

Name _____
Mr. Schlansky

Date _____
Pre Calculus

Exponential and Logarithm Equations Practice

Solve the following equations for all values of x and round to the nearest tenth if necessary

1. $2 \log_4 x - \log_4(x-1) = 1$

2. $27^x = 9^{x+2}$

3. $1.2(3)^{-2x} + 15 = 195$

4. $2x^{\frac{2}{3}} - 1 = 17$

$$5. \log_3 2 + 2\log_3 x = \log_3(7x-3)$$

$$6. 5x^{\frac{3}{4}} + 4 = 131$$

$$7. \log\left(x + \frac{3}{10}\right) + \log x + 1 = 0$$

$$8. \log_8(x-40) - \log_8(x-10) = \log_8(x+2)$$

$$9. 256 + 3(2)^{6x} = 2700$$

$$10. 4^{2b-3} = 8^{1-b}$$