,955\,265\,407\,372\,569\,600} \Delta_{1,20}(2z) \\
& - \frac{56\,715\,652\,965\,851}{16\,849\,124\,806\,553\,395\,200} \Delta_{1,20}(3z) + \frac{1070\,133\,684\,032}{55\,533\,004\,123\,161\,825} \Delta_{1,20}(4z) \\
& + \frac{1077\,597\,406\,351\,169}{702\,046\,866\,939\,724\,800} \Delta_{1,20}(6z) - \frac{3629\,801\,789\,814\,464}{2056\,777\,930\,487\,475} \Delta_{1,20}(12z) \\
& - \frac{1543}{53\,359\,384\,780\,800} \Delta_{2,20,1}(z) + \frac{1543}{104\,217\,548\,400} \Delta_{2,20,1}(2z)
\end{aligned}$$

$$\begin{aligned}
& -\frac{5022719}{1976273510400}\Delta_{2,20,1}(3z) + \frac{5022719}{3859909200}\Delta_{2,20,1}(6z) \\
& -\frac{67817}{11962012287545856}\Delta_{2,20,2}(z) - \frac{67817}{23363305249113}\Delta_{2,20,2}(2z) \\
& -\frac{8185152751}{3987337429181952}\Delta_{2,20,2}(3z) - \frac{8185152751}{7787768416371}\Delta_{2,20,2}(6z) \\
& +\frac{767213}{20886879548620800}\Delta_{3,20,1}(z) + \frac{17645899}{435143323929600}\Delta_{3,20,1}(2z) \\
& +\frac{24550816}{1274833956825}\Delta_{3,20,1}(4z) - (\frac{8494303295}{1663722668826916701437952}t \\
& +\frac{10708103908709}{277287111471152783572992})\Delta_{3,20,2}(z) + (\frac{90804606869887}{2888407411157841495552} \\
& -\frac{988262050793}{17330444466947048973312}t)\Delta_{3,20,2}(2z) - (\frac{135908852720}{50772786524258932539}t \\
& +\frac{342659325078688}{16924262174752977513})\Delta_{3,20,2}(4z) + (\frac{8494303295}{1663722668826916701437952}t \\
& -\frac{104481583877}{2475777780992435567616})\Delta_{3,20,3}(z) + (\frac{988262050793}{17330444466947048973312}t \\
& -\frac{1773003790921}{206314815082702963968})\Delta_{3,20,3}(2z) + (\frac{135908852720}{50772786524258932539}t \\
& -\frac{53494570945024}{2417751739250425359})\Delta_{3,20,3}(4z) - \frac{1}{8033549580288}\Delta_{4,20}(z) \\
& +\frac{4782965}{892616620032}\Delta_{4,20}(3z) + \frac{90953}{1904216938905600}\Delta_{6,20,1}(z) \\
& -\frac{90953}{3719173708800}\Delta_{6,20,1}(2z) + \frac{15193}{533015629922304}\Delta_{6,20,2}(z) \\
& +\frac{15193}{1041046152192}\Delta_{6,20,2}(2z) - \frac{437627}{12740489334374400}\Delta_{6,20,3}(z) \\
& -\frac{437627}{24883768231200}\Delta_{6,20,3}(2z) - (\frac{35413}{12055041520687952953344}s \\
& +\frac{16257776711}{223241509642369499136})\Delta_{12,20,1}(z) + (\frac{35413}{12055041520687952953344}s \\
& -\frac{14115219385}{223241509642369499136})\Delta_{12,20,2}(z) + (\frac{447399833}{6535880222295195648} \\
& -\frac{2053}{1764687660019702824960}r)\Delta_{12,20,3}(z) + (\frac{2053}{1764687660019702824960}r \\
& +\frac{442649191}{6535880222295195648})\Delta_{12,20,4}(z) + \frac{1}{511744696353728640000}E_{20}(z) \\
& -\frac{174763}{170581565451242880000}E_{20}(2z) - \frac{1}{511744696353728640000}E_{20}(3z) \\
& +\frac{512}{499750680032938125}E_{20}(4z) + \frac{174763}{170581565451242880000}E_{20}(6z) \\
& -\frac{512}{499750680032938125}E_{20}(12z),
\end{aligned}$$

$$\begin{aligned}
f_{16} = & -\frac{225\,437\,987}{263\,496\,248\,642\,764\,800}\Delta_{1,20}(z) + \frac{4283\,321\,753}{10\,979\,010\,360\,115\,200}\Delta_{1,20}(2z) \\
& + \frac{21\,351\,893\,139}{271\,086\,675\,558\,400}\Delta_{1,20}(3z) - \frac{225\,437\,987}{502\,579\,209\,600}\Delta_{1,20}(4z) \\
& - \frac{1217\,057\,908\,923}{33\,885\,834\,444\,800}\Delta_{1,20}(6z) + \frac{21\,351\,893\,139}{517\,056\,800}\Delta_{1,20}(12z) \\
& + \frac{4146\,683}{5918\,790\,411\,878\,400}\Delta_{2,20,1}(z) - \frac{4146\,683}{11\,560\,137\,523\,200}\Delta_{2,20,1}(2z) \\
& + \frac{373\,008\,159}{6089\,290\,547\,200}\Delta_{2,20,1}(3z) - \frac{373\,008\,159}{11\,893\,145\,600}\Delta_{2,20,1}(6z) \\
& + \frac{22\,737\,811}{174\,856\,399\,182\,888\,960}\Delta_{2,20,2}(z) + \frac{22\,737\,811}{341\,516\,404\,654\,080}\Delta_{2,20,2}(2z) \\
& + \frac{660\,754\,944\,207}{14\,571\,366\,598\,574\,080}\Delta_{2,20,2}(3z) + \frac{660\,754\,944\,207}{28\,459\,700\,387\,840}\Delta_{2,20,2}(6z) \\
& - \frac{767\,293}{932\,786\,366\,054\,400}\Delta_{3,20,1}(z) - \frac{17\,647\,739}{19\,433\,049\,292\,800}\Delta_{3,20,1}(2z) \\
& - \frac{767\,293}{1779\,148\,800}\Delta_{3,20,1}(4z) + \left(\frac{576\,442\,591\,399}{7176\,473\,829\,119\,935\,559\,761\,920}t\right. \\
& + \frac{200\,108\,725\,669}{219\,867\,457\,999\,998\,025\,728})\Delta_{3,20,2}(z) + \left(\frac{1599\,825\,435\,147\,949}{1196\,078\,971\,519\,989\,259\,960\,320}t\right. \\
& - \frac{110\,723\,262\,649\,823}{146\,578\,305\,333\,332\,017\,152})\Delta_{3,20,2}(2z) + \left(\frac{576\,442\,591\,399}{13\,688\,037\,546\,386\,595\,840}t\right. \\
& + \frac{200\,108\,725\,669}{419\,363\,895\,416\,256})\Delta_{3,20,2}(4z) + \left(\frac{165\,147\,892\,976\,149}{170\,868\,424\,502\,855\,608\,565\,760}\right. \\
& - \frac{576\,442\,591\,399}{7176\,473\,829\,119\,935\,559\,761\,920}t)\Delta_{3,20,3}(z) + \left(\frac{5227\,991\,244\,078\,679}{28\,478\,070\,750\,475\,934\,760\,960}\right. \\
& - \frac{1599\,825\,435\,147\,949}{1196\,078\,971\,519\,989\,259\,960\,320}t)\Delta_{3,20,3}(2z) + \left(\frac{165\,147\,892\,976\,149}{325\,905\,655\,866\,347\,520}\right. \\
& - \frac{576\,442\,591\,399}{13\,688\,037\,546\,386\,595\,840}t)\Delta_{3,20,3}(4z) - \frac{8419}{1083\,305\,977\,970\,688}\Delta_{4,20}(z) \\
& - \frac{1241\,032\,833}{10\,030\,610\,907\,136}\Delta_{4,20}(3z) - \frac{8986\,547}{7781\,192\,250\,163\,200}\Delta_{6,20,1}(z) \\
& + \frac{8986\,547}{15\,197\,641\,113\,600}\Delta_{6,20,1}(2z) - \frac{5042\,483}{7986\,216\,809\,005\,056}\Delta_{6,20,2}(z) \\
& - \frac{5042\,483}{15\,598\,079\,705\,088}\Delta_{6,20,2}(2z) + \frac{2890\,723}{3817\,835\,889\,426\,432}\Delta_{6,20,3}(z) \\
& + \frac{2890\,723}{7456\,710\,721\,536}\Delta_{6,20,3}(2z) + \left(\frac{147\,314\,615}{2167\,460\,085\,321\,826\,295\,611\,392}s\right. \\
& + \frac{67\,617\,692\,570\,749}{40\,138\,149\,728\,181\,968\,437\,248})\Delta_{12,20,1}(z) + \left(\frac{58\,704\,863\,734\,019}{40\,138\,149\,728\,181\,968\,437\,248}\right. \\
& - \frac{147\,314\,615}{2167\,460\,085\,321\,826\,295\,611\,392}s)\Delta_{12,20,2}(z) + \left(\frac{17\,051\,027}{634\,571\,031\,479\,019\,173\,314\,560}r\right. \\
& - \frac{3708\,962\,700\,031}{2350\,263\,079\,551\,922\,864\,128})\Delta_{12,20,3}(z) - \left(\frac{17\,051\,027}{634\,571\,031\,479\,019\,173\,314\,560}r\right.
\end{aligned}$$

