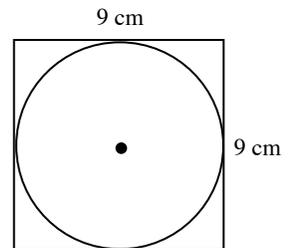# Ch. 10 Review

Name_____

Advanced Algebra

1) A bag contains 8 red marbles, 12 blue marbles, and 17 green marbles. If one marble is randomly selected from the bag, what is the probability that the marble is red or green ?

9 cm

2) If a point is randomly selected from the points inside the square shown at right, find the probability that the point is inside the circle.

9 cm

3) If A and B are independent events and P(A) = .4 and P(B) = .25, find P(A or B).

4) If A and B are independent events and P(A) = .5 and P(B) = .4, find P(B/A).

5) If P(B) = $^3/_8$, find P(B^c). (B compliment)

6) The menu at a restaurant has 11 appetizers, 15 entrees, 10 deserts, and 8 beverages. The restaurant offers a dinner special that includes 1 appetizer, 1 entrée, 1 desert, and 1 beverage. In how many ways can a person order a diner special at this restaurant ?

7) A CD has 10 songs on it. If a CD player randomly selects the order in which the songs are played, in how many different orders can the 10 songs be played ?

8) How many different permutations of the letters in September are possible ?

9) In how many different ways can 8 magazines be arranged on a circular carousel ?

10) A pizzeria has 6 meat toppings and 9 vegetable toppings. In how many different ways can a pizza with 2 meat toppings and 3 vegetable toppings be ordered from this pizzeria ?

11) If there are 25 students in a classroom, how many 5 person groups can be made ?

12) A baseball league that has 8 teams decides to add 3 new teams. The league then decides to divide into 2 divisions, one with 6 teams and the other with 5 teams. In how many ways can the 6 teams be chosen for the larger division ?

13) There are 15 dogs and 10 cats at an animal shelter. If a family decides to randomly select 5 animals to adopt, find the probability that the family selects 3 dogs and 2 cats ?

14) If two dice are rolled and the numbers that result are added, find the probability that the sum is an even number or a number less than 5.

15) All of the sections on the circular spinner shown at right are equal in size. If the spinner is spun 3 times, what is the probability that an even number is spun all 3 times ?