

Homework

p. 503: 3-15 (odds), 21, 23

EXPONENTIAL FORM Rewrite the equation in exponential form.

3. $\log_4 16 = 2$ 5. $\log_6 \frac{1}{36} = -2$

7. **ERROR ANALYSIS** Describe and correct the error in rewriting the equation $2^{-3} = \frac{1}{8}$ in logarithmic form.

$$\log_2 -3 = \frac{1}{8} \quad \times$$

EVALUATING LOGARITHMS Evaluate the logarithm without using a calculator.

9. $\log_7 49$ 11. $\log_2 64$ 13. $\log_{1/2} 8$ 15. $\log_{16} \frac{1}{4}$

CALCULATING LOGARITHMS Use a calculator to evaluate the logarithm.

21. $\ln 6$ 23. $\log 6.213$