$$+\frac{3669\,506\,623\,553}{2350\,263\,079\,551\,922\,864\,128})\Delta_{12,20,4}(z),$$

$$\begin{aligned} f_{17} = & -\frac{1089\,500\,734\,432\,301}{23\,556\,783\,857\,542\,043\,900\,313\,600}\Delta_{1,20}(z) \\ & +\frac{20\,700\,513\,954\,213\,719}{981\,532\,660\,730\,918\,495\,846\,400}\Delta_{1,20}(2z) \\ & +\frac{239\,821\,253\,099\,364\,303}{96\,941\,497\,356\,140\,098\,355\,200}\Delta_{1,20}(3z) - \frac{1089\,500\,734\,432\,301}{44\,930\,999\,484\,142\,387\,200}\Delta_{1,20}(4z) \\ & -\frac{13\,669\,811\,426\,663\,765\,271}{12\,117\,687\,169\,517\,512\,294\,400}\Delta_{1,20}(6z) + \frac{239\,821\,253\,099\,364\,303}{184\,901\,232\,445\,030\,400}\Delta_{1,20}(12z) \\ & -\frac{98\,198\,149}{6710\,217\,244\,095\,283\,200}\Delta_{2,20,1}(z) + \frac{98\,198\,149}{13\,105\,893\,054\,873\,600}\Delta_{2,20,1}(2z) \\ & -\frac{1556\,923\,113}{27\,614\,062\,732\,902\,400}\Delta_{2,20,1}(3z) + \frac{1556\,923\,113}{53\,933\,716\,275\,200}\Delta_{2,20,1}(6z) \\ & -\frac{18\,433\,105\,255}{1101\,175\,659\,494\,161\,514\,496}\Delta_{2,20,2}(z) - \frac{18\,433\,105\,255}{2150\,733\,709\,949\,534\,208}\Delta_{2,20,2}(2z) \\ & +\frac{59\,388\,854\,334\,687}{122\,352\,851\,054\,906\,834\,944}\Delta_{2,20,2}(3z) + \frac{59\,388\,854\,334\,687}{238\,970\,412\,216\,614\,912}\Delta_{2,20,2}(6z) \\ & -\frac{326\,064\,317}{10\,014\,394\,425\,960\,038\,400}\Delta_{3,20,1}(z) - \frac{7499\,479\,291}{208\,633\,217\,207\,500\,800}\Delta_{3,20,1}(2z) \\ & -\frac{326\,064\,317}{19\,100\,941\,516\,800}\Delta_{3,20,1}(4z) - (\frac{1975\,383\,754\,393}{1937\,237\,849\,643\,575\,747\,675\,160\,576}t \\ & +\frac{4932\,792\,743\,251}{593\,516\,498\,052\,566\,099\,165\,184})\Delta_{3,20,2}(z) + (\frac{1344\,221\,363\,763\,301}{197\,838\,832\,684\,188\,699\,721\,728} \\ & -\frac{3958\,433\,847\,461\,491}{322\,872\,974\,940\,595\,957\,945\,860\,096}t)\Delta_{3,20,2}(2z) - (\frac{1975\,383\,754\,393}{3694\,987\,963\,950\,301\,642\,752}t \\ & +\frac{4932\,792\,743\,251}{1132\,042\,881\,112\,224\,768})\Delta_{3,20,2}(4z) + (\frac{1975\,383\,754\,393}{1937\,237\,849\,643\,575\,747\,675\,160\,576}t \\ & -\frac{2914\,559\,151\,592\,525}{322\,872\,974\,940\,595\,957\,945\,860\,096})\Delta_{3,20,3}(z) \\ & +(\frac{3958\,433\,847\,461\,491}{322\,872\,974\,940\,595\,957\,945\,860\,096}t \\ & -\frac{97\,508\,549\,209\,376\,575}{53\,812\,162\,490\,099\,326\,324\,310\,016})\Delta_{3,20,3}(2z) + (\frac{1975\,383\,754\,393}{3694\,987\,963\,950\,301\,642\,752}t \\ & -\frac{56\,995\,555}{2914\,559\,151\,592\,525})\Delta_{3,20,3}(4z) + \frac{1109\,305\,321\,441\,984\,512}{56\,995\,555}\Delta_{4,20}(z) \\ & -\frac{77\,687\,757\,801}{41\,085\,382\,275\,629\,056}\Delta_{4,20}(3z) - \frac{67\,035\,223}{1369\,489\,836\,028\,723\,200}\Delta_{6,20,1}(z) \\ & +\frac{67\,035\,223}{2674\,784\,835\,993\,600}\Delta_{6,20,1}(2z) - \frac{3178\,085}{127\,779\,468\,944\,080\,896}\Delta_{6,20,2}(z) \\ & -\frac{3178\,085}{249\,569\,275\,281\,408}\Delta_{6,20,2}(2z) - \frac{5524\,819}{763\,567\,177\,885\,286\,400}\Delta_{6,20,3}(z) \end{aligned}$$

