Math 1313  
Homework 10  
Section 4.2  

Use the following problem to answer questions 1 and 2.  
Corrie bought a new flat screen 70 inch television and a speaker system from a local electronics store on credit. The store will charge 12% per year compounded monthly. Their monthly payments are $174.80 for 3 years. What is the cash price of her purchase?

1. Identify the type of problem.  
   a. Future Value with compound interest  
   b. Present Value with compound interest  
   c. Present Value of an Annuity  
   d. Future Value of an Annuity  
   e. Future Value with simple interest

2. Answer the question in the problem.  
   a. $4,881.98  
   b. $5,262.79  
   c. $4,956.80  
   d. $3,762.26  
   e. $4,382.98

Use the following problem to answer questions 3 and 4.  
Parents would like to have the funds for their child to have an allowance in college for 4 years. They want him to be able to withdraw $300 each month. How much should they deposit into an account earning 2.35% per year compounded monthly.

3. Identify the type of problem.  
   a. Future Value with compound interest  
   b. Present Value with compound interest  
   c. Future Value of an Annuity  
   d. Present Value of an Annuity  
   e. Future Value with simple interest

4. Answer the question in the problem.  
   a. $13,742.50  
   b. $13,200.10  
   c. $14,470.19  
   d. $12,850.57  
   e. $13,731.10

Use the following problem to answer questions 5 and 6.  
Harry plans to buy a townhome in 4 years. He’d like to have a down payment towards the purchase of the townhome. He can deposit $1,800 quarterly in an account that earns 2.44% per year compounded quarterly. How much will he have for a down payment in 4 years?

5. Identify the type of problem.  
   a. Future Value with compound interest
b. Present Value with compound interest

c. Future Value of an Annuity

d. Present Value of an Annuity

e. Future Value with simple interest

6. Answer the question in the problem.
   a. $22,884.12
   b. $30,155.86
   c. $31,887.41
   d. $28,457.23
   e. $23,597.12

Use the following problem to answer questions 7 and 8.
Robin, who is self-employed, contributes $6000 a year into a Keogh account. How much will they have in the account after 10 years if the account earns interest at the rate of 6.75% per year compounded annually?

7. Identify the type of problem.
   a. Future Value with compound interest
   b. Present Value with compound interest
   c. Future Value of an Annuity
   d. Present Value of an Annuity
   e. Future Value with simple interest

8. Answer the question in the problem.
   a. $102,338.96
   b. $136,225.16
   c. $1,024,343.27
   d. $516,291.54
   e. $81,926.23

9. The choices for problem number 14 part a from the book are given below
   a. Future Value with compound interest
   b. Present Value with compound interest
   c. Future Value of an Annuity
   d. Present Value of an Annuity
   e. Future Value with simple interest

10. The choices for problem number 14 part b from the book are given below
    a. $77,248.18
    b. $118,080.30
    c. $61,248.18
    d. $112,080.30
    e. $97,627.24