

Math 156 Test Chapter 9

Name _____

Show your work to receive full credit. Round off final answers to the nearest hundredth.

1. If an item costs \$75, what is its sale price (6 pts)
 - a) if a 30% discount is given?
 - b) if a 20% discount is given and an additional 10% is given at the register?
2. What is the difference between simple interest and compound interest? (4 pts)
3. You deposit \$6000 into an account that pays simple interest at a rate of 6% per year. How much do you have in the account after 5 years? (10 pts)
4. You deposit \$6000 into an account that compounds interest monthly at a rate of 6% per year. How much do you have in the account after 5 years? (10 pts)
5. You make regular payments into an annuity of \$300 a month. If the annual rate of interest is 7.2% computed monthly, how much will you have in the annuity after 25 years of these payments? (10 pts)
6. Suppose you invest \$10,000 in an account which pays 7.3% compounded daily, how long must you wait before you have \$450,000 in the account? (15 pts)
7. a) How much would your monthly loan payments be if you borrow \$39,000 for a new Ford Explorer at an annual interest rate of 7.2% over 5 years? b) how much would the car cost you if you made all the payments? (15 pts)
8. If you accelerate the payments by \$100 a month for the Explorer in Problem 7, how many payments would you make and how much would the car cost you? (15 pts)
9. You are making \$1652.79 monthly payments on a 30 year-loan of \$220,000 with an annual interest rate of 8.25%. After making 10 years of payments a) what is the balance on the loan?
 - b) How much of your payments in those 10 years went toward the principle of the loan? interest of the loan? (15 pts)