$$\begin{aligned}
& -\frac{5524819}{1491342144307200}\Delta_{6,20,3}(2z) + \left(\frac{97320929}{34679361365149220729782272}s\right. \\
& + \frac{44068459366411}{642210395650911494995968})\Delta_{12,20,1}(z) + \left(\frac{38180348520053}{642210395650911494995968}\right. \\
& - \frac{97320929}{34679361365149220729782272}s)\Delta_{12,20,2}(z) + \left(\frac{1376475918011}{94010523182076914565120}\right. \\
& - \frac{6375583}{25382841259160766932582400}r)\Delta_{12,20,3}(z) \\
& + \left(\frac{6375583}{25382841259160766932582400}r\right. \\
& + \frac{1361722818949}{94010523182076914565120})\Delta_{12,20,4}(z) \\
& - \frac{1}{251249055182980676321280000}E_{20}(z) \\
& + \frac{174763}{83749685060993558773760000}E_{20}(2z) \\
& + \frac{1162261467}{83749685060993558773760000}E_{20}(3z) \\
& - \frac{1}{479219541898690560000}E_{20}(4z) - \frac{609360902271963}{83749685060993558773760000}E_{20}(6z) \\
& + \frac{1162261467}{159739847299563520000}E_{20}(12z),
\end{aligned}$$

$$\begin{aligned}
f_{18} = & \frac{6798319}{78005207437747200}\Delta_{1,20}(z) - \frac{129168061}{3250216976572800}\Delta_{1,20}(2z) \\
& - \frac{1868071034473}{234015622313241600}\Delta_{1,20}(3z) + \frac{3480739328}{76176960388425}\Delta_{1,20}(4z) \\
& + \frac{35493349654987}{9750650929718400}\Delta_{1,20}(6z) - \frac{956452369650176}{228530881165275}\Delta_{1,20}(12z) \\
& - \frac{3079}{44795532902400}\Delta_{2,20,1}(z) + \frac{3079}{87491275200}\Delta_{2,20,1}(2z) \\
& - \frac{90179503}{14931844300800}\Delta_{2,20,1}(3z) + \frac{90179503}{29163758400}\Delta_{2,20,1}(6z) \\
& - \frac{154568009}{11483531796044021760}\Delta_{2,20,2}(z) - \frac{154568009}{22428773039148480}\Delta_{2,20,2}(2z) \\
& - \frac{18587464609057}{3827843932014673920}\Delta_{2,20,2}(3z) - \frac{18587464609057}{7476257679716160}\Delta_{2,20,2}(6z) \\
& + \frac{7093}{81589373236800}\Delta_{3,20,1}(z) + \frac{163139}{1699778609100}\Delta_{3,20,1}(2z) \\
& + \frac{58105856}{1274833956825}\Delta_{3,20,1}(4z) - \left(\frac{210826251257}{17677053356285989952778240}t\right. \\
& + \frac{3175441892663}{34660888933894097946624})\Delta_{3,20,2}(z) + \left(\frac{26951971115989}{361050926394730186944}\right. \\
& - \frac{24905040932627}{184135972461312395341440}t)\Delta_{3,20,2}(2z) - \left(\frac{26985760160896}{4315686854562009265815}t\right.
\end{aligned}$$

$$\begin{aligned}
& + \frac{812\,913\,124\,521\,728}{16\,924\,262\,174\,752\,977\,513})\Delta_{3,20,2}(4z) + (\frac{210\,826\,251\,257}{17\,677\,053\,356\,285\,989\,952\,778\,240}t \\
& - \frac{2630\,171\,716\,727}{26\,305\,138\,923\,044\,627\,905\,920})\Delta_{3,20,3}(z) + (\frac{24\,905\,040\,932\,627}{184\,135\,972\,461\,312\,395\,341\,440}t \\
& - \frac{44\,498\,017\,447\,021}{2192\,094\,910\,253\,718\,992\,160})\Delta_{3,20,3}(2z) + (\frac{26\,985\,760\,160\,896}{4315\,686\,854\,562\,009\,265\,815}t \\
& - \frac{10\,773\,183\,351\,713\,792}{205\,508\,897\,836\,286\,155\,515})\Delta_{3,20,3}(4z) + \frac{667}{5877\,212\,774\,400}\Delta_{6,20,1}(z) \\
& - \frac{667}{11\,478\,931\,200}\Delta_{6,20,1}(2z) + \frac{8987}{133\,253\,907\,480\,576}\Delta_{6,20,2}(z) \\
& + \frac{8987}{260\,261\,538\,048}\Delta_{6,20,2}(2z) \\
& - \frac{129\,353}{1592\,561\,166\,796\,800}\Delta_{6,20,3}(z) - \frac{129\,353}{3110\,471\,028\,900}\Delta_{6,20,3}(2z) \\
& + \frac{1}{575\,712\,783\,397\,944\,720\,000}E_{20}(z) - \frac{174\,763}{191\,904\,261\,132\,648\,240\,000}E_{20}(2z) \\
& - \frac{1}{575\,712\,783\,397\,944\,720\,000}E_{20}(3z) + \frac{4096}{4497\,756\,120\,296\,443\,125}E_{20}(4z) \\
& + \frac{174\,763}{191\,904\,261\,132\,648\,240\,000}E_{20}(6z) - \frac{4096}{4497\,756\,120\,296\,443\,125}E_{20}(12z),
\end{aligned}$$

$$\begin{aligned}
f_{19} = & \frac{1027}{115\,979\,817\,600}\Delta_{1,20}(2z) - \frac{639\,541}{23\,558\,400\,450}\Delta_{1,20}(4z) - \frac{3505\,549}{4295\,548\,800}\Delta_{1,20}(6z) \\
& + \frac{2190\,451\,567}{872\,533\,350}\Delta_{1,20}(12z) - \frac{709}{33\,867\,590\,400}\Delta_{2,20,1}(2z) - \frac{9149\,843}{5017\,420\,800}\Delta_{2,20,1}(6z) \\
& - \frac{493}{111\,170\,704\,640}\Delta_{2,20,2}(2z) + \frac{673\,369\,943}{444\,682\,818\,560}\Delta_{2,20,2}(6z) - \frac{79}{4157\,049\,600}\Delta_{3,20,1}(2z) \\
& - \frac{23\,443}{844\,400\,700}\Delta_{3,20,1}(4z) + (\frac{5456\,547\,853}{207\,887\,070\,235\,746\,424\,320}t \\
& - \frac{6190\,657\,373}{407\,621\,706\,344\,600\,832})\Delta_{3,20,2}(2z) + (\frac{3422\,794\,357}{812\,058\,868\,108\,384\,470}t \\
& + \frac{45\,378\,974\,899}{1592\,272\,290\,408\,597})\Delta_{3,20,2}(4z) + (\frac{1001\,876\,983}{309\,355\,759\,279\,384\,560} \\
& - \frac{5456\,547\,853}{207\,887\,070\,235\,746\,424\,320}t)\Delta_{3,20,3}(2z) + (\frac{608\,239\,972\,312}{19\,334\,734\,954\,961\,535} \\
& - \frac{3422\,794\,357}{812\,058\,868\,108\,384\,470}t)\Delta_{3,20,3}(4z) + \frac{3451}{100\,179\,763\,200}\Delta_{6,20,1}(2z) \\
& - \frac{19\,573}{925\,374\,357\,504}\Delta_{6,20,2}(2z) + \frac{22\,385}{884\,756\,203\,776}\Delta_{6,20,3}(2z),
\end{aligned}$$

$$f_{20} = -\frac{11}{2899\,495\,440}\Delta_{1,20}(2z) - \frac{4006}{2355\,840\,045}\Delta_{1,20}(4z) + \frac{301}{795\,472}\Delta_{1,20}(6z)$$

