

$$B = \log_a b \leftrightarrow a^B = b$$

$$C = \log_a c \leftrightarrow a^C = c$$

$$b \cdot c = a^B \cdot a^C = a^{B+C}$$

$$\log_a (b \cdot c) = B + C = \log_a b + \log_a c$$

$$\log_e (b \cdot c \cdot d \dots) = \log_e b +$$
$$+ \log_e c + \log_e d \dots$$

$$\frac{b}{c} = \frac{a^{\beta}}{a^{\gamma}} = a^{\beta - \gamma}$$

$$\log_a \left( \frac{b}{c} \right) = \log_a b - \log_a c$$

$$\log_a b^m =$$

$$= \log_a (\underbrace{b \cdot b \cdot b \dots \cdot b}_{n \text{ volte}})$$

$$= \underbrace{\log_a b + \log_a b + \dots + \log_a b}_m$$

$$\log_a b^m = m \cdot \log_a b \quad \forall m$$

$$a^b = c$$



$$\log_a(c) = b$$

$$\log_2(5) = ?$$

ln  
log Log

LOG NATURALE


$$\ln b = \log_e b$$

$$e \approx 2,7 \dots$$

$$\text{Log } b = \log_{10} b$$

$$a^b = c$$

$$b = \log_a c$$


$$\ln(e^b) = \ln c$$

$$b \cdot \ln a = \ln c$$



$$b = \frac{\ln c}{\ln a}$$

$$\log_a c = \frac{\ln c}{\ln a}$$

$$\log_{j^Q} c = \frac{\log_d c}{\log_d Q}$$