

$$\textcircled{V} \quad y = e^{-2x} \quad [0, 3)$$

slope of secant line:

$$\frac{e^{-6} - e^0}{3 - 0} = \frac{e^{-6} - 1}{3} = -0.332$$

$$\frac{dy}{dx} = -2e^{-2x} = -0.332$$

$$\ln(e^{-2x}) = \ln 0.166$$

$$-2x = \ln 0.166$$

$$x = \frac{\ln 0.166}{-2} = 0.897$$