

## General Algebra II Worksheet #2 Unit 12 Selected Solutions

Given:  $\text{Log}_N 2 = a$  ;  $\text{Log}_N 3 = b$  ;  $\text{Log}_N 5 = c$

Express each of the following using an algebraic expression in terms of a, b, and/or c.

8.  $\text{Log}_N 8 = 3a$

10.  $\text{Log}_N 0.25 = -2$

12.  $\text{Log}_N \sqrt{5} = \frac{c}{2}$

14.  $\text{Log}_N (15N^2) = b + c + 2$

Evaluate each of the following.

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

18.  $\text{Log}_{10} 0.0001 = -4$

20.  $\text{Log}_3 \sqrt{3} = 1/2$