$$\begin{aligned}
& -\frac{21\,392}{3231\,605}\Delta_{1,20}(12z) - \frac{29}{27\,094\,072\,320}\Delta_{2,20,1}(2z) - \frac{1807}{9291\,520}\Delta_{2,20,1}(6z) \\
& -\frac{7033}{4002\,145\,367\,040}\Delta_{2,20,2}(2z) - \frac{11\,074\,347}{111\,170\,704\,640}\Delta_{2,20,2}(6z) + \frac{1}{426\,465}\Delta_{3,20,1}(4z) \\
& +\frac{1011\,769}{320\,813\,379\,993\,435\,840}t + \frac{555\,575}{629\,045\,843\,124\,384}\Delta_{3,20,2}(2z) \\
& +\left(\frac{302\,777\,840}{176\,919\,143\,378\,733} - \frac{100\,940\,264}{45\,114\,381\,561\,576\,915}t\right)\Delta_{3,20,2}(4z) + \left(\frac{1478\,579}{477\,400\,863\,085\,470}\right. \\
& \left.-\frac{1011\,769}{320\,813\,379\,993\,435\,840}t\right)\Delta_{3,20,3}(2z) + \left(\frac{100\,940\,264}{45\,114\,381\,561\,576\,915}t\right. \\
& \left.+\frac{302\,299\,232}{2148\,303\,883\,884\,615}\right)\Delta_{3,20,3}(4z) + \frac{1}{455\,362\,560}\Delta_{6,20,1}(2z) + \frac{47}{25\,704\,843\,264}\Delta_{6,20,2}(2z) \\
& -\frac{17}{12\,288\,280\,608}\Delta_{6,20,3}(2z),
\end{aligned}$$

$$\begin{aligned}
f_{21} = & \frac{613}{251\,289\,604\,800}\Delta_{1,20}(2z) + \frac{34\,639}{7852\,800\,150}\Delta_{1,20}(4z) - \frac{433\,269}{1034\,113\,600}\Delta_{1,20}(6z) \\
& +\frac{13\,948\,443}{32\,316\,050}\Delta_{1,20}(12z) - \frac{13}{22\,578\,393\,600}\Delta_{2,20,1}(2z) + \frac{80\,433}{185\,830\,400}\Delta_{2,20,1}(6z) \\
& +\frac{14\,969}{2001\,072\,683\,520}\Delta_{2,20,2}(2z) - \frac{24\,890\,247}{444\,682\,818\,560}\Delta_{2,20,2}(6z) - \frac{1}{111\,196\,800}\Delta_{3,20,1}(2z) \\
& -\frac{23}{3474\,900}\Delta_{3,20,1}(4z) + \left(\frac{1688\,177}{285\,167\,448\,883\,054\,080}t - \frac{3188\,963}{1677\,455\,581\,665\,024}\right)\Delta_{3,20,2}(2z) \\
& -\left(\frac{2384\,681}{3341\,806\,041\,598\,290}t + \frac{507\,557}{2184\,186\,955\,293}\right)\Delta_{3,20,2}(4z) + \left(\frac{2870\,431}{1273\,068\,968\,227\,920}\right. \\
& \left.-\frac{1688\,177}{285\,167\,448\,883\,054\,080}t\right)\Delta_{3,20,3}(2z) + \left(\frac{2384\,681}{3341\,806\,041\,598\,290}t\right. \\
& \left.-\frac{19\,449\,272}{26\,522\,270\,171\,415}\right)\Delta_{3,20,3}(4z) + \frac{71}{33\,393\,254\,400}\Delta_{6,20,1}(2z) + \frac{7}{3808\,124\,928}\Delta_{6,20,2}(2z) \\
& -\frac{17}{3640\,972\,032}\Delta_{6,20,3}(2z),
\end{aligned}$$

$$\begin{aligned}
f_{22} = & -\frac{1852\,489\,927}{6175\,693\,327\,564\,800}\Delta_{1,20}(z) + \frac{35\,197\,308\,613}{257\,320\,555\,315\,200}\Delta_{1,20}(2z) \\
& +\frac{234\,668\,157\,327}{8471\,458\,611\,200}\Delta_{1,20}(3z) - \frac{1852\,489\,927}{11\,779\,200\,225}\Delta_{1,20}(4z) - \frac{13\,376\,084\,967\,639}{1058\,932\,326\,400}\Delta_{1,20}(6z) \\
& +\frac{234\,668\,157\,327}{16\,158\,025}\Delta_{1,20}(12z) + \frac{9146\,363}{39\,634\,757\,222\,400}\Delta_{2,20,1}(z) - \frac{9146\,363}{77\,411\,635\,200}\Delta_{2,20,1}(2z) \\
& +\frac{1093\,529\,277}{54\,368\,665\,600}\Delta_{2,20,1}(3z) - \frac{1093\,529\,277}{106\,188\,800}\Delta_{2,20,1}(6z) + \frac{423\,636\,017}{8196\,393\,711\,697\,920}\Delta_{2,20,2}(z) \\
& +\frac{423\,636\,017}{16\,008\,581\,468\,160}\Delta_{2,20,2}(2z) + \frac{16\,175\,157\,255\,207}{910\,710\,412\,410\,880}\Delta_{2,20,2}(3z) \\
& +\frac{16\,175\,157\,255\,207}{1778\,731\,274\,240}\Delta_{2,20,2}(6z) - \frac{7767\,049}{24\,594\,953\,011\,200}\Delta_{3,20,1}(z) - \frac{178\,642\,127}{512\,394\,854\,400}\Delta_{3,20,1}(2z)
\end{aligned}$$

$$\begin{aligned}
& -\frac{7767049}{46911150}\Delta_{3,20,1}(4z) + \left(\frac{96109105721}{1689494920011145543680}t + \frac{1034037172787}{3312735137276755968}\right)\Delta_{3,20,2}(z) \\
& + \left(\frac{32622793769489}{70395621667131064320}t - \frac{8573736452581}{34507657679966208}\right)\Delta_{3,20,2}(2z) + \left(\frac{192218211442}{6444911651653845}t\right. \\
& + \left.\frac{4136148691148}{25274163339819}\right)\Delta_{3,20,2}(4z) + \left(\frac{24784481264063}{70395621667131064320}\right. \\
& - \left.\frac{96109105721}{1689494920011145543680}t\right)\Delta_{3,20,3}(z) + \left(\frac{901796477152673}{11732603611188510720}\right. \\
& - \left.\frac{32622793769489}{70395621667131064320}t\right)\Delta_{3,20,3}(2z) + \left(\frac{396551700225008}{2148303883884615}\right. \\
& - \left.\frac{192218211442}{6444911651653845}t\right)\Delta_{3,20,3}(4z) - \frac{51}{9795518464}\Delta_{4,20}(z) - \frac{54481167}{1224439808}\Delta_{4,20}(3z) \\
& - \frac{38962873}{102584077516800}\Delta_{6,20,1}(z) + \frac{38962873}{200359526400}\Delta_{6,20,1}(2z) - \frac{26049097}{105287038009344}\Delta_{6,20,2}(z) \\
& - \frac{26049097}{205638746112}\Delta_{6,20,2}(2z) + \frac{14914687}{50332797370368}\Delta_{6,20,3}(z) + \frac{14914687}{98306244864}\Delta_{6,20,3}(2z) \\
& + \left(\frac{349380815}{1428745617111647944704}s + \frac{160439606104261}{264582529946511998976}\right)\Delta_{12,20,1}(z) \\
& + \left(\frac{139301368035131}{264582529946511998976} - \frac{349380815}{1428745617111647944704}s\right)\Delta_{12,20,2}(z) \\
& + \left(\frac{25086661}{2614352088918078259200}r - \frac{5488548894617}{9682785514511400960}\right)\Delta_{12,20,3}(z) \\
& - \left(\frac{25086661}{2614352088918078259200}r + \frac{5430498361063}{9682785514511400960}\right)\Delta_{12,20,4}(z),
\end{aligned}$$

