## Linear, Quadratic and Exponential Worksheet 2

1. Convert  $3^{x^2} + 8 = 20$  into logarithmic form and solve for x.

an exponential to a logarithmic equation which type of logarithm should you use?

2. Solve the equation  $2^x = 16$  using logarithmic form.

7. Unless otherwise noted, which base does a logarithm have?

3. Solve the equation  $2e^x = 18$  using logarithmic form.

8. Solve the equation  $e^{2x} - 16 = 0$  using logarithmic form.

4. Solve the equation  $5^x = 15$  using logarithmic form.

9. If we're trying to find the log of an exponential function, the best way to do this on a calculator is to convert the equation  $\log_b x = y$  into what?

5. Convert  $5 \times 2^{x+6} = 30$  into logarithmic form and solve for x.

10. What happens when you take the log of a negative number?

6. Whenever you see an equation with e in it and you are asked to convert from

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