

Формулы и свойства логарифмов

$$1. a^{\log_a b} = b$$

$$2. \log_a 1 = 0$$

$$3. \log_a a = 1$$

$$4. \log_a x \cdot y = \log_a x + \log_a y$$

$$5. \log_a \frac{x}{y} = \log_a x - \log_a y$$

$$6. \log_a \frac{1}{x} = -\log_a x$$

$$7. \log_a x^n = n \log_a x$$

$$8. \log_a \sqrt[n]{x} = \frac{1}{n} \log_a x$$

$$9. \log_{a^b} x = \frac{1}{b} \log_a x$$

$$10. \log_a x = \log_{a^b} x^b$$

$$11. \log_a x = \frac{\log_b x}{\log_b a}$$

$$12. \log_a x = \frac{1}{\log_x a}$$

$$13. (\log_a x)' = \frac{1}{x \ln a}$$

https://ru.onlinschool.com/math/formula/logarithm_formula/