

Directions: Write each equation in exponential form.

1. $\log_2 128 = 7$

2. $\log_8 64 = 2$

3. $\log_3 \frac{1}{27} = -3$

Directions: Write each equation in logarithmic form.

4. $4^4 = 256$

5. $8^3 = 512$

6. $27^{\frac{2}{3}} = 9$

Directions: Evaluate each logarithm. Use the change of base formula when necessary.

7. $\log_6 36$

8. $\log_2 32$

9. $\log_4 64$

10. $\log_3 81$

11. $\log_{100} 10$

12. $\log_7 \frac{1}{7}$

13. $\log_{18} 1$

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

15. $\log 1000$

16. $\log_{16} 8$

17. $\log_{243} 27$

18. $\log_3 92$

19. $\log_7 35$

20. $\log_2 260$

21. $\log_5 38$

