

Logarithm Functions – in book: Section 9.3 p. 575

Write each equation in logarithmic form.

1. $2^5 = 32$

2. $5^{-3} = \frac{1}{125}$

3. $6^{-3} = \frac{1}{216}$

Write each equation in exponential form.

4. $\log_3 27 = 3$

5. $\log_4 16 = 2$

6. $\log_{10} \frac{1}{100} = -2$

Evaluate each expression.

7. $\log_7 7^3$

8. $\log_{10} 0.001$

9. $\log_{11} 11$

10. $\log_b b^{-4}$

11. $\log_a a$

12. $\log_2 \frac{1}{16}$

Solve each equation.

13. $\log_x 64 = 3$

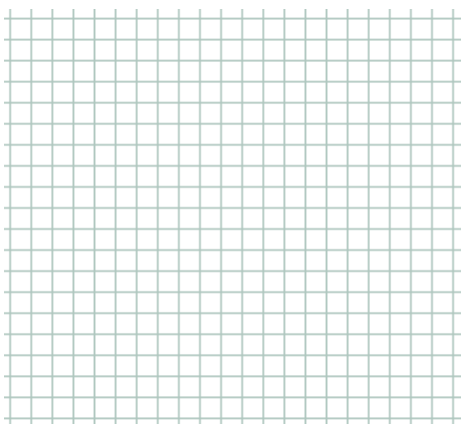
14. $\log_4 0.25 = x$

15. $\log_4 (2x - 1) = \log_4 16$

16. $\log_{10} \sqrt{10} = x$

Graph each equation or inequality.

17. $y = \log_2 x$



18. $y < \log_{10} (x - 1)$

