$$\log(x \times y) = \log(x) + \log(y)$$

$$\log\left(\frac{x}{y}\right) = \log(x) - \log(y)$$

$$\log\left(x^a\right) = a \times \log(x)$$

$$\log_z(x) = \frac{\log_y(x)}{\log_y(z)}$$

X $\log_a b^n = \frac{n}{m} \cdot \log_a b$