$$\begin{aligned}
f_{23} = & -\frac{1852489927}{6175693327564800}\Delta_{1,20}(z) + \frac{35197308613}{257320555315200}\Delta_{1,20}(2z) \\
& + \frac{234668157327}{8471458611200}\Delta_{1,20}(3z) - \frac{1852489927}{11779200225}\Delta_{1,20}(4z) - \frac{13376084967639}{1058932326400}\Delta_{1,20}(6z) \\
& + \frac{234668157327}{16158025}\Delta_{1,20}(12z) + \frac{9146363}{39634757222400}\Delta_{2,20,1}(z) - \frac{9146363}{77411635200}\Delta_{2,20,1}(2z) \\
& + \frac{1093529277}{54368665600}\Delta_{2,20,1}(3z) - \frac{1093529277}{106188800}\Delta_{2,20,1}(6z) - \frac{423636017}{8196393711697920}\Delta_{2,20,2}(z) \\
& + \frac{423636017}{16008581468160}\Delta_{2,20,2}(2z) + \frac{16175157255207}{910710412410880}\Delta_{2,20,2}(3z) \\
& + \frac{16175157255207}{1778731274240}\Delta_{2,20,2}(6z) - \frac{7767049}{24594953011200}\Delta_{3,20,1}(z) - \frac{178642127}{512394854400}\Delta_{3,20,1}(2z) \\
& - \frac{7767049}{46911150}\Delta_{3,20,1}(4z) + \left(\frac{96109105721}{1689494920011145543680}t\right. \\
& + \left.\frac{1034037172787}{3312735137276755968}\right)\Delta_{3,20,2}(z) + \left(\frac{32622793769489}{70395621667131064320}t\right. \\
& - \left.\frac{8573736452581}{34507657679966208}\right)\Delta_{3,20,2}(2z) + \left(\frac{192218211442}{6444911651653845}t + \frac{4136148691148}{25274163339819}\right)\Delta_{3,20,2}(4z) \\
& + \left(\frac{24784481264063}{70395621667131064320} - \frac{96109105721}{1689494920011145543680}t\right)\Delta_{3,20,3}(z)
\end{aligned}$$

$$\begin{aligned}
& + \left(\frac{901\,796\,477\,152\,673}{11\,732\,603\,611\,188\,510\,720} - \frac{32\,622\,793\,769\,489}{70\,395\,621\,667\,131\,064\,320} t \right) \Delta_{3,20,3}(2z) \\
& + \left(\frac{396\,551\,700\,225\,008}{2148\,303\,883\,884\,615} - \frac{192\,218\,211\,442}{6444\,911\,651\,653\,845} t \right) \Delta_{3,20,3}(4z) - \frac{51}{9795\,518\,464} \Delta_{4,20}(z) \\
& - \frac{54\,481\,167}{1224\,439\,808} \Delta_{4,20}(3z) - \frac{38\,962\,873}{102\,584\,077\,516\,800} \Delta_{6,20,1}(z) + \frac{38\,962\,873}{200\,359\,526\,400} \Delta_{6,20,1}(2z) \\
& - \frac{26\,049\,097}{105\,287\,038\,009\,344} \Delta_{6,20,2}(z) - \frac{26\,049\,097}{205\,638\,746\,112} \Delta_{6,20,2}(2z) + \frac{14\,914\,687}{50\,332\,797\,370\,368} \Delta_{6,20,3}(z) \\
& + \frac{14\,914\,687}{98\,306\,244\,864} \Delta_{6,20,3}(2z) + \left(\frac{349\,380\,815}{14\,287\,456\,617\,111\,647\,944\,704} s \right. \\
& + \left. \frac{160\,439\,606\,104\,261}{264\,582\,529\,946\,511\,998\,976} \right) \Delta_{12,20,1}(z) + \left(\frac{139\,301\,368\,035\,131}{264\,582\,529\,946\,511\,998\,976} \right. \\
& - \left. \frac{349\,380\,815}{14\,287\,456\,617\,111\,647\,944\,704} s \right) \Delta_{12,20,2}(z) + \left(\frac{25\,086\,661}{2614\,352\,088\,918\,078\,259\,200} r \right. \\
& - \left. \frac{5488\,548\,894\,617}{9682\,785\,514\,511\,400\,960} \right) \Delta_{12,20,3}(z) - \left(\frac{25\,086\,661}{2614\,352\,088\,918\,078\,259\,200} r \right. \\
& + \left. \frac{5430\,498\,361\,063}{9682\,785\,514\,511\,400\,960} \right) \Delta_{12,20,4}(z),
\end{aligned}$$

$$\begin{aligned}
f_{24} = & \frac{157}{1507\,737\,628\,800} \Delta_{1,20}(2z) + \frac{3829}{11\,779\,200\,225} \Delta_{1,20}(4z) \\
& - \frac{146\,617}{2068\,227\,200} \Delta_{1,20}(6z) + \frac{129\,251}{16\,158\,025} \Delta_{1,20}(12z) - \frac{29}{270\,940\,723\,200} \Delta_{2,20,1}(2z) \\
& + \frac{14\,549}{371\,660\,800} \Delta_{2,20,1}(6z) + \frac{10\,603}{8004\,290\,734\,080} \Delta_{2,20,2}(2z) + \frac{32\,496\,093}{889\,365\,637\,120} \Delta_{2,20,2}(6z) \\
& - \frac{1}{545\,875\,200} \Delta_{3,20,1}(2z) - \frac{7}{4264\,650} \Delta_{3,20,1}(4z) + \left(\frac{24\,439\,991}{23\,098\,563\,359\,527\,380\,480} t \right. \\
& - \left. \frac{225\,319}{45\,291\,300\,704\,955\,648} \right) \Delta_{3,20,2}(2z) + \left(\frac{24\,216\,482}{45\,114\,381\,561\,576\,915} t \right. \\
& + \left. \frac{13\,375\,948}{176\,919\,143\,378\,733} \right) \Delta_{3,20,2}(4z) + \left(\frac{25\,360\,061}{34\,372\,862\,142\,153\,840} \right. \\
& - \left. \frac{24\,439\,991}{23\,098\,563\,359\,527\,380\,480} t \right) \Delta_{3,20,3}(2z) + \left(\frac{971\,944\,624}{2148\,303\,883\,884\,615} \right. \\
& - \left. \frac{24\,216\,482}{45\,114\,381\,561\,576\,915} t \right) \Delta_{3,20,3}(4z) + \frac{1}{4553\,625\,600} \Delta_{6,20,1}(2z) \\
& + \frac{17}{17\,136\,562\,176} \Delta_{6,20,2}(2z) - \frac{47}{32\,768\,748\,288} \Delta_{6,20,3}(2z),
\end{aligned}$$

$$\begin{aligned}
f_{25} = & \frac{1248\,255\,843\,794\,674\,063}{269\,585\,996\,904\,854\,323\,200} \Delta_{1,20}(2z) - \frac{374\,858\,349\,505\,687\,183\,319}{33\,698\,249\,613\,106\,790\,400} \Delta_{1,20}(4z) \\
& - \frac{8428\,650\,471\,427\,510\,850\,183}{29\,953\,999\,656\,094\,924\,800} \Delta_{1,20}(6z) + \frac{1663\,683\,635\,463\,851\,193\,912\,079}{3744\,249\,957\,011\,865\,600} \Delta_{1,20}(12z)
\end{aligned}$$

