Algebra 1

Unit 4: Exponential Functions

Notes

Example 3: The population of a town is decreasing at a rate of 1% per year. In 2000, there were 1300 people. Write an exponential decay function to model this situation. Then find the population in 2008.

Growth or Decay:	

Starting value	(a):
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Rate (as a decimal): _____

Function:	

Example 4: The cost of tuition at a college is \$12,000 and is increasing at a rate of 6% per year. Find the cost of tuition after 4 years.

Growth or Decay: _____

Starting value (a): _____

Rate (as a decimal): _____

Example 5: The value of a car is \$18,000 and is depreciating at a rate of 12% per year. How much will your car be worth after 10 years?

Growth or Decay: _____

Starting value (a): _____

Rate (as a decimal): _____

Function: _____

Example 6: A bungee jumper jumps from a bridge. The diagram shows the bungee jumper's height above the ground at the top of each bounce. What is the bungee jumper's height at the top of the 5th bounce?

222	Growth or Decay:
T	Starting Value:
First bounce 200 ft	Rate (as a decimal):
(*	Function:
Second bounce 80 ft Third bounce 32 ft	