

小部分反正切公式

Abel 收集整理

2022 年 9 月 24 日

$$\frac{\pi}{4} = \arctan 1$$

$$\frac{\pi}{4} = 4 \arctan \frac{1}{5} - \arctan \frac{1}{239}$$

$$\frac{\pi}{4} = 2 \arctan \frac{1}{3} + \arctan \frac{1}{7}$$

$$\frac{\pi}{4} = \arctan \frac{1}{2} + \arctan \frac{1}{3}$$

$$\frac{\pi}{4} = 12 \arctan \frac{1}{18} + 8 \arctan \frac{1}{57} - 5 \arctan \frac{1}{239}$$

$$\frac{\pi}{4} = 8 \arctan \frac{1}{10} - \arctan \frac{1}{239} - 4 \arctan \frac{1}{515}$$

$$\frac{\pi}{4} = 5 \arctan \frac{1}{7} + 4 \arctan \frac{1}{68} + 2 \arctan \frac{1}{117}$$

$$\frac{\pi}{4} = 5 \arctan \frac{1}{7} + 4 \arctan \frac{1}{53} + 2 \arctan \frac{1}{4443}$$

$$\frac{\pi}{4} = 5 \arctan \frac{1}{7} + 2 \arctan \frac{1}{28} + 2 \arctan \frac{1}{443}$$

$$\frac{\pi}{4} = 5 \arctan \frac{1}{7} + 2 \arctan \frac{1}{27} + 2 \arctan \frac{1}{1068}$$

$$\frac{\pi}{4} = 5 \arctan \frac{1}{7} + 2 \arctan \frac{1}{26} - 2 \arctan \frac{1}{2057}$$

$$\frac{\pi}{4} = 5 \arctan \frac{1}{7} + 2 \arctan \frac{1}{23} - 2 \arctan \frac{1}{182}$$

$$\frac{\pi}{4} = 3 \arctan \frac{1}{7} + 4 \arctan \frac{1}{13} + 2 \arctan \frac{1}{38}$$

$$\frac{\pi}{4} = 3 \arctan \frac{1}{7} + 4 \arctan \frac{1}{11} - 2 \arctan \frac{1}{682}$$

$$\frac{\pi}{4} = 4 \arctan \frac{1}{6} + 4 \arctan \frac{1}{31} - \arctan \frac{1}{239}$$

$$\frac{\pi}{4} = 44 \arctan \frac{1}{57} + 7 \arctan \frac{1}{239} - 12 \arctan \frac{1}{682} + 24 \arctan \frac{1}{12943}$$

$$\frac{\pi}{4} = 20 \arctan \frac{1}{57} + 24 \arctan \frac{1}{68} + 12 \arctan \frac{1}{117} - 5 \arctan \frac{1}{239}$$

$$\frac{\pi}{4} = 24 \arctan \frac{1}{53} + 20 \arctan \frac{1}{57} - 5 \arctan \frac{1}{239} + 12 \arctan \frac{1}{4443}$$

$$\frac{\pi}{4} = 12 \arctan \frac{1}{38} + 20 \arctan \frac{1}{57} + 7 \arctan \frac{1}{239} + 24 \arctan \frac{1}{268}$$

$$\frac{\pi}{4} = 24 \arctan \frac{1}{29} - 4 \arctan \frac{1}{57} + 7 \arctan \frac{1}{239} - 12 \arctan \frac{1}{12238}$$

$$\frac{\pi}{4} = 22 \arctan \frac{1}{28} + 2 \arctan \frac{1}{443} - 5 \arctan \frac{1}{1393} - 10 \arctan \frac{1}{11018}$$

$$\frac{\pi}{4} = 12 \arctan \frac{1}{28} + 20 \arctan \frac{1}{57} - 5 \arctan \frac{1}{239} + 12 \arctan \frac{1}{443}$$

$$\frac{\pi}{4} = 12 \arctan \frac{1}{27} + 20 \arctan \frac{1}{57} - 5 \arctan \frac{1}{239} + 12 \arctan \frac{1}{1068}$$

$$\frac{\pi}{4} = 12 \arctan \frac{1}{27} + 5 \arctan \frac{1}{41} + 10 \arctan \frac{1}{46} + 2 \arctan \frac{1}{1068}$$

$$\frac{\pi}{4} = 17 \arctan \frac{1}{27} + 5 \arctan \frac{1}{38} + 10 \arctan \frac{1}{557} + 7 \arctan \frac{1}{1068}$$

$$\frac{\pi}{4} = 12 \arctan \frac{1}{26} + 20 \arctan \frac{1}{57} - 5 \arctan \frac{1}{239} - 12 \arctan \frac{1}{2057}$$

$$\frac{\pi}{4} = 17 \arctan \frac{1}{26} + 5 \arctan \frac{1}{38} + 3 \arctan \frac{1}{2682} - 7 \arctan \frac{1}{8827}$$

$$\frac{\pi}{4} = 17 \arctan \frac{1}{23} + 8 \arctan \frac{1}{182} + 10 \arctan \frac{1}{5118} + 5 \arctan \frac{1}{6072}$$

$$\frac{\pi}{4} = 12 \arctan \frac{1}{23} + 20 \arctan \frac{1}{83} + 8 \arctan \frac{1}{182} - 5 \arctan \frac{1}{239}$$

$$\frac{\pi}{4} = 7 \arctan \frac{1}{23} + 10 \arctan \frac{1}{30} + 5 \arctan \frac{1}{38} + 3 \arctan \frac{1}{182}$$

$$\frac{\pi}{4} = 17 \arctan \frac{1}{22} + 3 \arctan \frac{1}{172} - 2 \arctan \frac{1}{682} - 7 \arctan \frac{1}{5357}$$

$$\frac{\pi}{4} = 10 \arctan \frac{1}{22} + 7 \arctan \frac{1}{41} + 12 \arctan \frac{1}{75} + 2 \arctan \frac{1}{4193}$$

$$\frac{\pi}{4} = 16 \arctan \frac{1}{21} + 7 \arctan \frac{1}{239} - 4 \arctan \frac{1}{616} + 4 \arctan \frac{1}{3141}$$

$$\frac{\pi}{4} = 16 \arctan \frac{1}{21} + 3 \arctan \frac{1}{239} + 4 \arctan \frac{1}{421} + 4 \arctan \frac{1}{1985}$$

$$\frac{\pi}{4} = 16 \arctan \frac{1}{21} + 3 \arctan \frac{1}{239} + 4 \arctan \frac{1}{251} - 4 \arctan \frac{1}{905}$$

$$\frac{\pi}{4} = 16 \arctan \frac{1}{20} - \arctan \frac{1}{239} - 4 \arctan \frac{1}{515} - 8 \arctan \frac{1}{4030}$$

$$\frac{\pi}{4} = 12 \arctan \frac{1}{19} + 8 \arctan \frac{1}{57} - 5 \arctan \frac{1}{239} + 12 \arctan \frac{1}{343}$$

$$\frac{\pi}{4} = 10 \arctan \frac{1}{19} + 7 \arctan \frac{1}{27} + 2 \arctan \frac{1}{1068} - 5 \arctan \frac{1}{3458}$$

$$\frac{\pi}{4} = 12 \arctan \frac{1}{18} + 8 \arctan \frac{1}{109} + 11 \arctan \frac{1}{239} - 8 \arctan \frac{1}{6826318}$$

$$\frac{\pi}{4} = 12 \arctan \frac{1}{18} + 8 \arctan \frac{1}{107} + 8 \arctan \frac{1}{122} - 5 \arctan \frac{1}{239}$$

$$\frac{\pi}{4} = 12 \arctan \frac{1}{18} + 8 \arctan \frac{1}{99} + 3 \arctan \frac{1}{239} + 8 \arctan \frac{1}{307}$$

$$\frac{\pi}{4} = 12 \arctan \frac{1}{18} + 8 \arctan \frac{1}{82} + 8 \arctan \frac{1}{187} - 5 \arctan \frac{1}{239}$$

$$\frac{\pi}{4} = 12 \arctan \frac{1}{18} + 8 \arctan \frac{1}{73} + 3 \arctan \frac{1}{239} - 8 \arctan \frac{1}{2943}$$

$$\frac{\pi}{4} = 12 \arctan \frac{1}{18} + 8 \arctan \frac{1}{67} - 5 \arctan \frac{1}{239} + 8 \arctan \frac{1}{382}$$

$$\frac{\pi}{4} = 12 \arctan \frac{1}{18} + 8 \arctan \frac{1}{58} - 5 \arctan \frac{1}{239} + 8 \arctan \frac{1}{3307}$$

$$\frac{\pi}{4} = 12 \arctan \frac{1}{18} + 8 \arctan \frac{1}{57} - 10 \arctan \frac{1}{577} - 5 \arctan \frac{1}{1393}$$

