

BernoulliB[2]

$$\frac{1}{6}$$

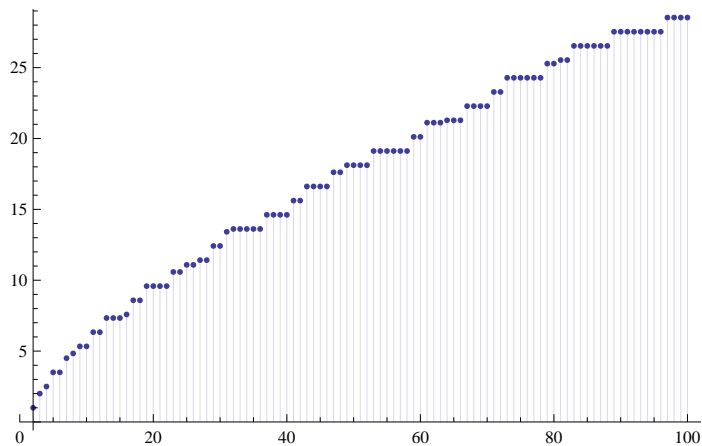
FF[n_, k_] :=

Sum[BernoulliB[k] / k! + N[MangoldtLambda[j] / Log[j]] FF[n / j, k + 1], {j, 2, n}]

FF[100, 0]

28.5333

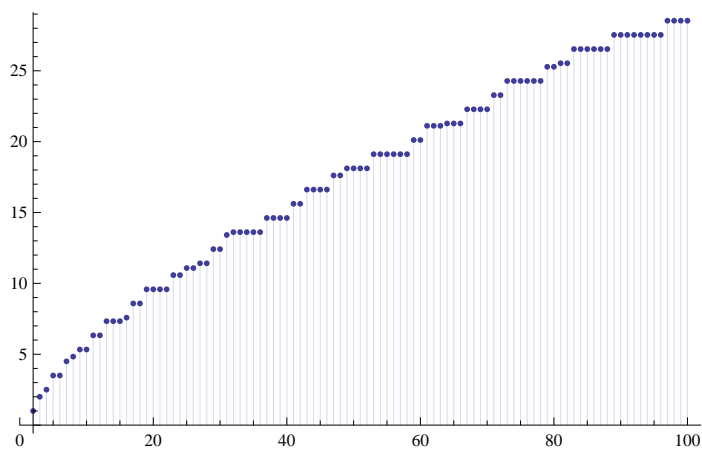
DiscretePlot[FF[n, 0], {n, 2, 100}]



FF2[n_, k_] :=

Sum[BernoulliB[k] / k! + N[MangoldtLambda[j] / Log[j]] FF2[n / j, k + 1], {j, 2, n}]

DiscretePlot[FF2[n, 0], {n, 2, 100}]

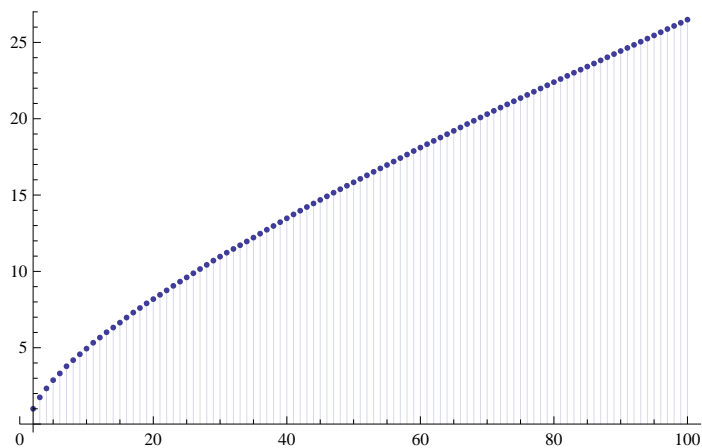


(Floor[n] - 1) BernoulliB[0] / 0!

-1 + Floor[n]

FF3[n_, k_] := (n - 1) / k - Sum[FF3[n / j, k + 1], {j, 2, n}]

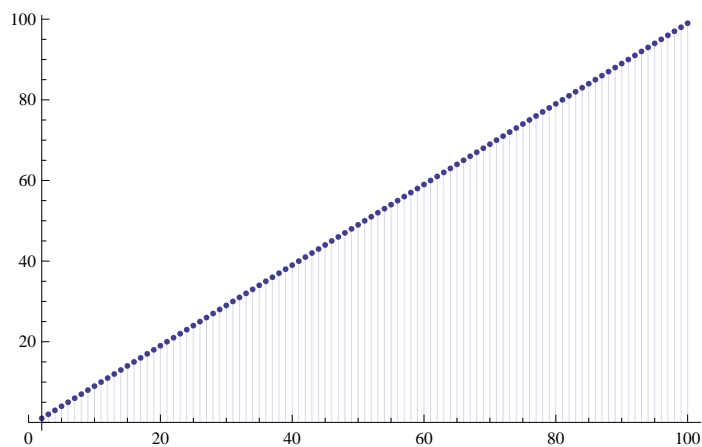
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DiscretePlot[ FF3[n, 1], {n, 2, 100}]
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```
a[n_] := -(n - 1)! ^ (-1) *
  Sum[BernoulliB[j] / j * StirlingS1[(n - 1), j - 1] * (-1)^(n - 1), {j, 1, (n - 1) + 1}];
a[0] = -1;
a[-1] = 1; Table[N[a[n]], {n, -1, 19}]
{1., -1., 0.5, 0.0833333, 0.0416667, 0.0263889, 0.01875, 0.0142692, 0.0113674,
  0.00935654, 0.00789255, 0.00678585, 0.00592406, 0.00523669, 0.0046775,
  0.00421495, 0.0038269, 0.00349735, 0.0032145, 0.00296945, 0.00275539}
```

```
FF4[n_, k_] := Sum[-a[k] N[MangoldtLambda[j] / Log[j]] - FF4[n / j, k + 1], {j, 2, n}]
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```
DiscretePlot[ FF4[n, 0], {n, 2, 100}]
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```
FF4[83, 0]
```

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82.
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```
FF5[n_, k_] :=
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Sum[-a[k] N[MangoldtLambda[j] / Log[j]] - MoebiusMu[j] FF5[n / j, k + 1], {j, 2, n}]
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```
DiscretePlot[FF5[n, 0], {n, 2, 100}]
```

