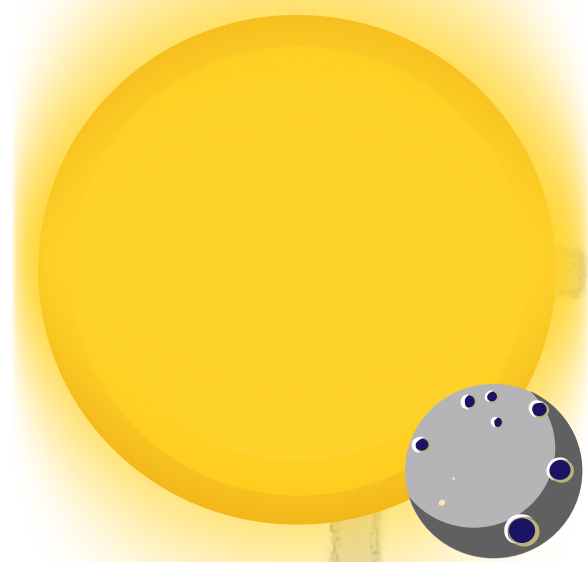
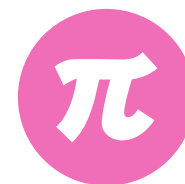


Zapamiętaj



$$\log_a \mathbf{b} + \log_a \mathbf{c} = \log_a (\mathbf{b} \cdot \mathbf{c})$$

$$\log_2 4\sqrt{2} = \log_2 4 + \log_2 \sqrt{2} = 2 + \frac{1}{2} = 2\frac{1}{2}$$

$$\log_6 3 + \log_6 12 = \log_6 (3 \cdot 12) = \log_6 36 = 2$$

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

$$\log_{15} 30 - \log_{15} 2 = \log_{15} \left(\frac{30}{2} \right) = \log_{15} 15 = 1$$

Czasami tylko znajomość tych wzorów pozwala nam poznać dokładną wartość logarytmu.

