

General Algebra 2 Worksheet #1 Unit 12

Write the exponential equation that corresponds to each logarithmic equation.

1. $\text{Log}_2 8 = 3$

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

3. $\text{Log}_{25} 5 = .5$

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

Write the logarithmic equation that corresponds to each exponential equation.

5. $4^3 = 64$

6. $7^2 = 49$

7. $25^{1.5} = 125$

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

Evaluate each of the following logarithms.

9. $\text{Log}_2 32 =$ _____

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

11. $\text{Log}_2 0.25 =$ _____

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

13. $\text{Log}_3 \frac{1}{27} =$ _____

14. $\text{Log}_8 2 =$ _____

15. $\text{Log}_8 16 =$ _____

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