

## Solving Log/Exponential Equations

Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve each equation.**

1)  $6^{-2b+3} = 6^3$

2)  $6^{3m} = 36$

3)  $2^{3b-3} = 2^{b-1}$

4)  $3^{-p-1} = 9$

5)  $6^{2x} = 216$

6)  $4^{3m+3} = 64$

7)  $6^{2-3m} = 36$

8)  $2^{3b} = 64$

$$9) 8^{2r+2} = 8^{3r+3}$$

$$10) 5^{-b} = 625$$

**Solve each equation.**

$$11) 16^{-2x} - 2 = 2$$

$$12) 2^{-10x} - 5 = 43$$

$$13) 9^{x-8} + 2 = 99$$

$$14) -5 \cdot 2^{r+10} = -72$$

$$15) 10^{n+6} + 6 = 60$$

$$16) 14^{v+7} - 8 = 63$$

$$17) -9 \cdot 14^{n+10} = -82$$

$$18) 7^{-2b} - 4 = 83$$