

**Math 107 Quiz #3**  
**January 25, 2011**

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

Show all work and answers on a separate paper stapled to this sheet. Simplify your answers as much as possible.

- (4 pts.) Find the total and annual returns of investments A and B. Which investment has a higher annual return?  
A: You invest \$1000 in a CD. After 2 years, it has grown to \$1350.      B: You purchased 50 shares of stock for \$40 per share. After 5 years, you sell it for \$70 per share.
- (4 pts.) Suppose you save for a down payment on a house by investing \$1200 **each quarter** into an account that gives 3.6% compounded quarterly. How much will you have after 5 years? How much interest will you have earned?
- (3 pts.) How much do you need to invest **each month** in order to save up for a \$6000 European vacation in 18 months if you get 3% compounded monthly?
- (4 pts.) You buy a new house today for \$250,000. If you have a down payment of \$60,000 and get a 30-year mortgage at 4.92% compounded monthly for the rest, what will your monthly payment be? How much interest will you have paid at the end of the 30 years?