

$$1. - 2.28116 \times 10^{-16} i$$

$$\begin{aligned} \text{ztmm}[1_] &:= \text{Product}[(1 + 1/\text{ZetaZero}[r]) (1 + 1/\text{ZetaZero}[-r]), \{r, 1, 1\}] \\ &\text{N}[\text{Pi}/3] \\ &\text{N}[\text{ztmm}[500]] \\ &1.0472 \\ &1.04479 + 3.88578 \times 10^{-16} i \end{aligned}$$

$$\begin{aligned} &\text{N}[3 \text{Zeta}[3] / \text{Pi}] \\ \text{zt3m22}[1_] &:= \text{Product}[(1 + 2/\text{ZetaZero}[r]) (1 + 2/\text{ZetaZero}[-r]), \{r, 1, 1\}] \\ &\text{N}[\text{zt3m22}[2200]] \\ &1.14788 \\ &1.14504 + 1.66533 \times 10^{-16} i \end{aligned}$$

$$\begin{aligned} \text{zt4}[1_] &:= \text{Product}[(1 - 1/\text{ZetaZero}[r]) (1 - 1/\text{ZetaZero}[-r]), \{r, 1, 1\}] \\ &\text{N}[\text{zt4}[800]] \end{aligned}$$

$$1. - 3.33067 \times 10^{-16} i$$

$$\begin{aligned} \text{zt322b}[1_] &:= \text{Product}[(1 - 2/\text{ZetaZero}[r]) (1 - 2/\text{ZetaZero}[-r]), \{r, 1, 1\}] \\ &\text{N}[\text{zt322b}[700]] \\ &\text{N}\left[\frac{\pi}{3}\right] \\ &1.04528 + 2.22045 \times 10^{-16} i \\ &1.0472 \end{aligned}$$

$$\begin{aligned} \text{zt33}[1_] &:= \text{Product}[(1 - 3/\text{ZetaZero}[r]) (1 - 3/\text{ZetaZero}[-r]), \{r, 1, 1\}] \\ &\text{N}[\text{zt33}[2200]] \\ &\text{N}[3 \text{Zeta}[3] / \text{Pi}] \\ &\text{N}[2^{(1/2)} \text{Pi}^{(3/2)} / 7] \\ &1.14504 + 3.33067 \times 10^{-16} i \\ &1.14788 \\ &1.12497 \end{aligned}$$

```
zt42[1_] := Product[(1 - 4 / ZetaZero[r]) (1 - 4 / ZetaZero[-r]), {r, 1, 1}]
```

$$N\left[\frac{2 \pi^2}{15}\right]$$

```
N[zt42[1200]]
```

```
1.31595
```

```
1.30597 - 7.77156 × 10-16 i
```

$$N\left[\frac{15 \text{Zeta}[5]}{\pi^2}\right]$$

```
zt35a[1_] := Product[(1 - 5 / ZetaZero[r]) (1 - 5 / ZetaZero[-r]), {r, 1, 1}]
```

```
N[zt35a[700]]
```

```
N[2^(3 / 2) Pi^(5 / 2) / 31]
```

```
1.57594
```

```
1.54728 - 5.55112 × 10-16 i
```

```
1.59609
```

$$N\left[\frac{4 \pi^3}{63}\right]$$

```
zt36b[1_] := Product[(1 - 6 / ZetaZero[r]) (1 - 6 / ZetaZero[-r]), {r, 1, 1}]
```

```
N[zt36b[1100]]
```

```
1.96865
```

```
1.92926 + 4.44089 × 10-16 i
```

$$N\left[\frac{315 \text{Zeta}[7]}{4 \pi^3}\right]$$

```
zt37b[1_] := Product[(1 - 7 / ZetaZero[r]) (1 - 7 / ZetaZero[-r]), {r, 1, 1}]
```

```
N[zt37b[1200]]
```

```
N[2^(5 / 2) Pi^(7 / 2) / 127]
```

```
2.56101
```

```
2.4937 + 6.10623 × 10-16 i
```

```
2.44791
```

```
2.5610139009137747`
```

```

N[ $\frac{8 \pi^4}{225}$ ]
zt38b[l_] := Product[(1 - 8 / ZetaZero[r]) (1 - 8 / ZetaZero[-r]), {r, 1, 1}]
N[zt38b[1200]]

