Quiz #3 - Due at the beginning of class Wednesday, April 7

Name: _______________________________________________

Print your name above. Show all support (including formulas you used with values plugged in) on separate paper and attach to this sheet. Make a copy of your work as we will go over this in class Wednesday, April 7. I will collect your work at the beginning of class Wednesday. If you are not going to be in class Wednesday, then it is your responsibility to get this to me BEFORE class Wednesday 4/7. There will be a 20% penalty if this is turned in later than the beginning of class on Wednesday, April 7.

1. Find the outside surface area and the volume (capacity) of each of the following. Give correct units with each answer rounding to the nearest whole number.
   a. The box shown in #40 on page 478.

   Surface area = _______________ Volume = _______________

   b. The cylinder shown in #44 on page 489 (notice that there is no top to this cylinder).

   Surface area = _______________ Volume = _______________

   c. The sphere shown in #51 on page 490

   Surface area = _______________ Volume = _______________

2. If you deposit $2000 now at 6.5% interest compounded monthly, how much will you have in 30 years?

   Answer: _______________

3. If you deposit $10 each month into an account that pays 6.5% compounded monthly, how much will you have in 30 years?

   Answer: _______________

4. If you need $500,000 for retirement in 30 years, how much do you need to deposit now at 7.2% compounded quarterly?

   Answer: _______________

5. If you need $500,000 for retirement in 30 years, how much do you have to deposit at the end of each quarter if you invest your money in an account that pays 7.2% compounded quarterly?

   Answer: _______________

6. If you take out a mortgage on a house for $180,000, what would your monthly payments be if you can finance this amount for 30 years at 5.9%? What is the total amount of interest you would pay?

   Answer: _______________

7. Suppose you can afford $875 for your monthly house payment. What is the loan you can afford if the interest rate is 5.9% and you finance for 30 years?

   Answer: _______________
8. In how many ways can a president, vice-president, secretary, and treasurer be chosen from a group of ten people?
   Answer: _________________

9. In how many ways can seven books be arranged on a shelf?
   Answer: _________________

10. How many pants & shirt outfits can Bobby wear if he has 7 pair of pants and 18 shirts?
    Answer: _________________

11. In how many ways can a committee of four people be chosen from a group of ten people?
    Answer: _________________

12. In how many ways can five hearts be drawn from a deck of cards?
    Answer: _________________

13. The special of the day at a restaurant is to choose one meat, two sides, and one dessert. If there are 5 meats, 12 sides, and 4 desserts to choose from, how many different specials are there?
    Answer: _________________

14. A license plate consists of three numerals followed by three letters. How many different license plates are possible?
    Answer: _________________

15. A license plate consists of three numerals followed by three letters. How many different license plates are possible if no numerals or letter are allowed to repeat?
    Answer: _________________