

```

FF[n_, k_] := FF[n, k] =
  If[ MangoldtLambda[n] == 0, 0,
    If[ MangoldtLambda[n] / Log[n] == 1, 1,
      N[If[ Mod[N[Log[n] / MangoldtLambda[n]], 2] == 0,
        (MangoldtLambda[n] / Log[n]) k, Abs[k] MangoldtLambda[n] / Log[n]]]]]

```

```
FF[8, 0]
```

```
0.
```

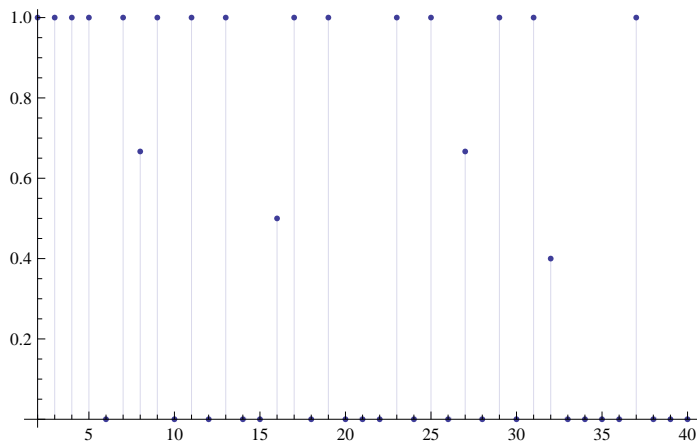
```
Mod[ (N[Log[6] / MangoldtLambda[6]]), 2]
```

```
Power::infy: Infinite expression  $\frac{1}{0}$  encountered. >>
```

```
Infinity::indet: Indeterminate expression ComplexInfinity - ComplexInfinity encountered. >>
```

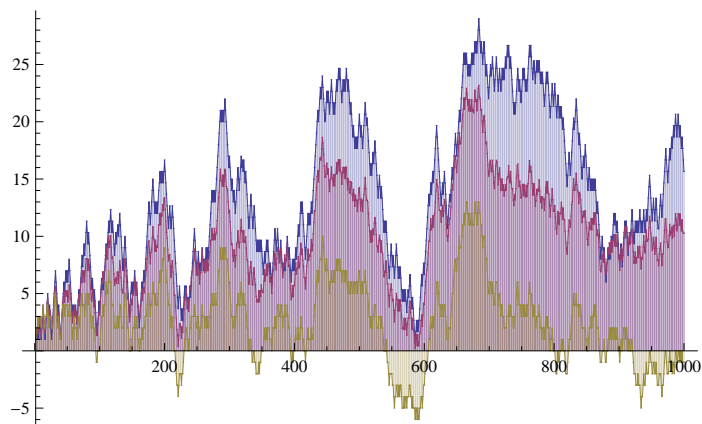
```
Indeterminate
```

```
DiscretePlot[ FF[n, 2], {n, 2, 40}]
```