```

```

N[ $\frac{945 \text{Zeta}[9]}{2 \pi^4}$ ]
zt399b[l_] := Product[(1 - 9 / ZetaZero[r]) (1 - 9 / ZetaZero[-r]), {r, 1, 1}]
N[zt399b[900]]
4.86042
4.5971 - 3.55271  $\times 10^{-15}$  i

```

```

N[ $\frac{16 \pi^5}{693}$ ]
zt310b[l_] := Product[(1 - 10 / ZetaZero[r]) (1 - 10 / ZetaZero[-r]), {r, 1, 1}]
N[zt310b[2200]]
7.06539
6.80749 + 8.88178  $\times 10^{-16}$  i

```

```

zzz[l_] := Product[(1 - (1 / 2) / ZetaZero[r]) (1 - (1 / 2) / ZetaZero[-r]), {r, 1, 1}]
N[zzz[3611]]
0.994313 + 4.16334  $\times 10^{-17}$  i

```

```

zt4a2[l_] := Product[(-1 + 1 / ZetaZero[r]) (1 - 1 / ZetaZero[-r]), {r, 1, 1}]
N[zt4a2[800]]
1. - 3.33067  $\times 10^{-16}$  i

```

```

b1[n_] := (-1) ^ (n + 1) BernoulliB[2 n] (2 Pi) ^ (2 n) / (2 ((2 n) !))
b1[2]
 $\frac{\pi^4}{90}$ 
bla[n_] := (-1) ^ (Floor[n / 2] + 1) BernoulliB[n] (2 Pi) ^ (n) / (2 ((n) !))
bla[3]
0
blb[n_] := 2 ((-1) ^ (Floor[n / 2] + 1) BernoulliB[n] (2 Pi) ^ (n) / (2 ((n) !)))
(1 / 2 Pi ^ (-n / 2) n (n - 1) Gamma[n / 2])

```

b1b[6]

$$\frac{4 \pi^3}{63}$$

b1c[n_] := 2 ((-1)^(Floor[n/2] + 1) BernB[n] (2 Pi)^(n) / (2 ((n)!)))
(1 / 2 Pi)^(-n/2) n (n - 1) Gamma[n/2]

b1c[6]

$$\frac{8}{3} \pi^3 \text{BernB}[6]$$

2 ((-1)^(Floor[n/2] + 1) BernB[n] (2 Pi)^(n) / (2 ((n)!)))
(1 / 2 Pi)^(-n/2) n (n - 1) Gamma[n/2]

FullSimplify[Expand[$\frac{(-1)^{1+\text{Floor}[\frac{n}{2}]} 2^{-1+n} (-1+n) n \pi^{n/2} \text{BernB}[n] \text{Gamma}[\frac{n}{2}]}{n!}$]]]

ea[n_] := - $\frac{2 (-1)^{\text{Floor}[\frac{n}{2}]} \pi^{\frac{1+n}{2}} \text{BernB}[n]}{\text{Gamma}[\frac{1}{2} (-1+n)]}$

ea[4]

$$-4 \pi^2 \text{BernB}[4]$$

$$\text{Gamma}\left[\frac{1}{2} (-1+4)\right]$$

$$\frac{\sqrt{\pi}}{2}$$

$$\text{Gamma}[(8-1)/2]$$

$$\frac{15 \sqrt{\pi}}{8}$$

coes[s_] := Pi^(s/2) / (2 (s - 1) Gamma[1 + s/2])

coes[9]

