

```
In[9]:= PrimePiApprox[x_] := If[x < 2, 0, Floor[x / Log[x]]]
```

```
G[x_] := Module[{e = Exp[1], logx, piX, piXDivE}, logx = Log[x];
  piX = PrimePiApprox[x];
  piXDivE = PrimePiApprox[x / e];
  piX^2 - (e * x / logx) * piXDivE]
```

```
xMin = Exp[547];
xMax = Exp[3247];
xValues = Exp[Range[Log[xMin], Log[xMax], (Log[xMax] - Log[xMin]) / 100]];
```

```
gValues = G /@ xValues;
logNegGValues = Log[Abs[-gValues]];
```

```
ListLogLogPlot[Transpose[{Log[xValues], logNegGValues}], PlotStyle -> Orange,
  AxesLabel -> {"Log x", "Log (-G(x))"}, PlotLabel -> "Plot of Log (-G(x)) against Log x",
  GridLines -> None, AspectRatio ->  $\frac{1}{\text{GoldenRatio}}$ ]
```

Out[16]=