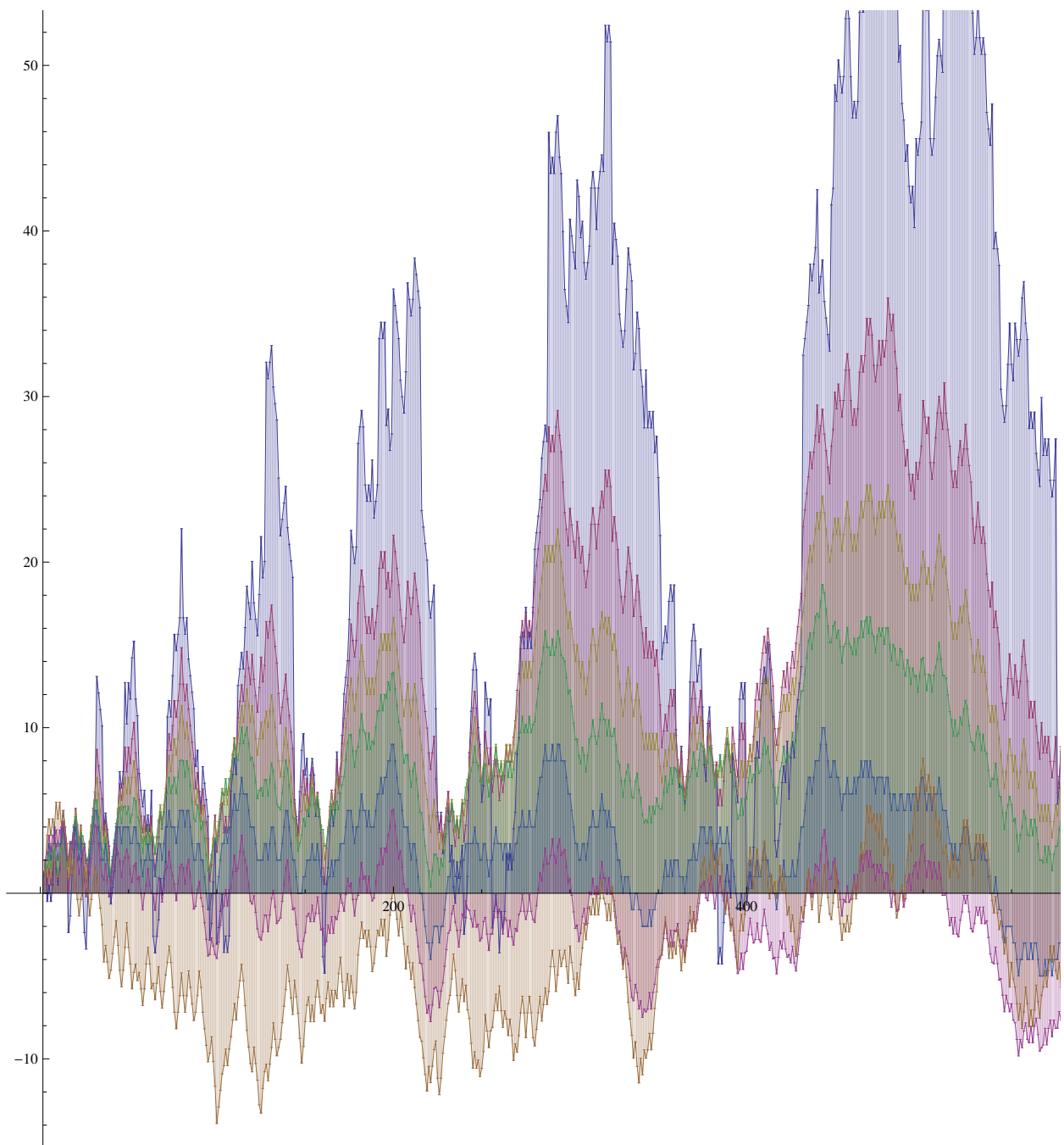


```
FG[n_, k_, s_] := FG[n, k, s] = Sum[ FF[j, s] ( 1 / (k!) - FG[Floor[n / j], k+1, s]), {j, 2, n}]
```

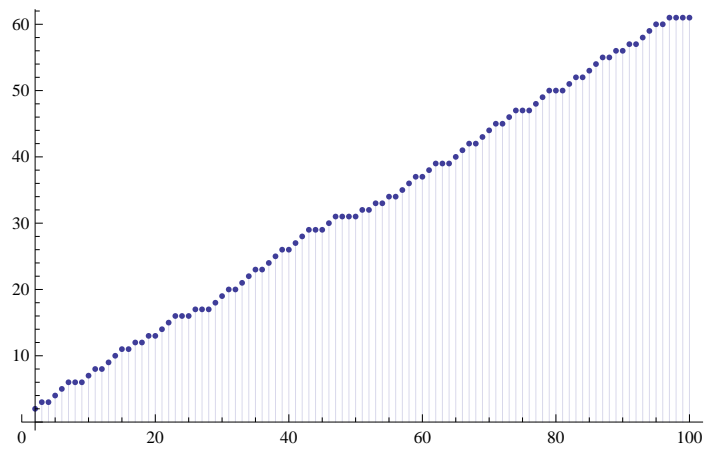
```
DiscretePlot[ {FG[n, 1, -1], FG[n, 1, 0], FG[n, 1, 1]}, {n, 2, 1000}, ExtentSize -> Full]
```



```
DiscretePlot[{FG[n, 1, -4], FG[n, 1, -2], FG[n, 1, -1], FG[n, 1, 0],  
FG[n, 1, 1], FG[n, 1, 2], FG[n, 1, 4]}, {n, 2, 1000}, ExtentSize -> Full]
```

