

**Math 107 Quiz #1**  
**January 11, 2011**

Name: \_\_\_\_\_

Show all work on a separate paper. Staple this sheet to your answers. You may use a calculator on this quiz.

1. (2 pts.) The population of the US is approximately 310 million. About 39.5 million of the people in the US is 65 years of age or over. What percentage of the population is **under** the age of 65? (Round your answer to the nearest percent.)
  
2. (3 pts.) Suppose your salary was decreased by 20% and then one year later increased by 20%. If your salary at the beginning was \$50,000, what is your salary after the increase?
  
3. The price of Google stock has risen from \$590.30 to \$613.95 over the last month.
  - (a) (1 pt.) Find the absolute change of the stock price over the last month.
  - (b) (2 pts.) Find the relative change of the stock price over the last month.
  - (c) (1 pt.) By what percentage has the Google stock price increased by over the last month?
  
4. Gas Index: Price Index for 1965: 26.1 Price Index for 2005: 129.6 (Using 1985 as the reference year.)
  - (a) (3 pts.) How much is \$25 worth of gas in 1985 worth in (i) 2005 dollars?, (ii) 1965 dollars?
  
  - (b) (3 pts.) Find the inflation rate of gas prices between 1965 and 2005, i.e., by how what percentage did gas prices increase between 1965 and 2005? (Round to the nearest percent.)