

Name _____
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Date _____
Algebra II

Converting Logarithms

Write each of the following in exponential form:

1. $\log_4 256 = 4$

2. $\log_x k = 5$

3. $\log_{12} \frac{1}{144} = -2$

4. $\log_2 \frac{1}{q} = p$

5. $\log 100 = 2$

6. $\ln 50 = x$

7. $\log_{x+2}(x^2 - 5x + 4) = 4$

8. $\log_3(x^2 + 4) = x + 7$

9. $\log(x^3 - 7x) = 4$

10. $\log_{x-9} 2 = x + 1$

11. $\log_2\left(\frac{x^2 - 4x + 1}{x - 7}\right) = x + 2$

12. $\log_x\left(\frac{x^2 + x - 3}{x + 1}\right) = 6$