

## Relative Growth Extra Problems

Math 111

1. A 25% increase is the same as multiplying by what growth factor?
2. A 150% increase is the same as multiplying by what growth factor?
3. A 40% decrease is the same as what growth factor?
4. Convert the following growth factors to a percentage change. Be sure to indicate if the change is an increase or a decrease.
  - (a) 1.3
  - (b) 0.75
  - (c) 0.1
5. Doubling is the same as what percent increase?
6. For three consecutive years the cost of tuition at one university has increased by 5%, 10%, and 8% respectively. How much has the tuition increased overall as a percentage?
7. According to the U.S. Census, the population of Virginia increased from 7,079,048 in 2000, to 7,882,590 in 2009. Calculate the growth factor and percentage change for that time period.