General Algebra II   Worksheet #1   Unit 12   Selected Solutions

Write the exponential equation that corresponds to each logarithmic equation.

2. $\text{Log}_3\ 81 = 4$

      $3^4 = 81$

4. $\text{Log}_5\ 0.2 = -1$

      $5^{-1} = 0.2$

Write the logarithmic equation that corresponds to each exponential equation.

6. $7^2 = 49$

      $\text{Log}_7\ 49 = 2$

8. $8^{-\frac{2}{3}} = \frac{1}{4}$

      $\text{Log}_8\ (1/4) = -2/3$

Evaluate each of the following logarithms.

10. $\text{Log}_{10}\ 1000 = 3$

12. $\text{Log}_{10}\ 0.01 = -2$

14. $\text{Log}_8\ 2 = 1/3$

16. $\text{Log}_2\ 1024 = 10$