$$\frac{2 \pi^4}{945}$$

```
ztmm[l_] := Product[(1 + 1 / ZetaZero[r]) (1 + 1 / ZetaZero[-r]), {r, 1, l}]
```

```
N[Pi / 3]
```

```
N[ztmm[500]]
```

```
1.0472
```

```
1.04479 + 3.88578 × 10-16 i
```

```
ztmm[l_] :=
```

```
Product[(1 + 1 / (1 / 2 + Im[ZetaZero[r]] I)) (1 + 1 / (1 / 2 - Im[ZetaZero[r]] I)), {r, 1, l}]
```

```
N[Pi / 3]
```

```
N[ztmm[100]]
```

```
(1 + 1 / ZetaZero[r]) (1 + 1 / ZetaZero[-r])
```

```
1.0472
```

```
1.0407 - 4.50358 × 10-18 i
```

```
FullSimplify[Expand[(1 + 1 / (1 / 2 + Im[ZetaZero[r]] I)) (1 + 1 / (1 / 2 - Im[ZetaZero[r]] I))]]
```

$$\text{Expand}\left[1 + \frac{8}{1 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}\right]$$

$$\frac{9 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}{1 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}$$

```
ztmm[l_] := Product[ $\frac{9 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}{1 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}$ , {r, 1, l}]
```

```
N[Pi / 3]
```

```
N[ztmm[300]]
```

```
1.0472
```

```
1.04385
```

```

ztmmc[1_] := Product[(1 + 1 / ZetaZero[r])^2 (1 + 1 / ZetaZero[-r])^2, {r, 1, 1}]
N[Pi^2 / 9]
N[ztmmc[800]]
1.09662

```

```

1.09295 - 4.996 × 10-16 i

```

```

FullSimplify[Expand[(1 + 1 / ZetaZero[r])^2 (1 + 1 / ZetaZero[-r])^2]]

$$\frac{(1 + \text{ZetaZero}[-r])^2 (1 + \text{ZetaZero}[r])^2}{\text{ZetaZero}[-r]^2 \text{ZetaZero}[r]^2}$$


```

```

ztmmc[1_] := Product[ $\frac{(1 + \text{ZetaZero}[-r])^2 (1 + \text{ZetaZero}[r])^2}{\text{ZetaZero}[-r]^2 \text{ZetaZero}[r]^2}$ , {r, 1, 1}]
N[Pi^2 / 9]
N[ztmmc[200]]
1.09662

```

```

1.08762 - 3.33067 × 10-16 i

```

```

FullSimplify[Expand[(1 + 1 / (a + b I))^2 (1 + 1 / (a - b I))^2]]

```

$$\frac{\left((1 + a)^2 + b^2\right)^2}{\left(a^2 + b^2\right)^2}$$

```

FullSimplify[Expand[(1 + 1 / (a + b I)) (1 + 1 / (a - b I))]]

```

$$1 + \frac{1 + 2 a}{a^2 + b^2}$$

$$\frac{\left((1 + a)^2 + b^2\right)^2}{\left(a^2 + b^2\right)^2} /. a \rightarrow (1 / 2)$$

```

FullSimplify[Expand[ $\frac{\left(\frac{9}{4} + b^2\right)^2}{\left(\frac{1}{4} + b^2\right)^2}$ ]]

```

$$\frac{\left(9 + 4 b^2\right)^2}{\left(1 + 4 b^2\right)^2}$$

```

ztmmd[1_] := Product[ $\frac{\left(9 + 4 \text{Im}[\text{ZetaZero}[r]]^2\right)^2}{\left(1 + 4 \text{Im}[\text{ZetaZero}[r]]^2\right)^2}$ , {r, 1, 1}]

```

```

N[Pi^2 / 9]
N[ztmmd[120]]

```

1.09662

1.08441

$N[(9 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]])^2 / (1 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]])^2 /. r \rightarrow 5]$

1.12417

$N\left[\frac{(1 + \operatorname{ZetaZero}[-r])^2 (1 + \operatorname{ZetaZero}[r])^2}{\operatorname{ZetaZero}[-r]^2 \operatorname{ZetaZero}[r]^2} /. r \rightarrow 1\right]$

1.0201 + 0. i

$N\left[\frac{(1 + \operatorname{ZetaZero}[-r])^2 (1 + \operatorname{ZetaZero}[r])^2}{(1/2 - \operatorname{Im}[\operatorname{ZetaZero}[r]] I)^2 \operatorname{ZetaZero}[r]^2} /. r \rightarrow 1\right]$

