Integrated Math 3
Unit 8: Exponential & Logarithmic Functions
8.2 Worksheet

Name: _____

Date: _____ Period: _____

Intro to Logarithms

1. Complete the table below. Write each of the following in exponential form and then solve.

Logarithmic Form	Exponential Form	Solution
$\log_5 25 = x$		
$\log_3 27 = x$		
$\log_x 625 = 4$		
$\log_x 64 = 2$		
$\log_x 121 = 2$		
$\log_3 x = 2$		
$\log_5 x = -2$		
$\log_{14} x = 0$		

Solve for the variable in the exponential equation (Hint: no common base).

3. $2^x = 27$

4. $4^x = 32$

5. $9^x = 16$

6. $5^x = 23$