MA 110 WORKSHEET (7.4)

Name _____

Solve the problem.

1.   How many ways can a president, vice-president, secretary, and treasurer be chosen from a club with 8 members?

2.   How many ways can a president, vice-president, and secretary be chosen from a club with 12 members?

3.   In how many ways can the letters in the word PAYMENT be arranged using 4 letters?

4.   In how many ways can 7 people line up for play tickets?

5.   How many ways can a committee of 5 be selected from a club with 10 members?

6.   How many ways can a committee of 2 be selected from a club with 12 members?

7.   In how many ways can a group of 8 students be selected from 9 students?

8.   How many ways can a person choose 7 of their 10 books to donate to a book drive?

9.   Ten kids are running a race. How many different outcomes are possible for the 1st, 2nd, and 3rd place finishers?

10. Your new boat only holds five people. Not counting yourself, if you invite twenty friends over to your dock for a party, how many different ways could you choose the first group to get a boat ride?

11. In a batch of 300 computer diskettes, ten are defective. A sample of four diskettes is to be selected from the batch.

    A. How many samples are possible?

    B. How many of the samples consist of all defective disks?

12. A committee has five male and eight female members. How many ways can a subcommittee consisting of three males and six females be selected?

13. How many ways can 8 people be awarded 3 different door prizes?

14. How many ways can 10 different items be displayed (in a straight line) in a store window?