

15.02

fredag 23 december 2022

13:12

$$y' = \frac{\ln x}{x}$$

$$y = \int \frac{1}{x} \cdot \ln x \, dx = (\ln x)^2 - \int \ln x \cdot \frac{1}{x} \, dx$$

$$y = \int \frac{1}{x} \cdot \ln x \, dx = \frac{(\ln x)^2}{2} + C$$

$$y(1) = \frac{(\ln 1)^2}{2} + C = 2 \quad C = 2$$

$$\text{Sv: } y = \frac{(\ln x)^2}{2} + 2$$