

Logarithms

$$\log_a x = t \Rightarrow a^t = x$$

Change of base

$$\log_b x = \log_b(a^t)$$

$$\Rightarrow \log_b x = t \log_b a$$

$$\Rightarrow \log_b x = \log_a x \times \log_b a$$

$$\Rightarrow \log_a x = \frac{\log_b x}{\log_b a}$$