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| 1. How do you know when is Exponential Growth or Exponential Decay? 2. How do you know When is Exponential Growth or Exponential Decay? 3. Decide if the following are exponential growth or exponential decay |

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| Graph the following functions |

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| Write the following equations in logarithmic form      Write the following equations in exponential form      Evaluate without using a calculator |

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| Evaluate without using a calculator.      Find the inverse of the following functions |

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| 1. The population of rabbits in Joe’s farm increases by 4% every year. In 2013, there were exactly 2700 rabbits. What will the population of rabbits be in 2018? 2. The price of a car decreases by 8% every year. If you buy a car for 20,000, what will the value of the car be in 4 years? 3. You make a deposit of 500 dollars in bank that pays 2.5% interest with three options: every year, compounded, and compounded continuously. Find the following,  * Amount of money after 5 years? * Amount of money compounded monthly after 5 years? * Compounded continuously for 5 years? |

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| Expand each logarithm:  1. 2. 3.  Condense each logarithm:  4. 5. 6. |

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| Solve each equation for x. Make sure to check for extraneous solutions.  1. 2. 3.  4. 5. 6. |