$$\begin{aligned}\frac{\pi}{4} &= 88 \arctan \frac{1}{192} + 39 \arctan \frac{1}{239} + 100 \arctan \frac{1}{515} \\ &\quad - 32 \arctan \frac{1}{1068} - 56 \arctan \frac{1}{173932}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 88 \arctan \frac{1}{172} + 51 \arctan \frac{1}{239} + 32 \arctan \frac{1}{682} \\ &\quad + 44 \arctan \frac{1}{5357} + 68 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 88 \arctan \frac{1}{111} + 7 \arctan \frac{1}{239} - 44 \arctan \frac{1}{515} \\ &\quad + 32 \arctan \frac{1}{682} + 24 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 44 \arctan \frac{1}{109} + 95 \arctan \frac{1}{239} - 12 \arctan \frac{1}{682} \\ &\quad + 24 \arctan \frac{1}{12943} - 44 \arctan \frac{1}{6826318}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 44 \arctan \frac{1}{107} + 44 \arctan \frac{1}{122} + 7 \arctan \frac{1}{239} \\ &\quad - 12 \arctan \frac{1}{682} + 24 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 44 \arctan \frac{1}{105} + 32 \arctan \frac{1}{117} + 24 \arctan \frac{1}{193} \\ &\quad - 5 \arctan \frac{1}{239} - 20 \arctan \frac{1}{1893}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 68 \arctan \frac{1}{99} + 27 \arctan \frac{1}{239} - 4 \arctan \frac{1}{307} \\ &\quad - 12 \arctan \frac{1}{12238} - 24 \arctan \frac{1}{58911}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 56 \arctan \frac{1}{99} + 27 \arctan \frac{1}{239} + 32 \arctan \frac{1}{307} \\ &\quad + 12 \arctan \frac{1}{4193} - 12 \arctan \frac{1}{39307}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 56 \arctan \frac{1}{99} + 39 \arctan \frac{1}{239} + 20 \arctan \frac{1}{307} \\ &\quad - 24 \arctan \frac{1}{2332} + 12 \arctan \frac{1}{6948}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 44 \arctan \frac{1}{99} + 51 \arctan \frac{1}{239} + 44 \arctan \frac{1}{307} \\ &\quad - 12 \arctan \frac{1}{682} + 24 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 56 \arctan \frac{1}{99} + 27 \arctan \frac{1}{239} + 20 \arctan \frac{1}{307} \\ &\quad + 24 \arctan \frac{1}{568} - 12 \arctan \frac{1}{19703}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 56 \arctan \frac{1}{99} + 39 \arctan \frac{1}{239} + 8 \arctan \frac{1}{307} \\ &\quad + 12 \arctan \frac{1}{515} + 24 \arctan \frac{1}{3323}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 44 \arctan \frac{1}{99} + 24 \arctan \frac{1}{193} + 27 \arctan \frac{1}{239} \\ &\quad + 32 \arctan \frac{1}{307} - 12 \arctan \frac{1}{20457}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 56 \arctan \frac{1}{99} + 12 \arctan \frac{1}{148} + 27 \arctan \frac{1}{239} \\ &\quad + 8 \arctan \frac{1}{307} - 12 \arctan \frac{1}{34522}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 68 \arctan \frac{1}{99} - 12 \arctan \frac{1}{117} + 39 \arctan \frac{1}{239} \\ &\quad + 20 \arctan \frac{1}{307} - 24 \arctan \frac{1}{882}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 322 \arctan \frac{1}{577} + 76 \arctan \frac{1}{682} + 139 \arctan \frac{1}{1393} \\ &\quad + 156 \arctan \frac{1}{12943} + 132 \arctan \frac{1}{32807} + 44 \arctan \frac{1}{1049433}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 122 \arctan \frac{1}{319} + 61 \arctan \frac{1}{378} + 115 \arctan \frac{1}{557} \\ &\quad + 29 \arctan \frac{1}{1068} + 22 \arctan \frac{1}{3458} + 44 \arctan \frac{1}{27493}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 100 \arctan \frac{1}{319} + 127 \arctan \frac{1}{378} + 71 \arctan \frac{1}{557} \\ &\quad - 15 \arctan \frac{1}{1068} + 66 \arctan \frac{1}{2943} + 44 \arctan \frac{1}{478707}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 337 \arctan \frac{1}{307} - 193 \arctan \frac{1}{463} + 151 \arctan \frac{1}{4193} \\ &\quad + 305 \arctan \frac{1}{4246} - 122 \arctan \frac{1}{39307} - 83 \arctan \frac{1}{390112}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 183 \arctan \frac{1}{268} + 32 \arctan \frac{1}{682} + 95 \arctan \frac{1}{1568} \\ &\quad + 44 \arctan \frac{1}{4662} - 166 \arctan \frac{1}{12943} - 51 \arctan \frac{1}{32807}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 183 \arctan \frac{1}{268} + 32 \arctan \frac{1}{682} + 95 \arctan \frac{1}{1483} \\ &\quad - 7 \arctan \frac{1}{9932} - 122 \arctan \frac{1}{12943} + 51 \arctan \frac{1}{29718}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 29 \arctan \frac{1}{268} + 269 \arctan \frac{1}{463} + 154 \arctan \frac{1}{2059} \\ &\quad + 122 \arctan \frac{1}{2943} - 186 \arctan \frac{1}{9193} + 71 \arctan \frac{1}{390112}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 241 \arctan \frac{1}{268} - 65 \arctan \frac{1}{463} + 32 \arctan \frac{1}{682} \\ &\quad - 58 \arctan \frac{1}{5357} - 122 \arctan \frac{1}{12943} - 51 \arctan \frac{1}{390112}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 100 \arctan \frac{1}{268} + 127 \arctan \frac{1}{378} + 27 \arctan \frac{1}{1526} \\ &\quad + 71 \arctan \frac{1}{2072} + 51 \arctan \frac{1}{2943} + 115 \arctan \frac{1}{16432}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 100 \arctan \frac{1}{268} + 83 \arctan \frac{1}{378} + 44 \arctan \frac{1}{905} \\ &\quad + 115 \arctan \frac{1}{1057} + 51 \arctan \frac{1}{2943} + 71 \arctan \frac{1}{3957}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 100 \arctan \frac{1}{268} + 83 \arctan \frac{1}{378} + 159 \arctan \frac{1}{837} \\ &\quad + 7 \arctan \frac{1}{2943} + 71 \arctan \frac{1}{247057} + 44 \arctan \frac{1}{740943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 176 \arctan \frac{1}{268} + 7 \arctan \frac{1}{343} + 83 \arctan \frac{1}{743} \\ &\quad + 32 \arctan \frac{1}{8307} - 115 \arctan \frac{1}{12943} + 44 \arctan \frac{1}{27493}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 61 \arctan \frac{1}{268} + 122 \arctan \frac{1}{343} + 115 \arctan \frac{1}{557} \\ &\quad - 32 \arctan \frac{1}{1068} + 83 \arctan \frac{1}{3458} + 44 \arctan \frac{1}{27493}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 100 \arctan \frac{1}{268} + 115 \arctan \frac{1}{327} + 51 \arctan \frac{1}{746} \\ &\quad + 12 \arctan \frac{1}{1568} - 71 \arctan \frac{1}{4662} - 32 \arctan \frac{1}{157318}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 68 \arctan \frac{1}{268} + 115 \arctan \frac{1}{307} + 32 \arctan \frac{1}{447} \\ &\quad + 95 \arctan \frac{1}{1143} + 51 \arctan \frac{1}{34208} + 39 \arctan \frac{1}{44179}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 127 \arctan \frac{1}{265} + 100 \arctan \frac{1}{515} + 88 \arctan \frac{1}{697} \\ &\quad - 32 \arctan \frac{1}{1068} + 39 \arctan \frac{1}{2436} - 56 \arctan \frac{1}{173932}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{265} + 100 \arctan \frac{1}{268} + 44 \arctan \frac{1}{327} \\ &\quad - 12 \arctan \frac{1}{557} - 32 \arctan \frac{1}{1068} + 39 \arctan \frac{1}{2436}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 227 \arctan \frac{1}{255} - 100 \arctan \frac{1}{682} + 44 \arctan \frac{1}{2072} \\ &\quad + 51 \arctan \frac{1}{2943} - 27 \arctan \frac{1}{12943} + 88 \arctan \frac{1}{16432}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 227 \arctan \frac{1}{255} - 56 \arctan \frac{1}{682} - 88 \arctan \frac{1}{2059} \\ &\quad + 51 \arctan \frac{1}{2943} + 44 \arctan \frac{1}{5357} - 71 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 183 \arctan \frac{1}{255} + 88 \arctan \frac{1}{606} - 56 \arctan \frac{1}{682} \\ &\quad + 51 \arctan \frac{1}{2943} - 44 \arctan \frac{1}{6118} - 71 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 183 \arctan \frac{1}{255} + 44 \arctan \frac{1}{515} - 56 \arctan \frac{1}{682} \\ &\quad + 88 \arctan \frac{1}{1303} + 7 \arctan \frac{1}{2943} - 71 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 127 \arctan \frac{1}{241} + 100 \arctan \frac{1}{437} + 44 \arctan \frac{1}{2072} \\ &\quad + 24 \arctan \frac{1}{2943} - 12 \arctan \frac{1}{16432} + 27 \arctan \frac{1}{28800}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 127 \arctan \frac{1}{241} + 100 \arctan \frac{1}{437} - 12 \arctan \frac{1}{776} \\ &\quad + 24 \arctan \frac{1}{1068} + 44 \arctan \frac{1}{2072} + 39 \arctan \frac{1}{28800}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 139 \arctan \frac{1}{241} + 88 \arctan \frac{1}{437} - 12 \arctan \frac{1}{682} \\ &\quad + 44 \arctan \frac{1}{2072} + 24 \arctan \frac{1}{12943} + 51 \arctan \frac{1}{28800}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 127 \arctan \frac{1}{239} + 68 \arctan \frac{1}{1068} + 232 \arctan \frac{1}{1282} \\ &\quad + 44 \arctan \frac{1}{2309} - 88 \arctan \frac{1}{4005} + 56 \arctan \frac{1}{4553}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 171 \arctan \frac{1}{239} + 68 \arctan \frac{1}{993} - 44 \arctan \frac{1}{2633} \\ &\quad + 24 \arctan \frac{1}{2943} + 56 \arctan \frac{1}{5593} - 100 \arctan \frac{1}{6826318}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 127 \arctan \frac{1}{239} + 200 \arctan \frac{1}{818} + 144 \arctan \frac{1}{1303} \\ &\quad - 276 \arctan \frac{1}{2943} - 44 \arctan \frac{1}{6118} - 56 \arctan \frac{1}{3014557}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 139 \arctan \frac{1}{239} + 120 \arctan \frac{1}{682} + 44 \arctan \frac{1}{5357} \\ &\quad + 156 \arctan \frac{1}{12943} + 88 \arctan \frac{1}{17923} + 88 \arctan \frac{1}{32807}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 139 \arctan \frac{1}{239} + 120 \arctan \frac{1}{682} + 132 \arctan \frac{1}{5357} \\ &\quad - 88 \arctan \frac{1}{5604} + 244 \arctan \frac{1}{12943} + 176 \arctan \frac{1}{2544482}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 139 \arctan \frac{1}{239} + 76 \arctan \frac{1}{682} + 88 \arctan \frac{1}{1087} \\ &\quad + 112 \arctan \frac{1}{12943} + 88 \arctan \frac{1}{32807} + 44 \arctan \frac{1}{534568}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 139 \arctan \frac{1}{239} + 32 \arctan \frac{1}{682} + 176 \arctan \frac{1}{1087} \\ &\quad - 44 \arctan \frac{1}{5357} + 68 \arctan \frac{1}{12943} - 88 \arctan \frac{1}{42658}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 183 \arctan \frac{1}{239} - 12 \arctan \frac{1}{682} + 44 \arctan \frac{1}{1023} \\ &\quad - 44 \arctan \frac{1}{5832} + 24 \arctan \frac{1}{12943} - 88 \arctan \frac{1}{6826318}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 95 \arctan \frac{1}{239} + 76 \arctan \frac{1}{682} + 176 \arctan \frac{1}{882} \\ &\quad + 220 \arctan \frac{1}{2917} - 132 \arctan \frac{1}{9466} + 200 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 95 \arctan \frac{1}{239} + 176 \arctan \frac{1}{660} + 76 \arctan \frac{1}{682} \\ &\quad + 44 \arctan \frac{1}{2621} + 24 \arctan \frac{1}{12943} - 132 \arctan \frac{1}{14942}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 127 \arctan \frac{1}{239} + 144 \arctan \frac{1}{606} + 36 \arctan \frac{1}{5118} \\ &\quad + 56 \arctan \frac{1}{6072} - 8 \arctan \frac{1}{6118} + 76 \arctan \frac{1}{52489}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 127 \arctan \frac{1}{239} + 200 \arctan \frac{1}{606} - 56 \arctan \frac{1}{2072} \\ &\quad - 76 \arctan \frac{1}{2943} - 100 \arctan \frac{1}{6118} - 112 \arctan \frac{1}{16432}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 139 \arctan \frac{1}{239} + 44 \arctan \frac{1}{568} + 76 \arctan \frac{1}{682} \\ &\quad + 112 \arctan \frac{1}{12943} + 44 \arctan \frac{1}{19703} + 132 \arctan \frac{1}{32807}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 132 \arctan \frac{1}{557} + 68 \arctan \frac{1}{1068} \\ &\quad + 144 \arctan \frac{1}{1113} + 100 \arctan \frac{1}{9882} - 44 \arctan \frac{1}{21637}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 39 \arctan \frac{1}{239} + 176 \arctan \frac{1}{557} + 188 \arctan \frac{1}{616} \\ &\quad - 32 \arctan \frac{1}{1068} + 100 \arctan \frac{1}{3141} - 144 \arctan \frac{1}{173932}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 127 \arctan \frac{1}{239} + 100 \arctan \frac{1}{515} + 200 \arctan \frac{1}{1303} \\ &\quad - 56 \arctan \frac{1}{2072} - 176 \arctan \frac{1}{2943} - 112 \arctan \frac{1}{16432}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 127 \arctan \frac{1}{239} + 188 \arctan \frac{1}{515} - 120 \arctan \frac{1}{1068} \\ &\quad + 88 \arctan \frac{1}{41218} - 144 \arctan \frac{1}{173932} + 88 \arctan \frac{1}{3539232}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 127 \arctan \frac{1}{239} + 188 \arctan \frac{1}{515} - 120 \arctan \frac{1}{1068} \\ &\quad + 88 \arctan \frac{1}{37057} - 144 \arctan \frac{1}{173932} - 88 \arctan \frac{1}{409557}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 127 \arctan \frac{1}{239} + 188 \arctan \frac{1}{515} - 120 \arctan \frac{1}{1068} \\ &\quad + 88 \arctan \frac{1}{6105} - 88 \arctan \frac{1}{7181} - 144 \arctan \frac{1}{173932}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 127 \arctan \frac{1}{239} + 100 \arctan \frac{1}{515} + 56 \arctan \frac{1}{1068} \\ &\quad + 88 \arctan \frac{1}{1303} - 176 \arctan \frac{1}{2943} - 56 \arctan \frac{1}{173932}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 183 \arctan \frac{1}{239} + 44 \arctan \frac{1}{515} - 56 \arctan \frac{1}{682} \\ &\quad + 88 \arctan \frac{1}{6050} + 24 \arctan \frac{1}{12943} - 88 \arctan \frac{1}{6826318}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 183 \arctan \frac{1}{239} - 44 \arctan \frac{1}{515} + 32 \arctan \frac{1}{682} \\ &\quad + 88 \arctan \frac{1}{2057} + 200 \arctan \frac{1}{12943} - 88 \arctan \frac{1}{18107068}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 95 \arctan \frac{1}{239} + 44 \arctan \frac{1}{515} + 32 \arctan \frac{1}{682} \\ &\quad + 176 \arctan \frac{1}{782} + 88 \arctan \frac{1}{4030} + 112 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 95 \arctan \frac{1}{239} + 44 \arctan \frac{1}{515} + 32 \arctan \frac{1}{682} \\ &\quad + 176 \arctan \frac{1}{697} + 24 \arctan \frac{1}{12943} + 88 \arctan \frac{1}{74043}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 183 \arctan \frac{1}{239} - 44 \arctan \frac{1}{500} + 76 \arctan \frac{1}{682} \\ &\quad - 88 \arctan \frac{1}{3793} + 200 \arctan \frac{1}{12943} + 132 \arctan \frac{1}{32807}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 220 \arctan \frac{1}{477} + 76 \arctan \frac{1}{682} \\ &\quad + 44 \arctan \frac{1}{5118} - 88 \arctan \frac{1}{6072} + 68 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 95 \arctan \frac{1}{239} + 132 \arctan \frac{1}{437} - 12 \arctan \frac{1}{682} \\ &\quad + 88 \arctan \frac{1}{1032} + 44 \arctan \frac{1}{3405} + 68 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 144 \arctan \frac{1}{437} + 44 \arctan \frac{1}{580} \\ &\quad - 12 \arctan \frac{1}{776} + 24 \arctan \frac{1}{1068} + 44 \arctan \frac{1}{1710}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 95 \arctan \frac{1}{239} + 132 \arctan \frac{1}{437} + 44 \arctan \frac{1}{580} \\ &\quad - 12 \arctan \frac{1}{682} + 44 \arctan \frac{1}{1710} + 24 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 132 \arctan \frac{1}{421} + 32 \arctan \frac{1}{682} \\ &\quad + 176 \arctan \frac{1}{782} - 44 \arctan \frac{1}{1985} + 112 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 71 \arctan \frac{1}{239} + 112 \arctan \frac{1}{378} + 44 \arctan \frac{1}{616} \\ &\quad + 144 \arctan \frac{1}{1303} - 64 \arctan \frac{1}{2943} + 100 \arctan \frac{1}{3141}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 71 \arctan \frac{1}{239} + 112 \arctan \frac{1}{378} + 144 \arctan \frac{1}{606} \\ &\quad - 56 \arctan \frac{1}{1772} - 20 \arctan \frac{1}{2943} - 44 \arctan \frac{1}{6118}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 71 \arctan \frac{1}{239} + 12 \arctan \frac{1}{378} + 144 \arctan \frac{1}{489} \\ &\quad + 100 \arctan \frac{1}{593} - 20 \arctan \frac{1}{2943} + 44 \arctan \frac{1}{165057}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 100 \arctan \frac{1}{353} + 176 \arctan \frac{1}{1113} \\ &\quad - 44 \arctan \frac{1}{21637} - 32 \arctan \frac{1}{29193} - 32 \arctan \frac{1}{191693}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 100 \arctan \frac{1}{353} + 144 \arctan \frac{1}{1113} \\ &\quad + 64 \arctan \frac{1}{2682} + 32 \arctan \frac{1}{8827} - 44 \arctan \frac{1}{21637}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 132 \arctan \frac{1}{353} + 32 \arctan \frac{1}{682} \\ &\quad + 176 \arctan \frac{1}{1113} - 64 \arctan \frac{1}{12943} - 44 \arctan \frac{1}{21637}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 115 \arctan \frac{1}{239} + 100 \arctan \frac{1}{353} - 32 \arctan \frac{1}{378} \\ &\quad + 144 \arctan \frac{1}{1113} - 64 \arctan \frac{1}{2943} - 44 \arctan \frac{1}{21637}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 227 \arctan \frac{1}{239} - 44 \arctan \frac{1}{348} - 12 \arctan \frac{1}{682} \\ &\quad - 44 \arctan \frac{1}{1719} + 68 \arctan \frac{1}{12943} - 88 \arctan \frac{1}{6826318}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 27 \arctan \frac{1}{239} + 200 \arctan \frac{1}{307} + 68 \arctan \frac{1}{5023} \\ &\quad + 56 \arctan \frac{1}{12238} + 68 \arctan \frac{1}{32318} + 44 \arctan \frac{1}{58911}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 27 \arctan \frac{1}{239} + 200 \arctan \frac{1}{307} + 68 \arctan \frac{1}{4193} \\ &\quad + 56 \arctan \frac{1}{12238} - 68 \arctan \frac{1}{39307} + 112 \arctan \frac{1}{58911}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 95 \arctan \frac{1}{239} + 132 \arctan \frac{1}{307} - 136 \arctan \frac{1}{3307} \\ &\quad - 12 \arctan \frac{1}{12238} + 44 \arctan \frac{1}{58911} - 68 \arctan \frac{1}{97643}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 39 \arctan \frac{1}{239} + 188 \arctan \frac{1}{307} + 32 \arctan \frac{1}{2332} \\ &\quad - 44 \arctan \frac{1}{6948} + 112 \arctan \frac{1}{32318} - 56 \arctan \frac{1}{55368}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 95 \arctan \frac{1}{239} + 132 \arctan \frac{1}{307} - 136 \arctan \frac{1}{2332} \\ &\quad + 68 \arctan \frac{1}{6948} + 56 \arctan \frac{1}{12238} + 112 \arctan \frac{1}{58911}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 27 \arctan \frac{1}{239} + 200 \arctan \frac{1}{307} - 56 \arctan \frac{1}{2072} \\ &\quad + 124 \arctan \frac{1}{2943} + 100 \arctan \frac{1}{15179} - 12 \arctan \frac{1}{16432}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 95 \arctan \frac{1}{239} + 132 \arctan \frac{1}{307} - 68 \arctan \frac{1}{1537} \\ &\quad + 56 \arctan \frac{1}{8277} - 124 \arctan \frac{1}{29307} - 12 \arctan \frac{1}{34522}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 95 \arctan \frac{1}{239} + 132 \arctan \frac{1}{307} - 68 \arctan \frac{1}{1292} \\ &\quad + 56 \arctan \frac{1}{12238} + 68 \arctan \frac{1}{12943} + 44 \arctan \frac{1}{58911}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 88 \arctan \frac{1}{307} + 68 \arctan \frac{1}{1068} \\ &\quad + 100 \arctan \frac{1}{1282} + 56 \arctan \frac{1}{4553} - 44 \arctan \frac{1}{17620}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 95 \arctan \frac{1}{239} + 76 \arctan \frac{1}{307} + 100 \arctan \frac{1}{882} \\ &\quad + 68 \arctan \frac{1}{2621} - 56 \arctan \frac{1}{14942} + 124 \arctan \frac{1}{25943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 95 \arctan \frac{1}{239} + 132 \arctan \frac{1}{307} - 34 \arctan \frac{1}{682} \\ &\quad + 90 \arctan \frac{1}{12943} + 22 \arctan \frac{1}{34522} + 22 \arctan \frac{1}{106007}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 139 \arctan \frac{1}{239} + 88 \arctan \frac{1}{307} - 56 \arctan \frac{1}{682} \\ &\quad - 44 \arctan \frac{1}{5357} + 68 \arctan \frac{1}{12943} + 88 \arctan \frac{1}{39307}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 95 \arctan \frac{1}{239} + 132 \arctan \frac{1}{307} - 12 \arctan \frac{1}{682} \\ &\quad - 44 \arctan \frac{1}{2482} - 44 \arctan \frac{1}{3671} + 68 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 95 \arctan \frac{1}{239} + 132 \arctan \frac{1}{307} - 56 \arctan \frac{1}{682} \\ &\quad + 88 \arctan \frac{1}{2332} - 44 \arctan \frac{1}{6948} + 112 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 95 \arctan \frac{1}{239} + 132 \arctan \frac{1}{307} - 12 \arctan \frac{1}{682} \\ &\quad - 44 \arctan \frac{1}{1902} - 44 \arctan \frac{1}{6687} + 68 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 95 \arctan \frac{1}{239} + 132 \arctan \frac{1}{307} - 56 \arctan \frac{1}{682} \\ &\quad + 44 \arctan \frac{1}{1607} + 44 \arctan \frac{1}{5928} + 68 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 95 \arctan \frac{1}{239} + 176 \arctan \frac{1}{307} - 56 \arctan \frac{1}{682} \\ &\quad - 88 \arctan \frac{1}{800} + 68 \arctan \frac{1}{12943} + 44 \arctan \frac{1}{29718}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 27 \arctan \frac{1}{239} + 132 \arctan \frac{1}{307} + 136 \arctan \frac{1}{568} \\ &\quad - 12 \arctan \frac{1}{19703} + 56 \arctan \frac{1}{27823} + 56 \arctan \frac{1}{34522}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 27 \arctan \frac{1}{239} + 132 \arctan \frac{1}{307} + 136 \arctan \frac{1}{568} \\ &\quad + 56 \arctan \frac{1}{12238} - 68 \arctan \frac{1}{19703} + 112 \arctan \frac{1}{58911}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 132 \arctan \frac{1}{307} - 32 \arctan \frac{1}{568} \\ &\quad + 112 \arctan \frac{1}{1568} - 56 \arctan \frac{1}{6107} + 44 \arctan \frac{1}{19703}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 27 \arctan \frac{1}{239} + 132 \arctan \frac{1}{307} + 80 \arctan \frac{1}{568} \\ &\quad + 112 \arctan \frac{1}{1123} + 44 \arctan \frac{1}{19703} - 56 \arctan \frac{1}{160590}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 76 \arctan \frac{1}{307} + 80 \arctan \frac{1}{568} \\ &\quad + 56 \arctan \frac{1}{1113} - 12 \arctan \frac{1}{19703} + 56 \arctan \frac{1}{4180652}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 95 \arctan \frac{1}{239} + 64 \arctan \frac{1}{307} + 68 \arctan \frac{1}{515} \\ &\quad + 136 \arctan \frac{1}{3323} + 56 \arctan \frac{1}{12238} + 112 \arctan \frac{1}{58911}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 39 \arctan \frac{1}{239} + 176 \arctan \frac{1}{307} + 12 \arctan \frac{1}{515} \\ &\quad + 56 \arctan \frac{1}{1068} - 88 \arctan \frac{1}{3323} - 56 \arctan \frac{1}{173932}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 95 \arctan \frac{1}{239} + 176 \arctan \frac{1}{307} - 44 \arctan \frac{1}{515} \\ &\quad - 56 \arctan \frac{1}{682} - 88 \arctan \frac{1}{3323} + 112 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 39 \arctan \frac{1}{239} + 144 \arctan \frac{1}{307} + 32 \arctan \frac{1}{447} \\ &\quad + 68 \arctan \frac{1}{1068} + 44 \arctan \frac{1}{2309} - 56 \arctan \frac{1}{48737}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 27 \arctan \frac{1}{239} + 132 \arctan \frac{1}{307} + 68 \arctan \frac{1}{443} \\ &\quad + 68 \arctan \frac{1}{813} + 56 \arctan \frac{1}{12238} + 44 \arctan \frac{1}{58911}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 88 \arctan \frac{1}{307} + 56 \arctan \frac{1}{418} \\ &\quad + 68 \arctan \frac{1}{4193} + 44 \arctan \frac{1}{39307} + 56 \arctan \frac{1}{333367}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 27 \arctan \frac{1}{239} + 132 \arctan \frac{1}{307} + 68 \arctan \frac{1}{392} \\ &\quad + 68 \arctan \frac{1}{1068} + 56 \arctan \frac{1}{12238} + 44 \arctan \frac{1}{58911}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 139 \arctan \frac{1}{239} + 44 \arctan \frac{1}{301} + 32 \arctan \frac{1}{682} \\ &\quad + 112 \arctan \frac{1}{12943} + 88 \arctan \frac{1}{32807} - 44 \arctan \frac{1}{70543}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 95 \arctan \frac{1}{239} + 88 \arctan \frac{1}{294} + 32 \arctan \frac{1}{682} \\ &\quad + 88 \arctan \frac{1}{2322} + 68 \arctan \frac{1}{12943} - 44 \arctan \frac{1}{29718}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 132 \arctan \frac{1}{294} + 32 \arctan \frac{1}{682} \\ &\quad + 44 \arctan \frac{1}{905} + 88 \arctan \frac{1}{3957} + 68 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 95 \arctan \frac{1}{239} + 88 \arctan \frac{1}{294} + 44 \arctan \frac{1}{515} \\ &\quad + 32 \arctan \frac{1}{682} - 88 \arctan \frac{1}{1929} + 24 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 71 \arctan \frac{1}{239} + 112 \arctan \frac{1}{293} + 44 \arctan \frac{1}{616} \\ &\quad + 132 \arctan \frac{1}{3141} - 32 \arctan \frac{1}{12238} - 64 \arctan \frac{1}{13443}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 39 \arctan \frac{1}{239} + 144 \arctan \frac{1}{293} + 44 \arctan \frac{1}{616} \\ &\quad + 64 \arctan \frac{1}{2682} + 100 \arctan \frac{1}{3141} + 32 \arctan \frac{1}{8827}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 71 \arctan \frac{1}{239} + 112 \arctan \frac{1}{293} + 12 \arctan \frac{1}{616} \\ &\quad + 64 \arctan \frac{1}{1432} + 132 \arctan \frac{1}{3141} - 32 \arctan \frac{1}{265842}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 39 \arctan \frac{1}{239} + 144 \arctan \frac{1}{293} + 12 \arctan \frac{1}{616} \\ &\quad + 64 \arctan \frac{1}{807} + 100 \arctan \frac{1}{3141} + 32 \arctan \frac{1}{246147}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 7 \arctan \frac{1}{239} + 176 \arctan \frac{1}{293} + 44 \arctan \frac{1}{616} \\ &\quad + 32 \arctan \frac{1}{682} + 132 \arctan \frac{1}{3141} - 64 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 39 \arctan \frac{1}{239} + 112 \arctan \frac{1}{293} + 64 \arctan \frac{1}{307} \\ &\quad + 12 \arctan \frac{1}{616} + 68 \arctan \frac{1}{3141} - 32 \arctan \frac{1}{3323}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 27 \arctan \frac{1}{239} + 136 \arctan \frac{1}{273} + 64 \arctan \frac{1}{307} \\ &\quad - 68 \arctan \frac{1}{2072} - 12 \arctan \frac{1}{12238} - 24 \arctan \frac{1}{58911}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 27 \arctan \frac{1}{239} + 124 \arctan \frac{1}{273} + 76 \arctan \frac{1}{307} \\ &\quad - 56 \arctan \frac{1}{2072} - 12 \arctan \frac{1}{5182} + 12 \arctan \frac{1}{2794602}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 27 \arctan \frac{1}{239} + 112 \arctan \frac{1}{273} + 88 \arctan \frac{1}{307} \\ &\quad - 56 \arctan \frac{1}{2072} + 12 \arctan \frac{1}{4193} - 12 \arctan \frac{1}{39307}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 39 \arctan \frac{1}{239} + 100 \arctan \frac{1}{273} + 88 \arctan \frac{1}{307} \\ &\quad - 56 \arctan \frac{1}{2072} - 12 \arctan \frac{1}{3307} - 12 \arctan \frac{1}{177057}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 39 \arctan \frac{1}{239} + 112 \arctan \frac{1}{273} + 76 \arctan \frac{1}{307} \\ &\quad - 56 \arctan \frac{1}{2072} - 24 \arctan \frac{1}{2332} + 12 \arctan \frac{1}{6948}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 88 \arctan \frac{1}{273} + 88 \arctan \frac{1}{307} \\ &\quad - 12 \arctan \frac{1}{682} - 44 \arctan \frac{1}{2072} + 24 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 27 \arctan \frac{1}{239} + 112 \arctan \frac{1}{273} + 76 \arctan \frac{1}{307} \\ &\quad + 24 \arctan \frac{1}{568} - 56 \arctan \frac{1}{2072} - 12 \arctan \frac{1}{19703}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 39 \arctan \frac{1}{239} + 112 \arctan \frac{1}{273} + 64 \arctan \frac{1}{307} \\ &\quad + 12 \arctan \frac{1}{515} - 56 \arctan \frac{1}{2072} + 24 \arctan \frac{1}{3323}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 88 \arctan \frac{1}{269} + 88 \arctan \frac{1}{477} \\ &\quad + 32 \arctan \frac{1}{682} + 44 \arctan \frac{1}{5357} + 68 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 115 \arctan \frac{1}{239} + 68 \arctan \frac{1}{268} + 108 \arctan \frac{1}{1958} \\ &\quad + 12 \arctan \frac{1}{2928} - 64 \arctan \frac{1}{7193} + 32 \arctan \frac{1}{228382}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 44 \arctan \frac{1}{1958} \\ &\quad + 64 \arctan \frac{1}{2682} + 44 \arctan \frac{1}{2928} + 32 \arctan \frac{1}{8827}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 164 \arctan \frac{1}{268} - 52 \arctan \frac{1}{1568} \\ &\quad + 12 \arctan \frac{1}{4662} - 64 \arctan \frac{1}{6898} - 32 \arctan \frac{1}{534568}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 44 \arctan \frac{1}{1568} \\ &\quad + 64 \arctan \frac{1}{2682} + 44 \arctan \frac{1}{4662} + 32 \arctan \frac{1}{8827}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 132 \arctan \frac{1}{268} - 64 \arctan \frac{1}{1458} \\ &\quad - 20 \arctan \frac{1}{1568} - 32 \arctan \frac{1}{4443} + 44 \arctan \frac{1}{4662}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 64 \arctan \frac{1}{1432} \\ &\quad + 44 \arctan \frac{1}{1958} + 12 \arctan \frac{1}{2928} - 32 \arctan \frac{1}{5099}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 132 \arctan \frac{1}{268} + 108 \arctan \frac{1}{1292} \\ &\quad - 32 \arctan \frac{1}{12238} - 20 \arctan \frac{1}{12943} + 44 \arctan \frac{1}{1000267}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 76 \arctan \frac{1}{1282} \\ &\quad + 32 \arctan \frac{1}{8832} + 44 \arctan \frac{1}{26337} + 12 \arctan \frac{1}{29193}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 115 \arctan \frac{1}{239} + 68 \arctan \frac{1}{268} + 44 \arctan \frac{1}{905} \\ &\quad + 20 \arctan \frac{1}{3957} - 32 \arctan \frac{1}{12238} - 64 \arctan \frac{1}{114483}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 115 \arctan \frac{1}{239} + 68 \arctan \frac{1}{268} + 44 \arctan \frac{1}{905} \\ &\quad - 12 \arctan \frac{1}{3957} + 32 \arctan \frac{1}{6507} - 32 \arctan \frac{1}{6826318}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 44 \arctan \frac{1}{905} \\ &\quad + 64 \arctan \frac{1}{2682} - 44 \arctan \frac{1}{3957} + 32 \arctan \frac{1}{8827}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 32 \arctan \frac{1}{807} \\ &\quad + 12 \arctan \frac{1}{1568} + 32 \arctan \frac{1}{3882} + 44 \arctan \frac{1}{4662}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 32 \arctan \frac{1}{767} \\ &\quad + 12 \arctan \frac{1}{1568} + 44 \arctan \frac{1}{4662} + 32 \arctan \frac{1}{5182}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 132 \arctan \frac{1}{268} + 32 \arctan \frac{1}{682} \\ &\quad + 44 \arctan \frac{1}{2307} + 44 \arctan \frac{1}{2928} - 20 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 132 \arctan \frac{1}{268} + 32 \arctan \frac{1}{682} \\ &\quad + 44 \arctan \frac{1}{1432} - 20 \arctan \frac{1}{12943} + 44 \arctan \frac{1}{13043}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 132 \arctan \frac{1}{268} + 