

oblicz

$$1) \log_{32\sqrt{2}} \left(\frac{1}{8} \right)$$

$$2) 3 \log_5 \frac{1}{25} - 2 \log 0,001 - 5 \log_3 27$$

$$3) {}_4^{1 - \log_2 3}$$

$$4) {}_9^{2 - \log_3 4}$$

$$5) 2 \log 2 - \log 40$$

$$6) \log_6 4 + (\log_6 27 - \log_6 3)$$

$$7) \frac{2 \log_3 2 + \log_3 4}{\log_3 8}$$

$$8) \log_{\frac{1}{5}} (3\sqrt{3} - \sqrt{2}) + \log_{\frac{1}{5}} (3\sqrt{3} + \sqrt{2})$$

$$9) \log_9 36 \cdot \log_{\frac{1}{6}} \sqrt{9}$$

$$10. \log_{\frac{1}{2}} (\log_2 36 - 2 \log_2 3)$$

$$11. \frac{\log_2 27}{\log_2 18 - 1}$$

$$12. 8^{\frac{1}{\log_3 8}} - (\sqrt{2})^{\frac{1}{\log_9 2}}$$

$$13) {}_4^{\log_2 45} - \frac{\log_3 2025}{\log_9 2025}$$

$$14. \frac{1}{\log_2 35 + 1} + \frac{1}{\log_7 140 - \log_7 2} + \frac{1}{\log_5 7 + \log_5 2 + 1}$$

$$15. \log_5 3 = m \quad \text{oblicz} \quad x = \log_3 5 + \log_9 5 + \log_5 15$$

$$16. \frac{1}{2} \log 4 + \frac{2}{3} \log 8 - \frac{3}{\log_2 10}$$