1.0201 + 0. i

$N[\operatorname{ZetaZero}[-1]^2]$

-199.54 - 14.1347 i

$N[\operatorname{Im}[\operatorname{ZetaZero}[-1]]]$

-14.1347

$N[(1/2 - \operatorname{Im}[\operatorname{ZetaZero}[1]] I)^2]$

-199.54 - 14.1347 i

$$\frac{(1 + (1/2 - \operatorname{Im}[\operatorname{ZetaZero}[r]] I))^2 (1 + (1/2 + \operatorname{Im}[\operatorname{ZetaZero}[r]] I))^2}{(1/2 - \operatorname{Im}[\operatorname{ZetaZero}[r]] I)^2 (1/2 + \operatorname{Im}[\operatorname{ZetaZero}[r]] I)^2}$$

$\text{FullSimplify}\left[\text{Expand}\left[\frac{\left(\frac{3}{2} - i \operatorname{Im}[\operatorname{ZetaZero}[r]]\right)^2 \left(\frac{3}{2} + i \operatorname{Im}[\operatorname{ZetaZero}[r]]\right)^2}{\left(\frac{1}{2} - i \operatorname{Im}[\operatorname{ZetaZero}[r]]\right)^2 \left(\frac{1}{2} + i \operatorname{Im}[\operatorname{ZetaZero}[r]]\right)^2}\right]\right]$

$$\frac{(9 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2)^2}{(1 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2)^2}$$

$\text{zttmde}[1_] := \text{Product}\left[\frac{(9 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2)^{3/2}}{(1 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2)^{3/2}}, \{r, 1, 1\}\right]$

$N[\text{Pi}^{(3/2)} / (3^{(3/2)})]$

$N[\text{zttmde}[240]]$

1.07163

1.06572

$$\text{ztmmd}[1_]:= \text{Product}\left[\frac{(9+4\text{Im}[\text{ZetaZero}[r]]^2)^2}{(1+4\text{Im}[\text{ZetaZero}[r]]^2)^2}, \{r, 1, 1\}\right]$$

N[Pi^2/9]

N[ztmmd[120]]

1.09662

1.08441

FullSimplify[Expand[(1-4/(1/2+Im[ZetaZero[r]] I))(1-4/(1/2-Im[ZetaZero[r]] I))]]

$$\frac{49+4\text{Im}[\text{ZetaZero}[r]]^2}{1+4\text{Im}[\text{ZetaZero}[r]]^2}$$

$$\text{zt42d}[1_]:= \text{Product}[(1-4/\text{ZetaZero}[r])(1-4/\text{ZetaZero}[-r]), \{r, 1, 1\}]$$

$$\text{N}\left[\frac{2\pi^2}{15}\right]$$

N[zt42d[200]]

$$\text{zt42d}[1_]:= \text{Product}\left[\frac{49+4\text{Im}[\text{ZetaZero}[r]]^2}{1+4\text{Im}[\text{ZetaZero}[r]]^2}, \{r, 1, 1\}\right]$$

$$\text{N}\left[\frac{2\pi^2}{15}\right]$$

N[zt42d[400]]

1.31595

1.29512

$$\text{N}\left[\frac{4\pi^3}{63}\right]$$

$$\text{zt36b}[1_]:= \text{Product}\left[\frac{121+4\text{Im}[\text{ZetaZero}[r]]^2}{1+4\text{Im}[\text{ZetaZero}[r]]^2}, \{r, 1, 1\}\right]$$

N[zt36b[300]]