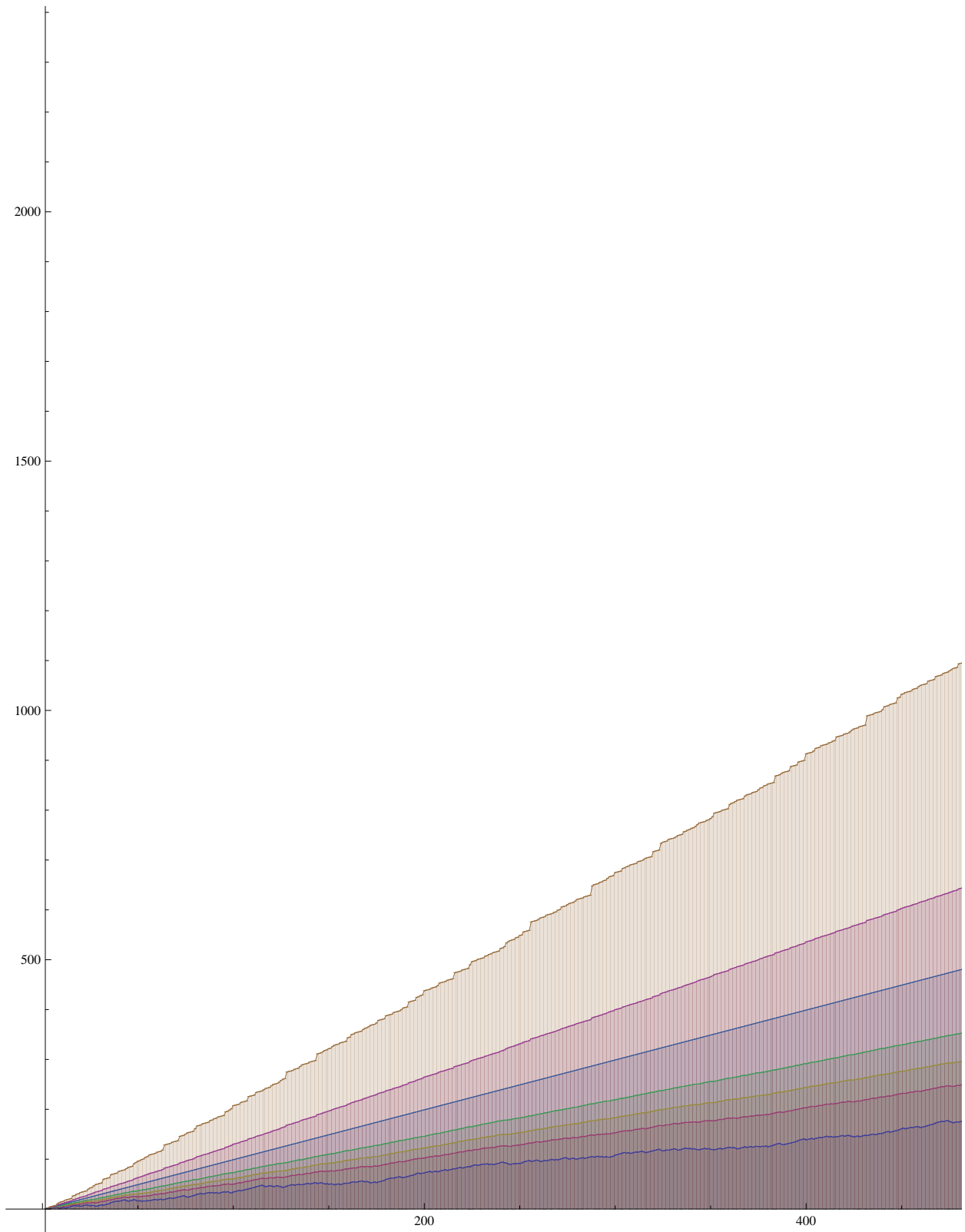


```
DiscretePlot[ Sum[ MoebiusMu[j] ^ 2, {j, 1, n}], {n, 2, 100}]
```



```
FH[n_, k_, s_] := FH[n, k, s] = Sum[ FF[j, s] ( 1 / (k!) + FH[Floor[n / j], k + 1, s]), {j, 2, n}]
```

```
DiscretePlot[ {FH[n, 1, -4], FH[n, 1, -2], FH[n, 1, -1], FH[n, 1, 0],  
  FH[n, 1, 1], FH[n, 1, 2], FH[n, 1, 4]}, {n, 2, 1000}, ExtentSize -> Full]
```



```
DiscretePlot[ {FH[n, 1, 40]}, {n, 2, 1000}, ExtentSize -> Full]
```

