

$$\log_a(x_1 \cdot x_2) = \log_a x_1 + \log_a x_2,$$

$$\log_a \frac{x_1}{x_2} = \log_a x_1 - \log_a x_2,$$

$$\log_a x^s = s \cdot \log_a x.$$

$$\log_b x = \log_a x \cdot \log_b a.$$