1.96865

1.87642

FullSimplify[Expand[(1-6/(1/2+Im[ZetaZero[r]] I))(1-6/(1/2-Im[ZetaZero[r]] I))]]

$$\frac{121 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2}{1 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2}$$

$$N\left[\frac{8 \pi^4}{225}\right]$$

$$\text{zt38b}[1_]:= \text{Product}\left[\frac{225 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2}{1 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2}, \{r, 1, 1\}\right]$$

$$N[\text{zt38b}[900]]$$

$$3.46343$$

$$3.3166$$

$$\text{FullSimplify}[\text{Expand}[(1 - 8 / (1 / 2 + \operatorname{Im}[\operatorname{ZetaZero}[r]] \operatorname{I})) (1 - 8 / (1 / 2 - \operatorname{Im}[\operatorname{ZetaZero}[r]] \operatorname{I}))]]]$$

$$\frac{225 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2}{1 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2}$$

$$\text{zt38b}[1_]:= \text{Product}\left[\frac{4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2}{1 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2}, \{r, 1, 1\}\right]$$

$$N[\text{zt38b}[1200]]$$

$$0.994399209202834$$

$$\text{FullSimplify}[\text{Expand}[(1 - 3 / (1 / 2 + \operatorname{Im}[\operatorname{ZetaZero}[r]] \operatorname{I})) (1 - 3 / (1 / 2 - \operatorname{Im}[\operatorname{ZetaZero}[r]] \operatorname{I}))]]]$$

$$1 + \frac{24}{1 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2}$$

$$\text{Expand}\left[\frac{(9 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2)^2}{(1 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2)^2}\right]$$

$$\frac{81}{(1 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2)^2} + \frac{72 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2}{(1 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2)^2} + \frac{16 \operatorname{Im}[\operatorname{ZetaZero}[r]]^4}{(1 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2)^2}$$

$$\text{Expand}\left[\left(1 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2\right)^2\right]$$

$$1 + 8 \operatorname{Im}[\text{ZetaZero}[r]]^2 + 16 \operatorname{Im}[\text{ZetaZero}[r]]^4$$

$$\frac{(9 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2)^2}{(1 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2)^2}$$

$$\left(\frac{49 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}{1 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}\right) \bigg/ \left(\frac{9 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}{1 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}\right)$$

$$\frac{49 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}{9 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}$$

$$\frac{49 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}{9 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}$$

$$\frac{4 \pi^3}{63} \bigg/ \frac{\pi^2}{9}$$

$$\frac{4 \pi}{7}$$

$$\frac{121 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}{1 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2} \bigg/ \frac{(9 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2)^2}{(1 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2)^2}$$

$$\text{FullSimplify}\left[\text{Expand}\left[\frac{(1 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2)(121 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2)}{(9 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2)^2}\right]\right]$$

$$\frac{(1 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2)(121 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2)}{(9 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2)^2}$$

$$\frac{8 \pi^4}{225} \bigg/ \frac{4 \pi^3}{63}$$

$$\frac{14 \pi}{25}$$

$$\frac{225 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}{1 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2} \bigg/ \frac{121 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}{1 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}$$

$$\frac{225 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}{121 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}$$

$$\frac{225 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}{121 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}$$

$$\frac{2 \pi}{5} \bigg/ \frac{14 \pi}{25}$$

$$\frac{5}{7}$$

$$\frac{49 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}{9 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2} \bigg/ \frac{225 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}{121 + 4 \operatorname{Im}[\text{ZetaZero}[r]]^2}$$

$$\text{FullSimplify}\left[\text{Expand}\left[\frac{(49 + 4 \text{Im}[\text{ZetaZero}[r]]^2) (121 + 4 \text{Im}[\text{ZetaZero}[r]]^2)}{(9 + 4 \text{Im}[\text{ZetaZero}[r]]^2) (225 + 4 \text{Im}[\text{ZetaZero}[r]]^2)}\right]\right]$$

$$1 + \frac{560}{27 (9 + 4 \text{Im}[\text{ZetaZero}[r]]^2)} - \frac{2288}{27 (225 + 4 \text{Im}[\text{ZetaZero}[r]]^2)}$$

$$\frac{9 + 4 \text{Im}[\text{ZetaZero}[r]]^2}{1 + 4 \text{Im}[\text{ZetaZero}[r]]^2} \bigg/ \frac{49 + 4 \text{Im}[\text{ZetaZero}[r]]^2}{9 + 4 \text{Im}[\text{ZetaZero}[r]]^2}$$

