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): |
| 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): |
| Function: |

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?

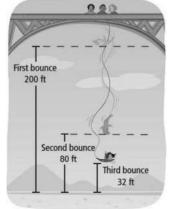
Growth or Decay: _____

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?



| Growth or Decay: |
|----------------------|
| Starting Value: |
| Rate (as a decimal): |

Function: