

5.1 Logarithms

WCID? I can rewrite logarithms

A. $2^3 = 8$

$$\log_2 8 = 3$$

$$1. \log_2 xy = \log_2 x + \log_2 y$$

$$2. \log_7 \frac{x}{y} = \log_7 x - \log_7 y$$

$$3. \log_{11} x^2 = 2 \log_{11} x$$

$$4. \log_4 1 = 0$$

B. Natural logarithm

1. $e = 2.72$

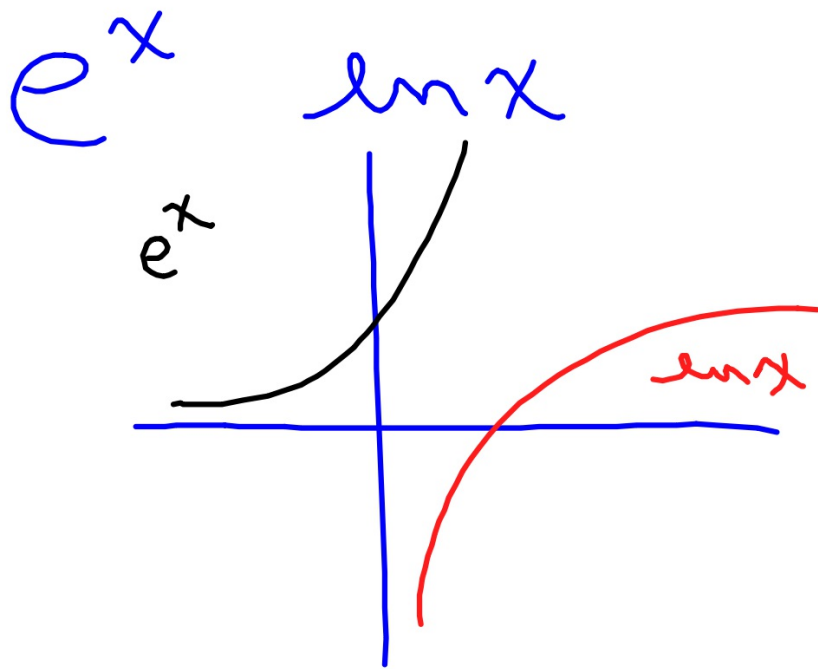
2. $\log_e x = \ln x$

Ex. $\ln xy^2$

$\ln x + 2 \ln y$

$$\text{Ex. } \ln x - 2 \ln y + 3 \ln z$$

$$\ln \frac{xz^3}{y^2}$$



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