```
N[10^ZetaZero[1]]
```

$1.34784 + 2.86065\,i$

```
N[ExpIntegralEi[(1 - ZetaZero[1]) Log[10]]]
```

$0.0880046 - 3.10063\,i$

```
N[-Gamma[0, -(1 - ZetaZero[1]) Log[10]]] - Pi I
```

$0.0880046 - 3.10063\,i$

```
N[-Sum[1 / j (1 - Gamma[j, -ZetaZero[1] Log[10]] / Gamma[j]), {j, 1, 1360}]]
```

$-4.54189 + 1.57113\,i$

```
N[LogIntegral[10^ZetaZero[1]]]
```

$1.97481 + 2.7126\,i$

```
N[-Sum[1 / j ( (Gamma[j, 0, -(1 - ZetaZero[1]) Log[10]] - Pi I) / Gamma[j]), {j, 1, 1360}]]
```

$-4.54219 + 3.8269\,i$

```
fp[n_, a_] := Sum[ ((a^(1 - ZetaZero[1]))^k - 1) / k, {k, 1, Log[a, n]}] +
  Log[(1 - ZetaZero[1]) Log[n]] + EulerGamma
```

```
fp[10, 1.0001]
```

$0.0879872 - 3.09999\,i$

```
se[n_, a_, s_] := Sum[ ((a^(1 - s))^k - 1) / k, {k, 1, Log[a, n]}]
```

```
s = N[ZetaZero[1]]; {se[nn = 10, 1.00001, s] + EulerGamma + Log[(1 - s) Log[nn]],
 N[ExpIntegralEi[(1 - s) Log[nn]]], -Gamma[0, -(1 - s) Log[nn]] - Pi I}
```

$\{0.0880018 - 3.10056\,i,\ 0.0880046 - 3.10063\,i,\ 0.0880046 - 3.10063\,i\}$

```
se[10, 1.00001, N[ZetaZero[1]]] + EulerGamma + Log[(1 - ZetaZero[1]) Log[10]]
```

$0.0880018 - 3.10056\,i$

```
N[ExpIntegralEi[(1 - ZetaZero[1]) Log[10]]]
```

$0.0880046 - 3.10063\,i$

```
Limit[ (Gamma[a, 0, -Log[n^(1 - ZetaZero[1])]] / Gamma[a] - 1) / a, {a → 0}]
```

$\left\{-\text{Gamma}\left[0, -\text{Log}\left[n^{1-\text{ZetaZero}[1]}\right]\right]\right\}$

```
Limit[ (Gamma[a, 0, -(1 - ZetaZero[1]) Log[n]] / Gamma[a] - 1) / a, {a → 0}]
```

$\{-\text{Gamma}[0, \text{Log}[n]\ (-1 + \text{ZetaZero}[1])]\}$

```
Limit[ (Gamma[a, 0, -Log[n^(1 - ZetaZero[1])]] / Gamma[a] - 1) / a, {a → 2}]
```

$\left\{-\frac{1}{2}\,\text{Gamma}\left[2, -\text{Log}\left[n^{1-\text{ZetaZero}[1]}\right]\right]\right\}$

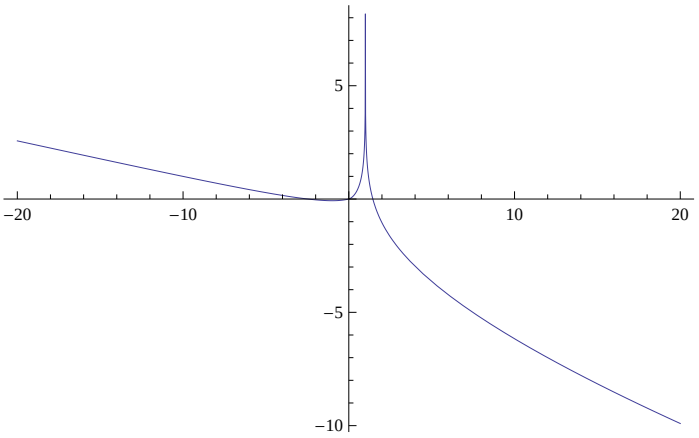
```
N[Gamma[3, 0, Log[99]] / Gamma[3]] + N[Gamma[3, Log[99]] / Gamma[3]]
```

$1.$

```
N[Gamma[3, 0, -Log[99]] / Gamma[3]] + N[Gamma[3, -Log[99]] / Gamma[3]]
```

$1. + 0.\,i$

```
Plot[{Re[Gamma[aa = 0, -Log[n]]], Re[Gamma[aa, 0, -Log[n]]]}, {n, -20, 20}]
```




```
(-1)!
```

```
ComplexInfinity
```

```
Integrate[ t^(-1) E^(-t), {t, -Log[x], Infinity}]
```

```
ConditionalExpression[Gamma[0, -Log[x]] + Log[-Log[x]], Im[Log[x]] ≠ 0 || Log[x] < 0]
```

```
Integrate[ (E^(-t) - 1) / t, {t, 0, -Log[n]}]
```

```
ConditionalExpression[-EulerGamma + ExpIntegralEi[Log[n]] - Log[-Log[n]], Log[n] < 0]
```