

## Solving Exponential Equations with "e" Using ln

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

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

1)  $-2e^{3x-9} - 1 = -78$

2)  $-4e^{8r-5} - 8 = -8$

3)  $3e^{10v+2} + 5 = 25$

4)  $3e^{4k-1} - 6 = 93$

5)  $9e^{-9n-1} + 3 = 21$

6)  $-9e^{3n+7} - 9 = -77$

$$7) -e^{4m-1} - 9 = -10$$



$$8) -7e^{8x-7} + 6 = 14$$

$$9) 8e^{6k-6} - 8 = -108$$



$$10) -2e^{10-8r} + 2 = -14$$

$$11) -2e^{5-r} + 1 = -69$$



$$12) -2e^{7n+1} - 10 = -39$$

