Name _____ Date _____

Change of Base Formula

$$\log_a x = \frac{\log x}{\log a}$$

Steps for Solving Equations

1. _____ the base.
2. If you can rewrite to make the _____ _____, do it!
3. If not, rewrite an exponential equation in _____ _____.
4. Check your answer!!

Example 1:

$8^x = 23$

Example 2:

$e^x = 72$

Example 3:

$3(2^x) = 42$

Example 4:

$2(3^{2t-5}) - 4 = 11$

Example 5:

$3e^{.5x} + 2 = 5$