76 \arctan \frac{1}{682} \\ &\quad - 44 \arctan \frac{1}{1407} - 20 \arctan \frac{1}{12943} + 44 \arctan \frac{1}{51412}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 132 \arctan \frac{1}{268} + 32 \arctan \frac{1}{682} \\ &\quad + 44 \arctan \frac{1}{1282} - 20 \arctan \frac{1}{12943} - 44 \arctan \frac{1}{198505}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 132 \arctan \frac{1}{268} + 32 \arctan \frac{1}{682} \\ &\quad + 44 \arctan \frac{1}{1087} - 44 \arctan \frac{1}{6898} - 20 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 132 \arctan \frac{1}{268} + 44 \arctan \frac{1}{599} \\ &\quad + 32 \arctan \frac{1}{682} - 44 \arctan \frac{1}{1118} - 20 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 32 \arctan \frac{1}{557} \\ &\quad + 12 \arctan \frac{1}{1068} - 44 \arctan \frac{1}{15449} - 44 \arctan \frac{1}{51693}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 144 \arctan \frac{1}{268} - 12 \arctan \frac{1}{557} \\ &\quad - 76 \arctan \frac{1}{1068} - 44 \arctan \frac{1}{6898} - 44 \arctan \frac{1}{409557}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 32 \arctan \frac{1}{557} \\ &\quad - 32 \arctan \frac{1}{1068} + 44 \arctan \frac{1}{1958} + 44 \arctan \frac{1}{2928}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 32 \arctan \frac{1}{557} \\ &\quad - 32 \arctan \frac{1}{1068} + 44 \arctan \frac{1}{1568} + 44 \arctan \frac{1}{4662}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 144 \arctan \frac{1}{268} - 56 \arctan \frac{1}{557} \\ &\quad - 32 \arctan \frac{1}{1068} + 44 \arctan \frac{1}{1432} + 44 \arctan \frac{1}{75382}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 144 \arctan \frac{1}{268} - 12 \arctan \frac{1}{557} \\ &\quad - 32 \arctan \frac{1}{1068} - 44 \arctan \frac{1}{1118} - 44 \arctan \frac{1}{5283}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 32 \arctan \frac{1}{557} \\ &\quad + 44 \arctan \frac{1}{905} - 32 \arctan \frac{1}{1068} - 44 \arctan \frac{1}{3957}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 144 \arctan \frac{1}{268} - 12 \arctan \frac{1}{557} \\ &\quad - 44 \arctan \frac{1}{863} - 32 \arctan \frac{1}{1068} + 44 \arctan \frac{1}{13332}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 77 \arctan \frac{1}{239} + 138 \arctan \frac{1}{268} - 26 \arctan \frac{1}{463} \\ &\quad + 32 \arctan \frac{1}{5604} - 64 \arctan \frac{1}{51693} - 6 \arctan \frac{1}{390112}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 61 \arctan \frac{1}{239} + 122 \arctan \frac{1}{268} + 22 \arctan \frac{1}{463} \\ &\quad + 64 \arctan \frac{1}{2682} + 32 \arctan \frac{1}{8827} - 22 \arctan \frac{1}{390112}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 61 \arctan \frac{1}{239} + 122 \arctan \frac{1}{268} + 22 \arctan \frac{1}{463} \\ &\quad + 32 \arctan \frac{1}{557} - 32 \arctan \frac{1}{1068} - 22 \arctan \frac{1}{390112}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 132 \arctan \frac{1}{268} - 32 \arctan \frac{1}{443} \\ &\quad + 12 \arctan \frac{1}{1568} + 44 \arctan \frac{1}{4662} + 32 \arctan \frac{1}{43932}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 112 \arctan \frac{1}{268} + 20 \arctan \frac{1}{421} \\ &\quad - 44 \arctan \frac{1}{1985} - 32 \arctan \frac{1}{4443} + 64 \arctan \frac{1}{30857}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 144 \arctan \frac{1}{268} - 44 \arctan \frac{1}{421} \\ &\quad - 44 \arctan \frac{1}{1985} + 64 \arctan \frac{1}{2682} + 32 \arctan \frac{1}{8827}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 144 \arctan \frac{1}{268} - 44 \arctan \frac{1}{421} \\ &\quad + 32 \arctan \frac{1}{557} - 32 \arctan \frac{1}{1068} - 44 \arctan \frac{1}{1985}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 71 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 56 \arctan \frac{1}{395} \\ &\quad - 64 \arctan \frac{1}{2943} - 32 \arctan \frac{1}{8783} - 44 \arctan \frac{1}{37107}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 39 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 88 \arctan \frac{1}{395} \\ &\quad + 64 \arctan \frac{1}{2682} + 32 \arctan \frac{1}{8827} - 44 \arctan \frac{1}{37107}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 7 \arctan \frac{1}{239} + 132 \arctan \frac{1}{268} + 88 \arctan \frac{1}{395} \\ &\quad + 32 \arctan \frac{1}{682} - 64 \arctan \frac{1}{12943} - 44 \arctan \frac{1}{37107}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 39 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 88 \arctan \frac{1}{395} \\ &\quad + 32 \arctan \frac{1}{557} - 32 \arctan \frac{1}{1068} - 44 \arctan \frac{1}{37107}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 115 \arctan \frac{1}{239} + 144 \arctan \frac{1}{268} - 76 \arctan \frac{1}{378} \\ &\quad - 108 \arctan \frac{1}{2943} + 44 \arctan \frac{1}{14318} + 44 \arctan \frac{1}{27493}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 93 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 12 \arctan \frac{1}{378} \\ &\quad - 42 \arctan \frac{1}{2943} + 44 \arctan \frac{1}{7535} - 22 \arctan \frac{1}{131168}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 115 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} - 32 \arctan \frac{1}{378} \\ &\quad - 20 \arctan \frac{1}{2943} + 88 \arctan \frac{1}{4662} + 44 \arctan \frac{1}{11981}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 115 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} - 32 \arctan \frac{1}{378} \\ &\quad + 44 \arctan \frac{1}{1958} + 44 \arctan \frac{1}{2928} - 64 \arctan \frac{1}{2943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 71 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 12 \arctan \frac{1}{378} \\ &\quad + 44 \arctan \frac{1}{565} - 20 \arctan \frac{1}{2943} + 44 \arctan \frac{1}{3557}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 71 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 12 \arctan \frac{1}{378} \\ &\quad + 44 \arctan \frac{1}{483} - 20 \arctan \frac{1}{2943} - 44 \arctan \frac{1}{51693}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 115 \arctan \frac{1}{239} + 144 \arctan \frac{1}{268} - 32 \arctan \frac{1}{378} \\ &\quad - 44 \arctan \frac{1}{421} - 44 \arctan \frac{1}{1985} - 64 \arctan \frac{1}{2943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 83 \arctan \frac{1}{239} + 144 \arctan \frac{1}{268} - 44 \arctan \frac{1}{343} \\ &\quad + 64 \arctan \frac{1}{2682} + 32 \arctan \frac{1}{8827} + 44 \arctan \frac{1}{27493}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 71 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 24 \arctan \frac{1}{327} \\ &\quad + 52 \arctan \frac{1}{1432} + 20 \arctan \frac{1}{2621} - 32 \arctan \frac{1}{14942}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 71 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 24 \arctan \frac{1}{327} \\ &\quad + 20 \arctan \frac{1}{1252} + 32 \arctan \frac{1}{2855} + 52 \arctan \frac{1}{3557}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 132 \arctan \frac{1}{268} + 44 \arctan \frac{1}{327} \\ &\quad - 44 \arctan \frac{1}{438} + 32 \arctan \frac{1}{682} - 20 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 71 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 44 \arctan \frac{1}{327} \\ &\quad + 12 \arctan \frac{1}{378} - 44 \arctan \frac{1}{993} - 20 \arctan \frac{1}{2943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 64 \arctan \frac{1}{307} \\ &\quad - 20 \arctan \frac{1}{1958} + 12 \arctan \frac{1}{2928} - 32 \arctan \frac{1}{9210}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 39 \arctan \frac{1}{239} + 68 \arctan \frac{1}{268} + 120 \arctan \frac{1}{307} \\ &\quad - 12 \arctan \frac{1}{795} - 56 \arctan \frac{1}{13307} - 44 \arctan \frac{1}{14256}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 39 \arctan \frac{1}{239} + 68 \arctan \frac{1}{268} + 64 \arctan \frac{1}{307} \\ &\quad + 56 \arctan \frac{1}{395} + 32 \arctan \frac{1}{1723} - 12 \arctan \frac{1}{37107}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 71 \arctan \frac{1}{239} + 100 \arctan \frac{1}{268} + 44 \arctan \frac{1}{307} \\ &\quad + 12 \arctan \frac{1}{378} - 44 \arctan \frac{1}{829} - 20 \arctan \frac{1}{2943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 80 \arctan \frac{1}{268} + 64 \arctan \frac{1}{307} \\ &\quad + 20 \arctan \frac{1}{343} + 32 \arctan \frac{1}{5087} + 12 \arctan \frac{1}{27493}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 39 \arctan \frac{1}{239} + 68 \arctan \frac{1}{268} + 64 \arctan \frac{1}{307} \\ &\quad + 56 \arctan \frac{1}{327} - 12 \arctan \frac{1}{882} + 44 \arctan \frac{1}{18543}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 64 \arctan \frac{1}{242} + 68 \arctan \frac{1}{268} \\ &\quad + 44 \arctan \frac{1}{905} + 20 \arctan \frac{1}{3957} + 32 \arctan \frac{1}{219602}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 44 \arctan \frac{1}{242} + 88 \arctan \frac{1}{268} \\ &\quad + 32 \arctan \frac{1}{682} + 44 \arctan \frac{1}{2673} - 20 \arctan \frac{1}{12943}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 64 \arctan \frac{1}{242} + 80 \arctan \frac{1}{268} \\ &\quad + 8 \arctan \frac{1}{659} - 20 \arctan \frac{1}{6443} + 12 \arctan \frac{1}{1610057}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 76 \arctan \frac{1}{242} + 68 \arctan \frac{1}{268} \\ &\quad + 8 \arctan \frac{1}{642} - 32 \arctan \frac{1}{5118} - 12 \arctan \frac{1}{6072}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 39 \arctan \frac{1}{239} + 88 \arctan \frac{1}{242} + 56 \arctan \frac{1}{268} \\ &\quad + 32 \arctan \frac{1}{557} + 12 \arctan \frac{1}{1068} - 44 \arctan \frac{1}{2309}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 51 \arctan \frac{1}{239} + 64 \arctan \frac{1}{242} + 68 \arctan \frac{1}{268} \\ &\quad + 32 \arctan \frac{1}{500} - 20 \arctan \frac{1}{1568} + 12 \arctan \frac{1}{4662}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 1587 \arctan \frac{1}{2852} + 295 \arctan \frac{1}{4193} + 593 \arctan \frac{1}{4246} \\ &\quad + 359 \arctan \frac{1}{39307} + 481 \arctan \frac{1}{55603} + 625 \arctan \frac{1}{211050} \\ &\quad - 708 \arctan \frac{1}{390112}\end{aligned}$$

$$\begin{aligned}\frac{\pi}{4} &= 327 \arctan \frac{1}{1958} + 481 \arctan \frac{1}{2059} + 625 \arctan \frac{1}{2928} \\ &\quad + 449 \arctan \frac{1}{2943} + 298 \arctan \frac{1}{4052} - 513 \arctan \frac{1}{9193} \\ &\quad + 398 \arctan \frac{1}{390112}\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1074 \arctan \frac{1}{1568} + 657 \arctan \frac{1}{4662} + 183 \arctan \frac{1}{5357} \\
& - 779 \arctan \frac{1}{12943} - 32 \arctan \frac{1}{17923} - 449 \arctan \frac{1}{32807} \\
& + 398 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1106 \arctan \frac{1}{1143} - 330 \arctan \frac{1}{4193} - 513 \arctan \frac{1}{4246} \\
& + 481 \arctan \frac{1}{34208} + 215 \arctan \frac{1}{39307} - 144 \arctan \frac{1}{44179} \\
& + 398 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 481 \arctan \frac{1}{1084} + 295 \arctan \frac{1}{4193} + 737 \arctan \frac{1}{4246} \\
& + 625 \arctan \frac{1}{6687} + 215 \arctan \frac{1}{39307} - 144 \arctan \frac{1}{235318} \\
& - 227 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} &= 764 \arctan \frac{1}{1068} + 127 \arctan \frac{1}{3323} + 442 \arctan \frac{1}{20457} \\
&\quad + 215 \arctan \frac{1}{37057} + 188 \arctan \frac{1}{83247} + 171 \arctan \frac{1}{173932} \\
&\quad + 481 \arctan \frac{1}{409557}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} &= 581 \arctan \frac{1}{993} + 171 \arctan \frac{1}{2072} + 127 \arctan \frac{1}{2633} \\
&\quad + 24 \arctan \frac{1}{2943} + 227 \arctan \frac{1}{5593} + 342 \arctan \frac{1}{16432} \\
&\quad - 100 \arctan \frac{1}{6826318}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} &= 327 \arctan \frac{1}{905} + 298 \arctan \frac{1}{1057} + 183 \arctan \frac{1}{2059} \\
&\quad + 151 \arctan \frac{1}{2943} - 29 \arctan \frac{1}{3957} + 83 \arctan \frac{1}{9193} \\
&\quad + 100 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 144 \arctan \frac{1}{905} + 481 \arctan \frac{1}{948} + 337 \arctan \frac{1}{3957} \\
& + 151 \arctan \frac{1}{4193} - 32 \arctan \frac{1}{4246} + 215 \arctan \frac{1}{39307} \\
& - 83 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 537 \arctan \frac{1}{882} + 581 \arctan \frac{1}{2917} - 322 \arctan \frac{1}{9466} \\
& + 371 \arctan \frac{1}{12943} - 171 \arctan \frac{1}{19703} - 266 \arctan \frac{1}{32807} \\
& - 76 \arctan \frac{1}{157318}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 625 \arctan \frac{1}{837} + 183 \arctan \frac{1}{2059} - 176 \arctan \frac{1}{2943} \\
& + 83 \arctan \frac{1}{9193} - 29 \arctan \frac{1}{247057} + 100 \arctan \frac{1}{390112} \\
& + 327 \arctan \frac{1}{740943}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 625 \arctan \frac{1}{829} - 144 \arctan \frac{1}{2059} + 151 \arctan \frac{1}{4193} \\
& + 112 \arctan \frac{1}{9193} + 449 \arctan \frac{1}{9872} + 327 \arctan \frac{1}{39307} \\
& - 227 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 625 \arctan \frac{1}{811} + 183 \arctan \frac{1}{2059} - 176 \arctan \frac{1}{2943} \\
& - 244 \arctan \frac{1}{9193} + 356 \arctan \frac{1}{29193} + 100 \arctan \frac{1}{390112} \\
& - 327 \arctan \frac{1}{1366849}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 481 \arctan \frac{1}{798} + 625 \arctan \frac{1}{3141} + 144 \arctan \frac{1}{3323} \\
& - 330 \arctan \frac{1}{4193} + 112 \arctan \frac{1}{4246} - 266 \arctan \frac{1}{39307} \\
& - 227 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 481 \arctan \frac{1}{795} + 295 \arctan \frac{1}{4193} + 256 \arctan \frac{1}{4246} \\
& + 625 \arctan \frac{1}{13307} + 144 \arctan \frac{1}{14256} - 266 \arctan \frac{1}{39307} \\
& - 227 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 283 \arctan \frac{1}{788} + 342 \arctan \frac{1}{837} + 7 \arctan \frac{1}{2943} \\
& + 83 \arctan \frac{1}{5503} + 71 \arctan \frac{1}{247057} - 100 \arctan \frac{1}{352618} \\
& + 144 \arctan \frac{1}{740943}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 210 \arctan \frac{1}{771} + 242 \arctan \frac{1}{882} + 190 \arctan \frac{1}{1168} \\
& + 95 \arctan \frac{1}{1393} + 66 \arctan \frac{1}{6948} - 76 \arctan \frac{1}{45368} \\
& - 132 \arctan \frac{1}{2947340}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} &= 359 \arctan \frac{1}{757} + 122 \arctan \frac{1}{813} + 200 \arctan \frac{1}{1068} \\
&\quad - 105 \arctan \frac{1}{3112} + 83 \arctan \frac{1}{12238} + 44 \arctan \frac{1}{58911} \\
&\quad + 132 \arctan \frac{1}{3139557}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} &= 537 \arctan \frac{1}{746} + 44 \arctan \frac{1}{5357} + 259 \arctan \frac{1}{5507} \\
&\quad + 156 \arctan \frac{1}{12943} - 171 \arctan \frac{1}{17923} + 227 \arctan \frac{1}{32807} \\
&\quad + 139 \arctan \frac{1}{157318}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} &= 537 \arctan \frac{1}{746} + 44 \arctan \frac{1}{2621} + 371 \arctan \frac{1}{12943} \\
&\quad + 215 \arctan \frac{1}{14942} + 271 \arctan \frac{1}{32807} - 171 \arctan \frac{1}{83071} \\
&\quad - 76 \arctan \frac{1}{157318}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} &= 537 \arctan \frac{1}{746} + 44 \arctan \frac{1}{1992} + 171 \arctan \frac{1}{9222} \\
&\quad + 371 \arctan \frac{1}{12943} - 215 \arctan \frac{1}{16693} + 271 \arctan \frac{1}{32807} \\
&\quad + 139 \arctan \frac{1}{157318}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} &= 322 \arctan \frac{1}{746} + 215 \arctan \frac{1}{1393} + 474 \arctan \frac{1}{2547} \\
&\quad + 156 \arctan \frac{1}{12943} + 56 \arctan \frac{1}{32807} - 76 \arctan \frac{1}{157318} \\
&\quad + 44 \arctan \frac{1}{1049433}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} &= 266 \arctan \frac{1}{746} + 215 \arctan \frac{1}{1067} + 327 \arctan \frac{1}{1568} \\
&\quad + 144 \arctan \frac{1}{4662} - 115 \arctan \frac{1}{13918} - 100 \arctan \frac{1}{27493} \\
&\quad - 32 \arctan \frac{1}{157318}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} &= 266 \arctan \frac{1}{746} + 271 \arctan \frac{1}{882} + 315 \arctan \frac{1}{2621} \\
&\quad - 56 \arctan \frac{1}{14942} - 171 \arctan \frac{1}{19703} + 371 \arctan \frac{1}{25943} \\
&\quad - 76 \arctan \frac{1}{157318}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} &= 266 \arctan \frac{1}{746} + 215 \arctan \frac{1}{882} + 427 \arctan \frac{1}{1568} \\
&\quad - 371 \arctan \frac{1}{6107} - 315 \arctan \frac{1}{18543} - 171 \arctan \frac{1}{19703} \\
&\quad - 132 \arctan \frac{1}{157318}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} &= 398 \arctan \frac{1}{743} + 139 \arctan \frac{1}{1393} + 322 \arctan \frac{1}{2153} \\
&\quad + 76 \arctan \frac{1}{8307} - 166 \arctan \frac{1}{12943} + 132 \arctan \frac{1}{32807} \\
&\quad + 44 \arctan \frac{1}{1049433}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} &= 266 \arctan \frac{1}{743} + 271 \arctan \frac{1}{882} + 315 \arctan \frac{1}{2917} \\
&\quad + 171 \arctan \frac{1}{8307} - 227 \arctan \frac{1}{9466} + 200 \arctan \frac{1}{12943} \\
&\quad + 95 \arctan \frac{1}{1059193}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} &= 2192 \arctan \frac{1}{5357} + 2097 \arctan \frac{1}{5507} - 227 \arctan \frac{1}{9466} \\
&\quad + 832 \arctan \frac{1}{12943} + 537 \arctan \frac{1}{34522} - 2287 \arctan \frac{1}{39307} \\
&\quad - 171 \arctan \frac{1}{106007} - 708 \arctan \frac{1}{1115618}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} &= 1484 \arctan \frac{1}{5118} + 708 \arctan \frac{1}{6072} + 2380 \arctan \frac{1}{6807} \\
&\quad + 974 \arctan \frac{1}{34208} + 254 \arctan \frac{1}{44179} - 68 \arctan \frac{1}{86432} \\
&\quad - 991 \arctan \frac{1}{275807} - 398 \arctan \frac{1}{619858}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1882 \arctan \frac{1}{5118} + 1106 \arctan \frac{1}{6072} + 2507 \arctan \frac{1}{6118} \\
& - 1465 \arctan \frac{1}{9193} + 144 \arctan \frac{1}{41688} - 449 \arctan \frac{1}{52489} \\
& - 779 \arctan \frac{1}{72093} + 398 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 2805 \arctan \frac{1}{4662} + 1257 \arctan \frac{1}{5357} - 779 \arctan \frac{1}{12943} \\
& + 1042 \arctan \frac{1}{17923} - 2597 \arctan \frac{1}{32807} + 2148 \arctan \frac{1}{83270} \\
& + 1472 \arctan \frac{1}{390112} + 1074 \arctan \frac{1}{1493208}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 2363 \arctan \frac{1}{4557} + 1218 \arctan \frac{1}{5507} + 1850 \arctan \frac{1}{18543} \\
& - 266 \arctan \frac{1}{39307} - 2658 \arctan \frac{1}{49457} + 1257 \arctan \frac{1}{123093} \\
& - 1484 \arctan \frac{1}{390112} + 481 \arctan \frac{1}{27872057}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 2805 \arctan \frac{1}{4246} + 1257 \arctan \frac{1}{5357} - 1106 \arctan \frac{1}{12238} \\
& + 295 \arctan \frac{1}{12943} - 417 \arctan \frac{1}{39307} - 1731 \arctan \frac{1}{58911} \\
& - 708 \arctan \frac{1}{390112} - 481 \arctan \frac{1}{1000267}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1074 \arctan \frac{1}{4246} + 1257 \arctan \frac{1}{5357} + 1731 \arctan \frac{1}{6107} \\
& + 295 \arctan \frac{1}{12943} + 625 \arctan \frac{1}{19703} - 481 \arctan \frac{1}{32807} \\
& - 1042 \arctan \frac{1}{39307} + 398 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1074 \arctan \frac{1}{4246} + 1882 \arctan \frac{1}{5357} + 1106 \arctan \frac{1}{5604} \\
& + 920 \arctan \frac{1}{12943} - 2148 \arctan \frac{1}{39307} - 1731 \arctan \frac{1}{51693} \\
& + 398 \arctan \frac{1}{390112} - 481 \arctan \frac{1}{2544482}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 593 \arctan \frac{1}{4246} + 1882 \arctan \frac{1}{5118} + 1106 \arctan \frac{1}{6072} \\
& + 2363 \arctan \frac{1}{34208} - 144 \arctan \frac{1}{44179} + 991 \arctan \frac{1}{72093} \\
& + 1321 \arctan \frac{1}{86432} + 398 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1699 \arctan \frac{1}{4246} + 1882 \arctan \frac{1}{5005} - 625 \arctan \frac{1}{34208} \\
& + 215 \arctan \frac{1}{39307} - 330 \arctan \frac{1}{39568} + 962 \arctan \frac{1}{44179} \\
& + 776 \arctan \frac{1}{74518} - 708 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 3286 \arctan \frac{1}{4246} + 295 \arctan \frac{1}{4443} - 625 \arctan \frac{1}{12238} \\
& + 840 \arctan \frac{1}{39307} - 2212 \arctan \frac{1}{58911} + 776 \arctan \frac{1}{74518} \\
& + 962 \arctan \frac{1}{256781} - 708 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1699 \arctan \frac{1}{4246} + 295 \arctan \frac{1}{4443} + 1587 \arctan \frac{1}{8377} \\
& + 962 \arctan \frac{1}{9703} + 840 \arctan \frac{1}{39307} + 776 \arctan \frac{1}{74518} \\
& - 708 \arctan \frac{1}{390112} + 625 \arctan \frac{1}{2087321}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 776 \arctan \frac{1}{4193} + 4504 \arctan \frac{1}{10842} + 3286 \arctan \frac{1}{34208} \\
& + 3020 \arctan \frac{1}{39307} + 962 \arctan \frac{1}{44179} - 1699 \arctan \frac{1}{275807} \\
& - 708 \arctan \frac{1}{390112} - 1106 \arctan \frac{1}{619858}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1711 \arctan \frac{1}{4193} + 3115 \arctan \frac{1}{9872} + 1775 \arctan \frac{1}{39307} \\
& + 764 \arctan \frac{1}{52489} + 625 \arctan \frac{1}{211050} - 227 \arctan \frac{1}{243092} \\
& - 171 \arctan \frac{1}{6823393} + 879 \arctan \frac{1}{10600764}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 776 \arctan \frac{1}{4193} + 2805 \arctan \frac{1}{6107} + 1699 \arctan \frac{1}{19703} \\
& + 481 \arctan \frac{1}{34208} + 215 \arctan \frac{1}{39307} + 1555 \arctan \frac{1}{44179} \\
& + 398 \arctan \frac{1}{390112} - 593 \arctan \frac{1}{617427}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 295 \arctan \frac{1}{4193} + 3767 \arctan \frac{1}{5507} + 593 \arctan \frac{1}{18543} \\
