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[59];
xMax = Exp[3159];
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 → Magenta,
 AxesLabel → {"Log x", "Log(-𝒢(x))"}, PlotLabel → "Plot of Log (-𝒢(x)) against Log x",
 GridLines → None, AspectRatio → 1 / GoldenRatio]
```

Out[16]=