

## Assignment

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

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

1)  $13^n - 4 = 58$

2)  $\frac{-10^b}{-1} = \frac{-77}{-1}$

$10^b = 77$

$\log_{10} 77 = b$

$\frac{\log 77}{\log 10}$

$1.886 = b$

3)  $19^{n-2} + 9 = 26$

Solve each equation.

4)  $\log_7 5m = \log_7 (1 - 4m)$

5)  $\log_3 (7 - 2a) = \log_3 5a$

6)  $\log_3 (5x - 10) = \log_3 (4x - 5)$

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

7)  $\log (10 - 2x) - \log 4 = \log 78$

8)  $\log (7 - 3x) + \log 9 = \log 26$

Solve each equation.

9)  $\log_4 (x - 5) + \log_4 9 = 1$

10)  $\log_4 8 - \log_4 -4x = 3$