

## Solving Exponential Equations with Logarithms

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

1)  $3^b = 17$

2)  $12^r = 13$

3)  $9^n = 49$

4)  $16^v = 67$

5)  $3^a = 69$

6)  $6^r = 51$

7)  $6^n = 99$

8)  $20^r = 56$

9)  $5 \cdot 18^{6x} = 26$

10)  $e^{x-1} - 5 = 5$

11)  $9^{n+10} + 3 = 81$

12)  $11^{n-8} - 5 = 54$