

**UNIT 5 WORKSHEET 9**  
**Exponential and Logarithmic Equations 1**

Solve each of the following. (Round answers to 3 decimal places)

1)  $3^{2x-4} = 5$

2)  $3^{5x+6} = 4^x$

3)  $5^{2x-4} = 3^{4x-5}$

4)  $\left(1 + \frac{0.10}{12}\right)^{12t} = 2$

5)  $\ln x + \ln(x-2) = 1$

6)  $e^{2x} = 7$

7)  $2 - 6\ln 3x = 10$

8)  $\log_2 x + \log_2(x+2) = \log_2(x+6)$

9)  $e^{2x} + 3e^x - 10 = 0$