$$\begin{aligned}
& \frac{3425\,948\,545\,219}{537\,546\,394\,828\,800}\Delta_{2,20,1}(2z) + \frac{10\,884\,721\,294\,936\,301}{59\,727\,377\,203\,200}\Delta_{2,20,1}(6z) \\
& - \frac{99\,528\,735\,729\,883\,097}{15\,311\,375\,728\,058\,695\,680}\Delta_{2,20,2}(2z) - \frac{860\,823\,839\,765\,942\,403\,541}{5103\,791\,909\,352\,898\,560}\Delta_{2,20,2}(6z) \\
& - \frac{5100\,209\,888\,497}{1740\,573\,295\,718\,400}\Delta_{3,20,1}(2z) - \frac{191\,731\,293\,051\,029}{36\,261\,943\,660\,800}\Delta_{3,20,1}(4z) \\
& + \left(\frac{148\,469\,555\,458\,354\,712\,401}{92\,429\,037\,157\,050\,927\,857\,664} - \frac{1331\,234\,328\,462\,665\,185\,193}{188\,555\,235\,800\,383\,892\,829\,634\,560}t\right)\Delta_{3,20,2}(2z) \\
& - \left(\frac{88\,773\,503\,762\,999\,762\,006\,807}{31\,425\,872\,633\,397\,315\,471\,605\,760}t + \frac{23\,725\,984\,406\,520\,872\,512\,655}{3851\,209\,881\,543\,788\,660\,736}\right)\Delta_{3,20,2}(4z) \\
& + \left(\frac{1331\,234\,328\,462\,665\,185\,193}{188\,555\,235\,800\,383\,892\,829\,634\,560}t - \frac{15\,039\,252\,510\,613\,032\,064\,463}{4489\,410\,376\,199\,616\,495\,943\,680}\right)\Delta_{3,20,3}(2z) \\
& + \left(\frac{88\,773\,503\,762\,999\,762\,006\,807}{31\,425\,872\,633\,397\,315\,471\,605\,760}t - \frac{6093\,405\,533\,305\,622\,681\,715\,317}{748\,235\,062\,699\,936\,082\,657\,280}\right)\Delta_{3,20,3}(4z) \\
& + \frac{203\,854\,744\,427}{17\,631\,638\,323\,200}\Delta_{6,20,1}(2z) - \frac{160\,554\,287\,245}{44\,417\,969\,160\,192}\Delta_{6,20,2}(2z) \\
& - \frac{26\,421\,026\,291\,123}{33\,974\,638\,224\,909\,840}\Delta_{6,20,3}(2z) + \frac{1077\,683\,939}{209\,610\,627\,626\,487\,250\,944\,000}E_{20}(2z) \\
& - \frac{3035\,935\,193\,986\,217}{628\,831\,882\,879\,461\,752\,832\,000}E_{20}(4z) - \frac{392\,680\,143\,454\,469\,939}{209\,610\,627\,626\,487\,250\,944\,000}E_{20}(6z) \\
& + \frac{1181\,076\,362\,324\,344\,217}{628\,831\,882\,879\,461\,752\,832\,000}E_{20}(12z),
\end{aligned}$$

$$\begin{aligned}
f_{26} = & \frac{1}{1861\,404\,480}\Delta_{1,20}(2z) + \frac{16}{29\,084\,445}\Delta_{1,20}(4z) - \frac{4221}{206\,822\,720}\Delta_{1,20}(6z) \\
& - \frac{67\,536}{3231\,605}\Delta_{1,20}(12z) + \frac{139}{83\,378\,028\,480}\Delta_{2,20,2}(2z) + \frac{454\,947}{27\,792\,676\,160}\Delta_{2,20,2}(6z) \\
& - \frac{1}{491\,287\,680}\Delta_{3,20,1}(2z) - \frac{8}{3838\,185}\Delta_{3,20,1}(4z) + \left(\frac{720\,809}{873\,475\,085\,024\,144\,640}t \right. \\
& \left. - \frac{3018\,185}{29\,115\,836\,167\,471\,488}\right)\Delta_{3,20,2}(2z) + \left(\frac{2883\,236}{3412\,012\,050\,875\,565}t \right. \\
& \left. - \frac{24\,145\,480}{227\,467\,470\,058\,371}\right)\Delta_{3,20,2}(4z) + \left(\frac{4327\,733}{9098\,698\,802\,334\,840} \right. \\
& \left. - \frac{720\,809}{873\,475\,085\,024\,144\,640}t\right)\Delta_{3,20,3}(2z) + \left(\frac{553\,949\,824}{1137\,337\,350\,291\,855} \right. \\
& \left. - \frac{2883\,236}{3412\,012\,050\,875\,565}t\right)\Delta_{3,20,3}(4z) + \frac{13}{14\,458\,974\,336}\Delta_{6,20,2}(2z) \\
& - \frac{637}{442\,378\,101\,888}\Delta_{6,20,3}(2z),
\end{aligned}$$

$$\begin{aligned}
f_{27} = & -\frac{639\,541}{376\,934\,407\,200}\Delta_{1,20}(2z) + \frac{525\,824}{906\,092\,325}\Delta_{1,20}(4z) \\
& + \frac{2190\,451\,567}{13\,960\,533\,600}\Delta_{1,20}(6z) - \frac{1794\,841\,088}{33\,558\,975}\Delta_{1,20}(12z) + \frac{709}{529\,181\,100}\Delta_{2,20,1}(2z)
\end{aligned}$$

$$\begin{aligned}
& + \frac{9149843}{78397200} \Delta_{2,20,1}(6z) + \frac{493}{1737042260} \Delta_{2,20,2}(2z) + \frac{673369943}{6948169040} \Delta_{2,20,2}(6z) \\
& - \frac{23443}{13510411200} \Delta_{3,20,1}(2z) - \frac{20224}{16238475} \Delta_{3,20,1}(4z) + \left(\frac{3422794357}{12992941889734151520} t \right. \\
& + \frac{45378974899}{25476356646537552} \Delta_{3,20,2}(2z) + \left(\frac{698438125184}{406029434054192235} t \right. \\
& - \frac{1584808287488}{1592272290408597} \Delta_{3,20,2}(4z) + \left(\frac{76029996539}{38669469909923070} \right. \\
& - \frac{3422794357}{12992941889734151520} t \Delta_{3,20,3}(2z) + \left(\frac{4103688122368}{19334734954961535} \right. \\
& - \frac{698438125184}{406029434054192235} t \Delta_{3,20,3}(4z) - \frac{3451}{1565308800} \Delta_{6,20,1}(2z) \\
& - \frac{19573}{14458974336} \Delta_{6,20,2}(2z) + \frac{22385}{13824315684} \Delta_{6,20,3}(2z),
\end{aligned}$$