$$\text{FullSimplify}\left[\text{Expand}\left[\frac{(9 + 4 \text{Im}[\text{ZetaZero}[r]]^2)^2}{(1 + 4 \text{Im}[\text{ZetaZero}[r]]^2) (49 + 4 \text{Im}[\text{ZetaZero}[r]]^2)}\right]\right]$$

$$\frac{(9 + 4 \text{Im}[\text{ZetaZero}[r]]^2)^2}{(1 + 4 \text{Im}[\text{ZetaZero}[r]]^2) (49 + 4 \text{Im}[\text{ZetaZero}[r]]^2)}$$

$$(\pi / 3) \bigg/ \left(\frac{2 \pi}{5}\right)$$

$$\frac{5}{6}$$

$$\frac{4 \pi^3}{63} \bigg/ \frac{2 \pi^2}{15}$$

$$\frac{10 \pi}{21}$$

$$\frac{121 + 4 \text{Im}[\text{ZetaZero}[r]]^2}{1 + 4 \text{Im}[\text{ZetaZero}[r]]^2} \bigg/ \frac{49 + 4 \text{Im}[\text{ZetaZero}[r]]^2}{1 + 4 \text{Im}[\text{ZetaZero}[r]]^2}$$

$$\frac{121 + 4 \text{Im}[\text{ZetaZero}[r]]^2}{49 + 4 \text{Im}[\text{ZetaZero}[r]]^2}$$

$$\frac{2 \pi}{5} \bigg/ \frac{10 \pi}{21}$$

$$\frac{21}{25}$$

$$\frac{49 + 4 \text{Im}[\text{ZetaZero}[r]]^2}{9 + 4 \text{Im}[\text{ZetaZero}[r]]^2} \bigg/ \frac{121 + 4 \text{Im}[\text{ZetaZero}[r]]^2}{49 + 4 \text{Im}[\text{ZetaZero}[r]]^2}$$

$$\frac{(49 + 4 \text{Im}[\text{ZetaZero}[r]]^2)^2}{(9 + 4 \text{Im}[\text{ZetaZero}[r]]^2) (121 + 4 \text{Im}[\text{ZetaZero}[r]]^2)}$$

$$\frac{8 \pi^4}{225} \bigg/ \frac{4 \pi^3}{63}$$

$$\frac{14 \pi}{25}$$

$$\frac{225 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2}{1 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2} \bigg/ \frac{121 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2}{1 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2}$$

$$\frac{225 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2}{121 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2}$$

$$19^2$$

$$\frac{16 \pi^5}{693} \bigg/ \frac{8 \pi^4}{225}$$

$$361$$

$$\frac{50 \pi}{77}$$

$$23^2$$

$$529$$

$$\frac{529 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2}{361 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2}$$

$$\frac{529 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2}{361 + 4 \operatorname{Im}[\operatorname{ZetaZero}[r]]^2}$$

$$\frac{22\,112 \pi^6}{1\,289\,925} \bigg/ \frac{16 \pi^5}{693}$$

$$\frac{15\,202 \pi}{20\,475}$$

$$\mathbf{fb}[n_]:=(-1)^{(\mathbf{Floor}[n/2]+1)} \mathbf{BernoulliB}[n] (2 \pi)^n / (2 ((n)!))$$

$$\mathbf{fb2}[n_]:=(-1)^{(\mathbf{Floor}[n/2]+1)} \mathbf{BernoulliB}[n] (2 \pi)^n / (2 ((n)!)) / (\pi^{(n/2)}) / (2 (n-1)) / \mathbf{Gamma}[1+n/2]$$

$$\mathbf{fc}[n_]:= \mathbf{fb2}[n] / \mathbf{fb2}[n-2]$$

$$\mathbf{fb}[6]$$

$$\frac{\pi^6}{945}$$

$$\mathbf{N}[\{1/3, 2/5, 10/21, 14/25, 50/77, 15\,202/20\,475\}]$$

$$\{0.333333, 0.4, 0.47619, 0.56, 0.649351, 0.742466\}$$