# Algebra 2 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# HW #1 Solving Exponential and Log Equations Per: \_\_\_\_

I. Solve by simplifying each logarithmic expression to a single logarithm and then rewriting in exponential form.

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| 1.  | 2.  | 3.  |

II. Solve by either taking the log of both sides OR by rewriting in logarithmic form. Round to the nearest hundredth when necessary.

|  |  |
| --- | --- |
| 4.  | 5.  |
| 6.  | 7.  |

III. Factor completely. **Some problems may require more than one step**. Always look for the GCF first, then think about the number of terms (don’t forget about the difference of squares!)

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| 8) $49x^{2}-100$ | 9)$ 16x^{2}+24x+9$ |
| 10) $6x^{2}+x-12$ | 11)$ x^{2}+12x-64$ |
| 12) $n^{2}x-x+4n^{2}-4$ | 13)$ 3y^{3}-75y$ |