Alg 2B Classwork 11-2-17 Solving logarithmic equations Fall 2017 Name:

You can solve Logarithmic Equations using the following basic steps:

-Move all logarithmic terms to one side of the equation and all other terms to the other side.

-Combine all logarithms into a single logarithm using properties of logarithms.

-Change to an exponential equation.

-Solve

Solve each to the nearest hundredth.

1. $\log_4(x-2) = 3$

2. $2\log_7 X = 6$

3. $\log 5x + 4 = 8$

4. $2\log x + \log 2x + 3 = 41$

5. $\log_3 5 - \log_3(x+1) = 2$

6. $2\log_2 x + \log_2 8 = 3$

7. $\frac{1}{2}\log_4 x - 3 = \log_4 3$