$$\begin{aligned}
f_{28} = & \frac{1}{143184960} \Delta_{1,20}(2z) + \frac{61}{20135385} \Delta_{1,20}(4z) + \frac{6561}{15909440} \Delta_{1,20}(6z) \\
& + \frac{44469}{248585} \Delta_{1,20}(12z) - \frac{1}{98703360} \Delta_{2,20,1}(2z) - \frac{729}{1218560} \Delta_{2,20,1}(6z) \\
& - \frac{41}{4184156160} \Delta_{2,20,2}(2z) - \frac{269001}{464906240} \Delta_{2,20,2}(6z) + \left(\frac{3188963}{559151860555008} \right. \\
& - \frac{1688177}{95055816294351360} t \Delta_{3,20,2}(2z) + \left(\frac{768826}{185655891199905} t \right. \\
& - \frac{22519480}{2184186955293} \Delta_{3,20,2}(4z) + \left(\frac{1688177}{95055816294351360} t \right. \\
& - \frac{2870431}{424356322742640} \Delta_{3,20,3}(2z) - \left(\frac{768826}{185655891199905} t \right. \\
& + \frac{196348564}{26522270171415} \Delta_{3,20,3}(4z) + \frac{17}{1213657344} \Delta_{6,20,3}(2z),
\end{aligned}$$

$$\begin{aligned}
f_{29} = & - \frac{2458390737684855647}{80875799071456296960} \Delta_{1,20}(2z) + \frac{658718636322693548839}{10109474883932037120} \Delta_{1,20}(4z) \\
& + \frac{5913482322301467121241}{2995399965609492480} \Delta_{1,20}(6z) - \frac{993158018260808516027089}{374424995701186560} \Delta_{1,20}(12z) \\
& - \frac{1084569657047}{32252783689728} \Delta_{2,20,1}(2z) - \frac{4658633021054483}{5972737720320} \Delta_{2,20,1}(6z) \\
& + \frac{97224209407773461}{2551895954676449280} \Delta_{2,20,2}(2z) + \frac{1008051966770433499213}{850631984892149760} \Delta_{2,20,2}(6z) \\
& + \frac{1521681156257}{116038219714560} \Delta_{3,20,1}(2z) + \frac{200133758682073}{7252388732160} \Delta_{3,20,1}(4z) \\
& + \left(\frac{1293555079679823827179}{31425872633397315471605760} t - \frac{79022297418680748875}{15404839526175154642944} \right) \Delta_{3,20,2}(2z) \\
& + \left(\frac{319490522126201659171423}{15712936316698657735802880} t + \frac{64280064683616063337015}{1925604940771894330368} \right) \Delta_{3,20,2}(4z)
\end{aligned}$$

$$\begin{aligned}
& + \left(\frac{17\,782\,623\,314\,312\,561\,880\,349}{748\,235\,062\,699\,936\,082\,657\,280} - \frac{1293\,555\,079\,679\,823\,827\,179}{31\,425\,872\,633\,397\,315\,471\,605\,760} t \right) \Delta_{3,20,3}(2z) \\
& + \left(\frac{17\,828\,754\,151\,211\,920\,037\,342\,413}{374\,117\,531\,349\,968\,041\,328\,640} - \frac{319\,490\,522\,126\,201\,659\,171\,423}{15\,712\,936\,316\,698\,657\,735\,802\,880} t \right) \Delta_{3,20,3}(4z) \\
& - \frac{76\,161\,729\,751}{1057\,898\,299\,392} \Delta_{6,20,1}(2z) + \frac{44\,140\,968\,523}{2467\,664\,953\,344} \Delta_{6,20,2}(2z) \\
& + \frac{9112\,968\,275\,939}{188\,747\,990\,138\,880} \Delta_{6,20,3}(2z) - \frac{1445\,620\,951}{34\,935\,104\,604\,414\,541\,824\,000} E_{20}(2z) \\
& + \frac{4236\,326\,972\,638\,853}{104\,805\,313\,813\,243\,625\,472\,000} E_{20}(4z) + \frac{344\,941\,997\,180\,708\,251}{34\,935\,104\,604\,414\,541\,824\,000} E_{20}(6z) \\
& - \frac{1039\,062\,314\,177\,900\,753}{104\,805\,313\,813\,243\,625\,472\,000} E_{20}(12z),
\end{aligned}$$

$$\begin{aligned}
f_{30} = & \frac{301}{64\,433\,232} \Delta_{1,20}(2z) - \frac{21\,392}{261\,760\,005} \Delta_{1,20}(4z) - \frac{649\,539}{3977\,360} \Delta_{1,20}(6z) \\
& - \frac{236\,550\,294}{3231\,605} \Delta_{1,20}(12z) - \frac{1807}{752\,613\,120} \Delta_{2,20,1}(2z) - \frac{1712\,421}{37\,166\,080} \Delta_{2,20,1}(6z) \\
& - \frac{410\,161}{333\,512\,113\,920} \Delta_{2,20,2}(2z) - \frac{33\,638\,620\,977}{444\,682\,818\,560} \Delta_{2,20,2}(6z) - \frac{1}{585} \Delta_{3,20,1}(4z) \\
& + \left(\frac{1011\,769}{440\,073\,223\,584\,960} t + \frac{555\,575}{862\,888\,673\,696} \right) \Delta_{3,20,2}(2z) + \left(\frac{302\,777\,840}{242\,687\,439\,477} \right. \\
& \left. - \frac{100\,940\,264}{61\,885\,297\,066\,635} t \right) \Delta_{3,20,2}(4z) + \left(\frac{1478\,579}{654\,870\,868\,430} \right. \\
& \left. - \frac{1011\,769}{440\,073\,223\,584\,960} t \right) \Delta_{3,20,3}(2z) + \left(\frac{100\,940\,264}{61\,885\,297\,066\,635} t \right. \\
& \left. + \frac{302\,299\,232}{2946\,918\,907\,935} \right) \Delta_{3,20,3}(4z) - \frac{1}{624\,640} \Delta_{6,20,1}(2z) - \frac{47}{35\,260\,416} \Delta_{6,20,2}(2z) \\
& - \frac{17}{16\,856\,352} \Delta_{6,20,3}(2z),
\end{aligned}$$

$$\begin{aligned}
f_{31} = & - \frac{28\,021}{167\,526\,403\,200} \Delta_{1,20}(2z) + \frac{346\,208}{1308\,800\,025} \Delta_{1,20}(4z) \\
& - \frac{3833\,811}{2068\,227\,200} \Delta_{1,20}(6z) - \frac{194\,765\,472}{16\,158\,025} \Delta_{1,20}(12z) + \frac{1339}{3763\,065\,600} \Delta_{2,20,1}(2z) \\
& + \frac{802\,629}{46\,457\,600} \Delta_{2,20,1}(6z) + \frac{4917}{111\,170\,704\,640} \Delta_{2,20,2}(2z) + \frac{613\,341\,963}{111\,170\,704\,640} \Delta_{2,20,2}(6z) \\
& - \frac{23}{74\,131\,200} \Delta_{3,20,1}(2z) - \frac{128}{289\,575} \Delta_{3,20,1}(4z) + \left(\frac{29\,271\,899}{142\,583\,724\,441\,527\,040} t \right. \\
& \left. - \frac{62\,815\,195}{279\,575\,930\,277\,504} \right) \Delta_{3,20,2}(2z) + \left(\frac{626\,289\,064}{2184\,186\,955\,293} \right. \\
& \left. - \frac{280\,849\,684}{556\,967\,673\,599\,715} t \right) \Delta_{3,20,2}(4z) - \left(\frac{29\,271\,899}{142\,583\,724\,441\,527\,040} t \right.
\end{aligned}$$

