

# Quiz 5

Differentiate:

$$1) y = 2^x + \frac{1}{x^3}$$

$$y' = \ln(2) 2^x - 3x^{-4}$$

$$2) y = \ln(\ln(x))$$

Chain Rule

$$y' = \ln'(\ln(x)) \cdot (\ln(x))'$$

$$= \frac{1}{\ln(x)} \cdot \frac{1}{x}$$

$$= \frac{1}{x \ln(x)}$$