

Name : \_\_\_\_\_ Score : \_\_\_\_\_

Teacher : \_\_\_\_\_ Date : \_\_\_\_\_

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### The Meaning of Logarithms

**Rewrite each in exponential form.**

1)  $\log_2 4 = 2$

2)  $\log_{125} 5 = \frac{1}{3}$

3)  $\log_3 \frac{1}{81} = -4$

4)  $\log_2 \frac{7}{23} = -g$

5)  $\log_s x = 3$

6)  $\log_{15} q = y$

**Rewrite each in logarithmic form.**

7)  $4^4 = 256$

8)  $243^{\frac{1}{5}} = 3$

9)  $6^{-2} = \frac{1}{36}$

10)  $s^{-n} = \frac{5}{19}$

11)  $x^3 = y$

12)  $-10^p = d$