$$\begin{aligned}
& + \frac{8546783}{106089080685660} \Delta_{3,20,3}(2z) + \left(\frac{280849684}{556967673599715} t \right. \\
& - \frac{1783465088}{26522270171415} \Delta_{3,20,3}(4z) + \frac{13}{231897600} \Delta_{6,20,1}(2z) \\
& \left. + \frac{25}{79335936} \Delta_{6,20,2}(2z) + \frac{7}{606828672} \Delta_{6,20,3}(2z) \right),
\end{aligned}$$

$$\begin{aligned}
f_{32} = & - \frac{1337}{261760005} \Delta_{1,20}(2z) + \frac{1232896}{4027077} \Delta_{1,20}(4z) - \frac{118275147}{25852840} \Delta_{1,20}(6z) \\
& - \frac{2660511744}{248585} \Delta_{1,20}(12z) + \frac{1807}{11759580} \Delta_{2,20,1}(2z) + \frac{1712421}{580720} \Delta_{2,20,1}(6z) \\
& - \frac{410161}{5211126780} \Delta_{2,20,2}(2z) - \frac{33638620977}{6948169040} \Delta_{2,20,2}(6z) - \frac{1}{9360} \Delta_{3,20,1}(2z) \\
& + \left(\frac{18923615}{242687439477} - \frac{12617533}{123770594133270} t \right) \Delta_{3,20,2}(2z) + \left(\frac{1036051456}{6876144118515} t \right. \\
& + \frac{1137817600}{26965271053} \Delta_{3,20,2}(4z) + \left(\frac{12617533}{123770594133270} t \right. \\
& + \frac{18893702}{2946918907935} \Delta_{3,20,3}(2z) + \left(\frac{48450076672}{327435434215} \right. \\
& - \frac{1036051456}{6876144118515} t \Delta_{3,20,3}(4z) + \frac{1}{9760} \Delta_{6,20,1}(2z) - \frac{47}{550944} \Delta_{6,20,2}(2z) \\
& \left. - \frac{34}{526761} \Delta_{6,20,3}(2z) \right),
\end{aligned}$$

$$\begin{aligned}
f_{33} = & - \frac{3505549}{4295548800} \Delta_{1,20}(2z) + \frac{2190451567}{872533350} \Delta_{1,20}(4z) + \frac{4912109163}{159094400} \Delta_{1,20}(6z) \\
& - \frac{3058904777229}{32316050} \Delta_{1,20}(12z) - \frac{9149843}{5017420800} \Delta_{2,20,1}(2z) \\
& - \frac{3391125021}{46457600} \Delta_{2,20,1}(6z) + \frac{673369943}{444682818560} \Delta_{2,20,2}(2z) \\
& + \frac{1718984709693}{111170704640} \Delta_{2,20,2}(6z) + \frac{79}{70400} \Delta_{3,20,1}(2z) + \frac{23443}{14300} \Delta_{3,20,1}(4z) \\
& + \left(\frac{5456547853}{3520585788679680} t - \frac{6190657373}{6903109389568} \right) \Delta_{3,20,2}(2z) + \left(\frac{3422794357}{13752288237030} t \right. \\
& + \frac{45378974899}{26965271053} \Delta_{3,20,2}(4z) + \left(\frac{1001876983}{5238966947440} - \frac{5456547853}{3520585788679680} t \right) \Delta_{3,20,3}(2z) \\
& + \left(\frac{608239972312}{327435434215} - \frac{3422794357}{13752288237030} t \right) \Delta_{3,20,3}(4z) - \frac{279531}{137420800} \Delta_{6,20,1}(2z) \\
& + \frac{19573}{15671296} \Delta_{6,20,2}(2z) + \frac{22385}{14983424} \Delta_{6,20,3}(2z),
\end{aligned}$$

$$f_{34} = \frac{2190451567}{13960533600} \Delta_{1,20}(2z) - \frac{1794841088}{33558975} \Delta_{1,20}(4z) - \frac{3058904777229}{517056800} \Delta_{1,20}(6z)$$

$$\begin{aligned}
& + \frac{2514999891456}{1242925} \Delta_{1,20}(12z) + \frac{9149843}{78397200} \Delta_{2,20,1}(2z) + \frac{3391125021}{725900} \Delta_{2,20,1}(6z) \\
& + \frac{673369943}{6948169040} \Delta_{2,20,2}(2z) + \frac{1718984709693}{1737042260} \Delta_{2,20,2}(6z) + \frac{23443}{228800} \Delta_{3,20,1}(2z) \\
& + \frac{20224}{275} \Delta_{3,20,1}(4z) \left(\frac{3422794357}{220036611792480} t + \frac{45378974899}{431444336848} \right) \Delta_{3,20,2}(2z) \\
& + \left(\frac{698438125184}{6876144118515} t - \frac{1584808287488}{26965271053} \right) \Delta_{3,20,2}(4z) + \left(\frac{76029996539}{654870868430} \right. \\
& - \frac{3422794357}{220036611792480} t \left. \right) \Delta_{3,20,3}(2z) + \left(\frac{4103688122368}{327435434215} \right. \\
& - \frac{698438125184}{6876144118515} t \left. \right) \Delta_{3,20,3}(4z) + \frac{279531}{2147200} \Delta_{6,20,1}(2z) + \frac{19573}{244864} \Delta_{6,20,2}(2z) \\
& + \frac{22385}{234116} \Delta_{6,20,3}(2z),
\end{aligned}$$

$$\begin{aligned}
f_{35} = & - \frac{106963861575094603}{2340156223132416} \Delta_{1,20}(2z) + \frac{24611729644058189069}{292519527891552} \Delta_{1,20}(4z) \\
& + \frac{127457288571796162013}{43336226354304} \Delta_{1,20}(6z) - \frac{4686667568391236799361}{1354257073572} \Delta_{1,20}(12z) \\
& - \frac{28777651727}{666600192} \Delta_{2,20,1}(2z) - \frac{44218241866997}{49377792} \Delta_{2,20,1}(6z) \\
& + \frac{452070348975198583}{9968343572954880} \Delta_{2,20,2}(2z) + \frac{10869555768395125456273}{6645562381969920} \Delta_{2,20,2}(6z) \\
& + \frac{1351829117257}{131861613312} \Delta_{3,20,1}(2z) + \frac{15406400616787}{515084427} \Delta_{3,20,1}(4z) \\
& + \left(\frac{453053812669182400843}{8768379641014875968640} t - \frac{209522299199879292865}{34385802513783827328} \right) \Delta_{3,20,2}(2z) \\
& + \left(\frac{225604074541553015014357}{8768379641014875968640} t + \frac{44995490708510822597245}{1074556328555744604} \right) \Delta_{3,20,2}(4z) \\
& + \left(\frac{88205196732598941903737}{2922793213671625322880} - \frac{453053812669182400843}{8768379641014875968640} t \right) \Delta_{3,20,3}(2z) \\
& + \left(\frac{87589544084936421488932969}{1461396606835812661440} - \frac{225604074541553015014357}{8768379641014875968640} t \right) \Delta_{3,20,3}(4z) \\
& - \frac{1375179407}{13913856} \Delta_{6,20,1}(2z) + \frac{253291551115}{14458974336} \Delta_{6,20,2}(2z) + \frac{167297707623041}{2764863136800} \Delta_{6,20,3}(2z) \\
& - \frac{11476538671}{186088980492264960000} E_{20}(2z) + \frac{11272232190580271}{186088980492264960000} E_{20}(4z) \\
& + \frac{1266481397574377723}{93044490246132480000} E_{20}(6z) - \frac{1272117507931398523}{93044490246132480000} E_{20}(12z).
\end{aligned}$$