& - 1228 \arctan \frac{1}{39307} + 2068 \arctan \frac{1}{55603} - 962 \arctan \frac{1}{211050} \\
& - 708 \arctan \frac{1}{390112} - 1587 \arctan \frac{1}{2867938}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1645 \arctan \frac{1}{4193} + 2002 \arctan \frac{1}{5357} + 415 \arctan \frac{1}{9466} \\
& - 171 \arctan \frac{1}{17923} - 813 \arctan \frac{1}{27823} + 537 \arctan \frac{1}{34522} \\
& - 1350 \arctan \frac{1}{1115618} - 1455 \arctan \frac{1}{22709274}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 776 \arctan \frac{1}{4193} + 1699 \arctan \frac{1}{4373} + 1106 \arctan \frac{1}{5807} \\
& + 481 \arctan \frac{1}{34208} + 215 \arctan \frac{1}{39307} - 144 \arctan \frac{1}{44179} \\
& + 593 \arctan \frac{1}{233839} + 991 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1882 \arctan \frac{1}{4193} + 593 \arctan \frac{1}{4246} + 1587 \arctan \frac{1}{34208} \\
& + 3533 \arctan \frac{1}{39307} + 3174 \arctan \frac{1}{44179} - 1106 \arctan \frac{1}{55603} \\
& + 2212 \arctan \frac{1}{211050} - 708 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1882 \arctan \frac{1}{4193} + 1699 \arctan \frac{1}{4246} - 1106 \arctan \frac{1}{32318} \\
& - 625 \arctan \frac{1}{34208} - 891 \arctan \frac{1}{39307} - 144 \arctan \frac{1}{44179} \\
& + 1106 \arctan \frac{1}{66432} - 708 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1882 \arctan \frac{1}{4193} + 2180 \arctan \frac{1}{4246} - 3174 \arctan \frac{1}{25368} \\
& - 1228 \arctan \frac{1}{39307} - 1106 \arctan \frac{1}{55603} - 962 \arctan \frac{1}{211050} \\
& + 1587 \arctan \frac{1}{275807} - 708 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 776 \arctan \frac{1}{4193} + 2180 \arctan \frac{1}{4246} + 1106 \arctan \frac{1}{13637} \\
& + 144 \arctan \frac{1}{14633} - 266 \arctan \frac{1}{39307} + 1587 \arctan \frac{1}{275807} \\
& - 708 \arctan \frac{1}{390112} - 962 \arctan \frac{1}{793632}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 776 \arctan \frac{1}{4193} + 1699 \arctan \frac{1}{4246} + 1587 \arctan \frac{1}{13307} \\
& + 1106 \arctan \frac{1}{14256} + 215 \arctan \frac{1}{39307} - 708 \arctan \frac{1}{390112} \\
& - 481 \arctan \frac{1}{1263257} + 481 \arctan \frac{1}{6826318}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 295 \arctan \frac{1}{4193} + 2180 \arctan \frac{1}{4246} + 1587 \arctan \frac{1}{13307} \\
& + 1587 \arctan \frac{1}{14256} - 1228 \arctan \frac{1}{39307} + 481 \arctan \frac{1}{55603} \\
& - 962 \arctan \frac{1}{211050} - 708 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 776 \arctan \frac{1}{4193} + 1699 \arctan \frac{1}{4246} + 1106 \arctan \frac{1}{13307} \\
& + 1106 \arctan \frac{1}{14256} + 481 \arctan \frac{1}{34208} + 215 \arctan \frac{1}{39307} \\
& + 962 \arctan \frac{1}{44179} - 708 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1257 \arctan \frac{1}{4193} + 1699 \arctan \frac{1}{4246} + 1106 \arctan \frac{1}{13307} \\
& + 625 \arctan \frac{1}{14256} - 962 \arctan \frac{1}{29193} - 266 \arctan \frac{1}{39307} \\
& - 708 \arctan \frac{1}{390112} + 481 \arctan \frac{1}{9361318}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 295 \arctan \frac{1}{4193} + 3767 \arctan \frac{1}{4246} - 1587 \arctan \frac{1}{12238} \\
& + 359 \arctan \frac{1}{39307} + 481 \arctan \frac{1}{55603} - 3174 \arctan \frac{1}{58911} \\
& - 962 \arctan \frac{1}{211050} - 708 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 776 \arctan \frac{1}{4193} + 2805 \arctan \frac{1}{4246} - 1106 \arctan \frac{1}{12238} \\
& + 481 \arctan \frac{1}{34208} + 1321 \arctan \frac{1}{39307} + 962 \arctan \frac{1}{44179} \\
& - 2212 \arctan \frac{1}{58911} - 708 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 295 \arctan \frac{1}{4193} + 2180 \arctan \frac{1}{4246} + 1587 \arctan \frac{1}{9703} \\
& + 359 \arctan \frac{1}{39307} + 481 \arctan \frac{1}{55603} + 1587 \arctan \frac{1}{82957} \\
& + 625 \arctan \frac{1}{211050} - 708 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1738 \arctan \frac{1}{4193} + 2180 \arctan \frac{1}{4246} - 818 \arctan \frac{1}{7093} \\
& - 962 \arctan \frac{1}{38280} - 266 \arctan \frac{1}{39307} + 1587 \arctan \frac{1}{275807} \\
& - 708 \arctan \frac{1}{390112} + 1106 \arctan \frac{1}{1460857}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 776 \arctan \frac{1}{4193} + 1699 \arctan \frac{1}{4246} + 1106 \arctan \frac{1}{6948} \\
& + 1587 \arctan \frac{1}{34208} + 1321 \arctan \frac{1}{39307} - 1250 \arctan \frac{1}{44179} \\
& - 2212 \arctan \frac{1}{188703} + 398 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 295 \arctan \frac{1}{4193} + 2180 \arctan \frac{1}{4246} + 1587 \arctan \frac{1}{6687} \\
& - 1228 \arctan \frac{1}{39307} + 481 \arctan \frac{1}{55603} - 962 \arctan \frac{1}{211050} \\
& - 1587 \arctan \frac{1}{235318} - 708 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 776 \arctan \frac{1}{4193} + 1699 \arctan \frac{1}{4246} + 1106 \arctan \frac{1}{6687} \\
& + 481 \arctan \frac{1}{34208} + 215 \arctan \frac{1}{39307} + 962 \arctan \frac{1}{44179} \\
& - 1106 \arctan \frac{1}{235318} - 708 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1738 \arctan \frac{1}{4193} + 1699 \arctan \frac{1}{4246} + 144 \arctan \frac{1}{6687} \\
& - 1443 \arctan \frac{1}{32318} - 266 \arctan \frac{1}{39307} + 337 \arctan \frac{1}{235318} \\
& - 227 \arctan \frac{1}{390112} - 481 \arctan \frac{1}{2282363}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 776 \arctan \frac{1}{4193} + 1699 \arctan \frac{1}{4246} + 1106 \arctan \frac{1}{6687} \\
& + 481 \arctan \frac{1}{8827} - 266 \arctan \frac{1}{39307} - 962 \arctan \frac{1}{81943} \\
& - 144 \arctan \frac{1}{235318} - 227 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 295 \arctan \frac{1}{4193} + 593 \arctan \frac{1}{4246} + 3174 \arctan \frac{1}{6107} \\
& + 1587 \arctan \frac{1}{19703} - 1228 \arctan \frac{1}{39307} + 481 \arctan \frac{1}{55603} \\
& - 962 \arctan \frac{1}{211050} + 879 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 776 \arctan \frac{1}{4193} + 593 \arctan \frac{1}{4246} + 2212 \arctan \frac{1}{5701} \\
& + 481 \arctan \frac{1}{34208} + 1321 \arctan \frac{1}{39307} + 962 \arctan \frac{1}{44179} \\
& + 1106 \arctan \frac{1}{219602} - 708 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
-\frac{\pi}{4} = & 330 \arctan \frac{1}{4193} - 1699 \arctan \frac{1}{4246} - 2212 \arctan \frac{1}{5648} \\
& - 1587 \arctan \frac{1}{34208} - 215 \arctan \frac{1}{39307} + 144 \arctan \frac{1}{44179} \\
& - 1106 \arctan \frac{1}{48737} - 398 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1882 \arctan \frac{1}{4193} + 1074 \arctan \frac{1}{4246} + 625 \arctan \frac{1}{5604} \\
& + 215 \arctan \frac{1}{39307} - 1731 \arctan \frac{1}{51693} + 398 \arctan \frac{1}{390112} \\
& - 481 \arctan \frac{1}{485443} + 481 \arctan \frac{1}{6826318}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1882 \arctan \frac{1}{4193} + 593 \arctan \frac{1}{4246} + 1587 \arctan \frac{1}{5604} \\
& - 1228 \arctan \frac{1}{39307} - 3174 \arctan \frac{1}{51693} + 481 \arctan \frac{1}{55603} \\
& - 962 \arctan \frac{1}{211050} + 879 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1882 \arctan \frac{1}{4193} + 593 \arctan \frac{1}{4246} + 1106 \arctan \frac{1}{5604} \\
& + 481 \arctan \frac{1}{34208} + 215 \arctan \frac{1}{39307} - 1250 \arctan \frac{1}{51693} \\
& + 962 \arctan \frac{1}{303932} + 398 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1587 \arctan \frac{1}{4052} + 295 \arctan \frac{1}{4193} + 593 \arctan \frac{1}{4246} \\
& + 1587 \arctan \frac{1}{9210} + 359 \arctan \frac{1}{39307} + 481 \arctan \frac{1}{55603} \\
& - 962 \arctan \frac{1}{211050} - 708 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 625 \arctan \frac{1}{4052} + 295 \arctan \frac{1}{4193} + 1555 \arctan \frac{1}{4246} \\
& + 1587 \arctan \frac{1}{9210} + 481 \arctan \frac{1}{37107} + 359 \arctan \frac{1}{39307} \\
& + 962 \arctan \frac{1}{299655} - 1189 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1106 \arctan \frac{1}{4052} + 776 \arctan \frac{1}{4193} + 593 \arctan \frac{1}{4246} \\
& + 1106 \arctan \frac{1}{9210} + 481 \arctan \frac{1}{34208} + 1321 \arctan \frac{1}{39307} \\
& + 962 \arctan \frac{1}{44179} - 708 \arctan \frac{1}{390112}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 553 \arctan \frac{1}{4005} + 1329 \arctan \frac{1}{4193} + 1146 \arctan \frac{1}{4246} \\
& + 1034 \arctan \frac{1}{34208} + 768 \arctan \frac{1}{39307} + 409 \arctan \frac{1}{44179} \\
& - 155 \arctan \frac{1}{390112} + 1106 \arctan \frac{1}{602057}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 3286 \arctan \frac{1}{34208} + 9852 \arctan \frac{1}{39307} + 5280 \arctan \frac{1}{41688} \\
& + 7794 \arctan \frac{1}{44179} + 7608 \arctan \frac{1}{60443} + 4357 \arctan \frac{1}{275807} \\
& - 1484 \arctan \frac{1}{390112} - 1882 \arctan \frac{1}{619858} + 776 \arctan \frac{1}{976283}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 6832 \arctan \frac{1}{25368} + 4062 \arctan \frac{1}{34208} + 9076 \arctan \frac{1}{39307} \\
& + 6242 \arctan \frac{1}{44179} + 776 \arctan \frac{1}{55603} + 5280 \arctan \frac{1}{211050} \\
& - 2475 \arctan \frac{1}{275807} - 708 \arctan \frac{1}{390112} - 1882 \arctan \frac{1}{619858}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 9012 \arctan \frac{1}{18543} + 6896 \arctan \frac{1}{39307} - 295 \arctan \frac{1}{49457} \\
& + 2363 \arctan \frac{1}{55603} + 8419 \arctan \frac{1}{123093} + 7162 \arctan \frac{1}{211050} \\
& - 5065 \arctan \frac{1}{390112} - 5944 \arctan \frac{1}{2867938} + 4062 \arctan \frac{1}{27872057}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 9852 \arctan \frac{1}{17298} + 5546 \arctan \frac{1}{34208} + 776 \arctan \frac{1}{38280} \\
& + 1738 \arctan \frac{1}{44179} + 708 \arctan \frac{1}{172078} - 5988 \arctan \frac{1}{219602} \\
& + 2029 \arctan \frac{1}{275807} + 2622 \arctan \frac{1}{619858} + 8300 \arctan \frac{1}{1460857}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 5280 \arctan \frac{1}{15789} + 4838 \arctan \frac{1}{34208} + 3796 \arctan \frac{1}{39307} \\
& + 6832 \arctan \frac{1}{39568} + 962 \arctan \frac{1}{44179} + 776 \arctan \frac{1}{74518} \\
& + 3581 \arctan \frac{1}{275807} - 708 \arctan \frac{1}{390112} - 1882 \arctan \frac{1}{619858}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 2917 \arctan \frac{1}{15179} + 6935 \arctan \frac{1}{16432} + 3222 \arctan \frac{1}{28800} \\
& + 1106 \arctan \frac{1}{57532} + 5614 \arctan \frac{1}{167318} + 3903 \arctan \frac{1}{664373} \\
& + 859 \arctan \frac{1}{1048768} - 398 \arctan \frac{1}{3036182} - 227 \arctan \frac{1}{7042807}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 4062 \arctan \frac{1}{14942} + 4655 \arctan \frac{1}{18543} + 295 \arctan \frac{1}{25943} \\
& + 4357 \arctan \frac{1}{32729} + 2539 \arctan \frac{1}{39307} + 2363 \arctan \frac{1}{55603} \\
& + 2805 \arctan \frac{1}{211050} - 708 \arctan \frac{1}{390112} - 1587 \arctan \frac{1}{2867938}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 7047 \arctan \frac{1}{14318} + 5678 \arctan \frac{1}{21042} - 283 \arctan \frac{1}{27493} \\
& + 1257 \arctan \frac{1}{34208} + 2690 \arctan \frac{1}{34522} - 3825 \arctan \frac{1}{44179} \\
& - 1767 \arctan \frac{1}{298307} + 3796 \arctan \frac{1}{325057} - 4572 \arctan \frac{1}{27005643}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1106 \arctan \frac{1}{13637} + 3876 \arctan \frac{1}{14633} + 5912 \arctan \frac{1}{15179} \\
& + 2180 \arctan \frac{1}{16432} - 3222 \arctan \frac{1}{39307} + 2363 \arctan \frac{1}{275807} \\
