

## 5-7 Practice - Solving with Logs

Date \_\_\_\_\_

**Solve each equation. Round your answers to the nearest ten-thousandth.**

1)  $\log_{11} x = 0$

2)  $\log_3 v + 6 = 9$

3)  $-9 - 10\log_8 x = 11$

4)  $\log_4 3p = -2$

5)  $\ln(10 - 3n) = 0$

6)  $\log(7b - 1) + 3 = 7$

7)  $\log_2 x - \log_2 5 = 4$

8)  $\log_3 4 + \log_3 x = \log_3 37$

9)  $\ln x + \ln 8 = 3$

10)  $\log_2 x - \log_2 10 = 4$

$$11) \log 6 + \log -3x = 2$$

$$12) \log_4 -4x - \log_4 6 = 1$$

$$13) \log_4 9 + \log_4 (x - 9) = \log_4 68$$

$$14) \ln (x + 9) + \ln 10 = 1$$

$$15) 5^k = 60$$

$$16) 10^x - 10 = 50$$

$$17) 3 \cdot 15^a - 8 = 56$$

$$18) 7^{5r} = 43$$

$$19) 14^{8r-8} = 55$$

$$20) 5 \cdot 2^{n+7} = 69$$

$$21) 2 \cdot 13^{-x} = 9$$

$$22) 7e^{7k-2} - 2.1 = 33$$