Warm-up: 11/17/14

You have a bag with 20 marbles. 5 of them are red. 15 are blue.

1. Find the probability of choosing a blue marble.

2. Find the probability of choosing a red marble.

3. Find the probability of choosing a red marble and then a blue marble without replacing the marble.

November 11, Look for the word INTERACTIVE!

Unit 7: Probability

Lesson: Geometric Probability

Goal: Use geometry to find the probability of a certain event occurring.

Example: If you are shooting at a round target, what is the probability of hitting the bull’s eye?

1. Find the area of the bull’s eye.

2. Find the area of the entire target.

3. Divide the area of the bull’s eye by the area of the entire target.

Bull’s Eye: diameter is 6”

The radius of each ring is 3” larger than the last.

The total radius is 30”

1. Area of bull’s eye:

sq. in.

2. Area of target:

3. Probability =

Conclusion: Find the area of the desired target. Find the area of the entire target. Divide desired target by entire target.

Example: From a sky view, a tree will appear to be a circle with a diameter of 60 feet. If lightning strikes your property of 11 acres, what is the probability of lightning striking this particular tree.

1. Find the area of the tree.

2. Find the area of the yard.

3. Divide the area of the tree by the area of the yard.

1. square feet

2.

(1 acre = 43,560 square feet)

3.

8. is 46.

Non-shaded region = 28.

Shaded region = 46-28=18

How many unique ways are there to arrange the letters in the word ROBIN?

5!=120

How many unique ways are there to arrange the letters in the word GEORGIA?

How many unique ways are there to arrange the letters in the word MISSISSIPPI?

SASSY

9.

10.

11.

12.