

Exercise 15

Differentiate the function.

$$F(s) = \ln \ln s$$

Solution

Take the derivative of the function.

$$\begin{aligned} F'(s) &= \frac{d}{ds} [\ln(\ln s)] \\ &= \frac{1}{\ln s} \cdot \frac{d}{ds} (\ln s) \\ &= \frac{1}{\ln s} \cdot \left(\frac{1}{s} \right) \\ &= \frac{1}{s \ln s} \end{aligned}$$