& - 776 \arctan \frac{1}{328173} - 1484 \arctan \frac{1}{390112} - 2514 \arctan \frac{1}{793632}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 6537 \arctan \frac{1}{13307} + 1106 \arctan \frac{1}{14256} + 5431 \arctan \frac{1}{19384} \\
& - 3222 \arctan \frac{1}{39307} + 3251 \arctan \frac{1}{167318} - 1257 \arctan \frac{1}{333367} \\
& - 708 \arctan \frac{1}{390112} + 2956 \arctan \frac{1}{664373} + 481 \arctan \frac{1}{7042807}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 7162 \arctan \frac{1}{12943} + 3796 \arctan \frac{1}{32807} + 2558 \arctan \frac{1}{34208} \\
& + 2729 \arctan \frac{1}{44179} - 708 \arctan \frac{1}{51387} + 2192 \arctan \frac{1}{114669} \\
& - 2805 \arctan \frac{1}{157318} - 3696 \arctan \frac{1}{485298} - 2407 \arctan \frac{1}{24208144}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 2026 \arctan \frac{1}{12943} + 11712 \arctan \frac{1}{30383} + 7643 \arctan \frac{1}{32807} \\
& + 1699 \arctan \frac{1}{51387} - 4062 \arctan \frac{1}{114669} + 1042 \arctan \frac{1}{157318} \\
& + 2729 \arctan \frac{1}{390112} + 1289 \arctan \frac{1}{1984933} - 5136 \arctan \frac{1}{3449051}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 4357 \arctan \frac{1}{12943} + 1699 \arctan \frac{1}{19703} + 3581 \arctan \frac{1}{32807} \\
& + 4062 \arctan \frac{1}{34208} + 3020 \arctan \frac{1}{39307} + 2331 \arctan \frac{1}{44179} \\
& + 398 \arctan \frac{1}{390112} + 2988 \arctan \frac{1}{617427} - 2805 \arctan \frac{1}{3449051}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 2026 \arctan \frac{1}{12943} + 7909 \arctan \frac{1}{17923} + 5502 \arctan \frac{1}{30383} \\
& - 266 \arctan \frac{1}{32807} + 1074 \arctan \frac{1}{41187} - 1731 \arctan \frac{1}{157318} \\
& + 1655 \arctan \frac{1}{390112} - 5136 \arctan \frac{1}{1049433} + 4062 \arctan \frac{1}{21638297}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 4755 \arctan \frac{1}{12943} + 3847 \arctan \frac{1}{13252} - 632 \arctan \frac{1}{28322} \\
& + 3664 \arctan \frac{1}{30001} + 808 \arctan \frac{1}{51412} + 3386 \arctan \frac{1}{247057} \\
& - 1074 \arctan \frac{1}{395413} + 676 \arctan \frac{1}{740943} + 2407 \arctan \frac{1}{8296072}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 2026 \arctan \frac{1}{12943} + 3847 \arctan \frac{1}{13043} + 4062 \arctan \frac{1}{14942} \\
& + 2729 \arctan \frac{1}{21059} - 1340 \arctan \frac{1}{32807} - 215 \arctan \frac{1}{83071} \\
& - 581 \arctan \frac{1}{83270} - 2805 \arctan \frac{1}{157318} + 1074 \arctan \frac{1}{1493208}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 2363 \arctan \frac{1}{12438} + 5575 \arctan \frac{1}{15933} + 5136 \arctan \frac{1}{18543} \\
& - 1042 \arctan \frac{1}{39307} - 481 \arctan \frac{1}{39818} + 2873 \arctan \frac{1}{390112} \\
& + 776 \arctan \frac{1}{513443} - 4062 \arctan \frac{1}{2298668} + 3581 \arctan \frac{1}{227661182}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 2475 \arctan \frac{1}{12238} + 4357 \arctan \frac{1}{13443} + 3286 \arctan \frac{1}{34208} \\
& + 4902 \arctan \frac{1}{39307} + 3767 \arctan \frac{1}{44179} - 2988 \arctan \frac{1}{58911} \\
& + 2097 \arctan \frac{1}{390112} - 3581 \arctan \frac{1}{2163127} + 2805 \arctan \frac{1}{201229582}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 2475 \arctan \frac{1}{12238} + 4357 \arctan \frac{1}{13443} + 3767 \arctan \frac{1}{30997} \\
& + 4421 \arctan \frac{1}{39307} + 481 \arctan \frac{1}{55603} + 298 \arctan \frac{1}{58911} \\
& + 2805 \arctan \frac{1}{211050} - 708 \arctan \frac{1}{390112} - 295 \arctan \frac{1}{2163127}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 3183 \arctan \frac{1}{12238} + 4838 \arctan \frac{1}{13443} + 2097 \arctan \frac{1}{20457} \\
& + 1870 \arctan \frac{1}{37057} - 891 \arctan \frac{1}{58911} + 1843 \arctan \frac{1}{83247} \\
& + 935 \arctan \frac{1}{173932} + 481 \arctan \frac{1}{409557} - 2419 \arctan \frac{1}{2163127}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 2956 \arctan \frac{1}{12238} + 4062 \arctan \frac{1}{13307} + 3581 \arctan \frac{1}{14256} \\
& + 295 \arctan \frac{1}{29193} - 3222 \arctan \frac{1}{39307} + 4655 \arctan \frac{1}{58911} \\
& - 1257 \arctan \frac{1}{69915} - 708 \arctan \frac{1}{390112} + 481 \arctan \frac{1}{9361318}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 2773 \arctan \frac{1}{12238} + 1186 \arctan \frac{1}{12943} + 8073 \arctan \frac{1}{17298} \\
& + 183 \arctan \frac{1}{38280} + 2331 \arctan \frac{1}{114483} - 2622 \arctan \frac{1}{129553} \\
& - 1914 \arctan \frac{1}{172078} + 3215 \arctan \frac{1}{1000267} + 5085 \arctan \frac{1}{1460857}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 9852 \arctan \frac{1}{12023} - 4306 \arctan \frac{1}{34208} + 2514 \arctan \frac{1}{51693} \\
& + 1484 \arctan \frac{1}{172078} + 3088 \arctan \frac{1}{219602} + 3581 \arctan \frac{1}{275807} \\
& + 962 \arctan \frac{1}{303932} - 776 \arctan \frac{1}{329365} + 4174 \arctan \frac{1}{619858}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 9852 \arctan \frac{1}{12023} + 776 \arctan \frac{1}{32318} - 4306 \arctan \frac{1}{34208} \\
& + 1738 \arctan \frac{1}{44179} - 776 \arctan \frac{1}{66432} + 708 \arctan \frac{1}{172078} \\
& + 3864 \arctan \frac{1}{219602} + 3581 \arctan \frac{1}{275807} + 3398 \arctan \frac{1}{619858}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 6896 \arctan \frac{1}{12023} + 3476 \arctan \frac{1}{18543} + 1218 \arctan \frac{1}{19703} \\
& - 1870 \arctan \frac{1}{39818} + 776 \arctan \frac{1}{157318} - 1660 \arctan \frac{1}{160590} \\
& + 266 \arctan \frac{1}{172078} + 3581 \arctan \frac{1}{275807} + 908 \arctan \frac{1}{2298668}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 9076 \arctan \frac{1}{12023} + 776 \arctan \frac{1}{12943} - 3530 \arctan \frac{1}{34208} \\
& + 1738 \arctan \frac{1}{44179} + 708 \arctan \frac{1}{172078} + 3088 \arctan \frac{1}{219602} \\
& + 2805 \arctan \frac{1}{275807} + 3398 \arctan \frac{1}{619858} + 776 \arctan \frac{1}{1336743}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 3808 \arctan \frac{1}{12023} + 2180 \arctan \frac{1}{12238} + 3422 \arctan \frac{1}{17298} \\
& + 776 \arctan \frac{1}{38280} + 2622 \arctan \frac{1}{58911} + 1738 \arctan \frac{1}{114483} \\
& + 708 \arctan \frac{1}{172078} + 2029 \arctan \frac{1}{275807} + 1870 \arctan \frac{1}{1460857}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 3032 \arctan \frac{1}{12023} + 2956 \arctan \frac{1}{12238} + 3422 \arctan \frac{1}{13443} \\
& + 2622 \arctan \frac{1}{58911} - 908 \arctan \frac{1}{114483} - 1870 \arctan \frac{1}{139693} \\
& + 708 \arctan \frac{1}{172078} + 2805 \arctan \frac{1}{275807} - 776 \arctan \frac{1}{2163127}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 4572 \arctan \frac{1}{11981} + 5280 \arctan \frac{1}{19703} + 3449 \arctan \frac{1}{34208} \\
& + 1738 \arctan \frac{1}{44179} - 378 \arctan \frac{1}{99557} - 215 \arctan \frac{1}{108090} \\
& + 613 \arctan \frac{1}{798097} + 2407 \arctan \frac{1}{1935182} - 2590 \arctan \frac{1}{4497709}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 4357 \arctan \frac{1}{11981} + 2475 \arctan \frac{1}{19703} + 4062 \arctan \frac{1}{34208} \\
& + 3020 \arctan \frac{1}{39307} + 2805 \arctan \frac{1}{41688} + 1555 \arctan \frac{1}{44179} \\
& - 776 \arctan \frac{1}{99557} + 398 \arctan \frac{1}{390112} + 2988 \arctan \frac{1}{617427}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 5431 \arctan \frac{1}{11981} + 2212 \arctan \frac{1}{12227} + 4325 \arctan \frac{1}{19703} \\
& - 2116 \arctan \frac{1}{39307} - 1074 \arctan \frac{1}{167318} - 1257 \arctan \frac{1}{333367} \\
& + 398 \arctan \frac{1}{390112} - 3581 \arctan \frac{1}{664373} + 481 \arctan \frac{1}{7042807}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 4838 \arctan \frac{1}{11269} + 5280 \arctan \frac{1}{20457} + 3183 \arctan \frac{1}{27823} \\
& - 1655 \arctan \frac{1}{34522} + 1870 \arctan \frac{1}{37057} - 2995 \arctan \frac{1}{83247} \\
& + 935 \arctan \frac{1}{173932} + 481 \arctan \frac{1}{409557} + 5602 \arctan \frac{1}{534568}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 6056 \arctan \frac{1}{10842} + 3796 \arctan \frac{1}{39307} + 5024 \arctan \frac{1}{44179} \\
& + 4838 \arctan \frac{1}{167318} - 2475 \arctan \frac{1}{275807} - 776 \arctan \frac{1}{333367} \\
& - 708 \arctan \frac{1}{390112} - 1106 \arctan \frac{1}{619858} + 4062 \arctan \frac{1}{1610057}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 6056 \arctan \frac{1}{10842} + 4062 \arctan \frac{1}{34208} + 4758 \arctan \frac{1}{44179} \\
& - 2475 \arctan \frac{1}{275807} + 4572 \arctan \frac{1}{338746} - 708 \arctan \frac{1}{390112} \\
& + 776 \arctan \frac{1}{610443} - 1882 \arctan \frac{1}{619858} - 3796 \arctan \frac{1}{6826318}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 6056 \arctan \frac{1}{10842} + 4062 \arctan \frac{1}{34208} + 3796 \arctan \frac{1}{39307} \\
& + 962 \arctan \frac{1}{44179} + 776 \arctan \frac{1}{139693} - 2475 \arctan \frac{1}{275807} \\
& - 1484 \arctan \frac{1}{390112} - 1882 \arctan \frac{1}{619858} - 776 \arctan \frac{1}{201229582}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 5280 \arctan \frac{1}{10842} + 4838 \arctan \frac{1}{34208} + 776 \arctan \frac{1}{38280} \\
& + 4572 \arctan \frac{1}{39307} + 1738 \arctan \frac{1}{44179} - 3251 \arctan \frac{1}{275807} \\
& - 708 \arctan \frac{1}{390112} - 2658 \arctan \frac{1}{619858} - 1552 \arctan \frac{1}{1460857}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 5280 \arctan \frac{1}{10842} + 776 \arctan \frac{1}{32318} + 4838 \arctan \frac{1}{34208} \\
& + 4572 \arctan \frac{1}{39307} + 1738 \arctan \frac{1}{44179} - 776 \arctan \frac{1}{66432} \\
& - 1699 \arctan \frac{1}{275807} - 708 \arctan \frac{1}{390112} - 1882 \arctan \frac{1}{619858}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 6056 \arctan \frac{1}{10842} - 776 \arctan \frac{1}{20057} + 4838 \arctan \frac{1}{34208} \\
& + 4572 \arctan \frac{1}{39307} + 962 \arctan \frac{1}{44179} - 2475 \arctan \frac{1}{275807} \\
& - 708 \arctan \frac{1}{390112} - 1882 \arctan \frac{1}{619858} - 776 \arctan \frac{1}{4433307}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 6537 \arctan \frac{1}{10833} + 3315 \arctan \frac{1}{20457} + 1106 \arctan \frac{1}{57532} \\
& + 3620 \arctan \frac{1}{93020} - 3713 \arctan \frac{1}{143382} - 1321 \arctan \frac{1}{167318} \\
& - 3430 \arctan \frac{1}{664373} + 859 \arctan \frac{1}{1048768} - 625 \arctan \frac{1}{7042807}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 1699 \arctan \frac{1}{10481} + 4357 \arctan \frac{1}{12943} + 2312 \arctan \frac{1}{20457} \\
& + 1750 \arctan \frac{1}{34208} + 5319 \arctan \frac{1}{44179} + 95 \arctan \frac{1}{262433} \\
& + 4504 \arctan \frac{1}{2146152} - 2590 \arctan \frac{1}{7082943} - 215 \arctan \frac{1}{173691877}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 2690 \arctan \frac{1}{10304} + 4655 \arctan \frac{1}{13637} + 2180 \arctan \frac{1}{16432} \\
& + 1186 \arctan \frac{1}{34718} - 327 \arctan \frac{1}{286057} + 2773 \arctan \frac{1}{328173} \\
& + 2065 \arctan \frac{1}{390112} + 3398 \arctan \frac{1}{793632} - 3222 \arctan \frac{1}{4433307}
\end{aligned}$$

$$\begin{aligned}
\frac{\pi}{4} = & 4357 \arctan \frac{1}{10213} + 4360 \arctan \frac{1}{18543} + 2539 \arctan \frac{1}{39307} \\
& + 295 \arctan \frac{1}{39818} + 2363 \arctan \frac{1}{55603} + 2805 \arctan \frac{1}{211050} \\
& - 708 \arctan \frac{1}{390112} - 4062 \arctan \frac{1}{2298668} - 1587 \arctan \frac{1}{2867938}
\end{aligned}$$