

- $\log x = 2 \Leftrightarrow 10^2 = x \Leftrightarrow x = 100$

- $\log x = 3 \Leftrightarrow 10^3 = x \Leftrightarrow x = 1000$

- $\log 10^4 = 4$

- $\log 1000 = \log 10^3 = 3$

- $\ln e^2 = 2$

- $\ln e^4 = 4$

- $\ln \frac{1}{e} = \ln e^{-1} = -1$

- $\log \frac{1}{10} = \log 10^{-1} = -1$

- $\log_x q = 3 \Leftrightarrow x^3 = q \Leftrightarrow x = \sqrt[3]{q}$

- $\log_x q = 2 \Leftrightarrow x^2 = q \Leftrightarrow x = \sqrt{q} = 3$

- $\log 4 + \log 20 - 3 \log 2 = \log(4 \cdot 20) - \log 2^3 = \log 80 - \log 8 =$

- $\log \frac{80}{8} = \log 10 = 1$

- $\log 5 + \log 20 = \log(5 \cdot 20) = \log 100 = \log 10^2 = 2$

- $\log 30 - \log 3 = \log \frac{30}{3} = \log 10 = 1$