**11.1 Quiz 1** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
 Block: \_\_\_\_\_\_\_

Simplify the following.

1.) 8! 2.)  7C2

3.)  7P2 4.) 12P7 + 9C4

5.) An amusement park has 20 different rides.   
 You want to ride *at least* 16 of them.   
 How many different ways can you go on the rides?

**11.2-11.3 Quiz 2** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
 Block: \_\_\_\_\_\_\_

6.) A jar contains 5 red marbles, 3 blue marbles, and 2 green marble. Find the probability of randomly drawing the given type of marble.

a.) P(red) b.) P(blue) c.) P(not blue)

***With Replacement***

d.) P(red then blue) e.) P(green then green) f.) P(green then blue)

***Without Replacement***g.) P(red then blue) h.) P(green then green) i.) P(green then blue)

7.) In a survey of 200 pet owners, 103 owned dogs, 88 owned cats, 25 owned birds, 18 owned reptiles.

1. None of the respondents owned both a cat and a bird. What is the probability that they owned a cat or a bird

b.) Of the respondents, 119 owned a dog or a reptile. What is the probability that they owned a dog and a reptile?