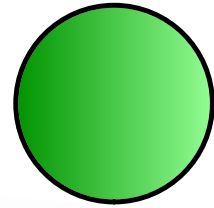
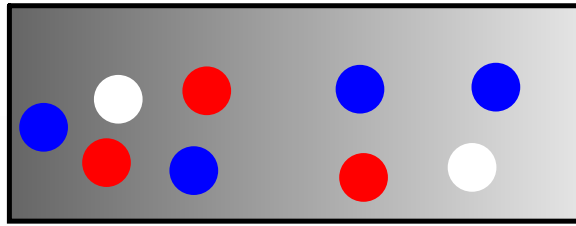


4-6-18

Aim: *SWBAT* continue to determine the probability of two or more independent and dependent events.

HW: Packet Pages 50 - 51

Do Now: Let's continue



Dependent Probability (AKA → probability without replacement)

Part C - In a bag, there are 3 red marbles, 2 white marbles and 4 blue marbles. Once a marble is selected, it is NOT replaced. Find each probability:

10) $P(\text{red, blue}) = \frac{1}{6}$
 $\frac{3}{9} \cdot \frac{4}{8}$

12) $P(\text{blue, blue}) = \frac{1}{6}$
 $\frac{4}{9} \cdot \frac{3}{8}$

11) $P(\text{white, red}) = \frac{1}{12}$
 $\frac{2}{9} \cdot \frac{3}{8}$

13) $P(\text{red, red, white}) = \frac{1}{42}$
 $\frac{3}{9} \cdot \frac{2}{8} \cdot \frac{2}{7}$

14) $P(\text{white, white, white}) = 0$
 $\frac{2}{9} \cdot \frac{1}{8} \cdot \frac{0}{7}$

Homework - Independent & Dependent Probability
(NO Calculators!!)

Tell whether the events are independent or dependent. Then find the probability.

- 1) You draw a button from a jar that contains 10 red buttons, 2 yellow buttons, 4 black buttons and 5 blue buttons. Without replacing the first button, you draw another.

(Circle one) Independent Dependent

- a) What is the probability that you draw a red button and then a yellow button?
- b) What is the probability that you draw a yellow button and then a blue button?
- c) What is the probability that you draw a black button and then another black button?
- d) What is the probability that you draw a red button and then a green button?

- 2) At a banquet, you can order a main course of a chef's salad, salmon and potatoes, ham and beans or steak and rice. You can drink water, juice, milk, coffee, or iced tea. All choices are equally likely. What is the probability that a person chooses a chef's salad and juice?

(Circle one) Independent Dependent

- 3) You have a basket of rolls: 5 wheat, 6 sourdough, 8 sesame, and 9 cheese. You randomly choose a roll, keep it, and then choose another.

(Circle one) Independent Dependent

- a) What is the probability that you will choose a sesame roll and then a cheese roll?
- b) What is the probability that you will choose a cheese roll and then a sourdough roll?
- c) What is the probability that you will choose a wheat roll and then a sesame roll?
- d) What is the probability that you will choose a wheat roll and then another wheat roll?

- 4) You toss a coin and then roll a standard die. Find the probability that the coin lands on heads and the die lands on the number 3.

(Circle one) Independent Dependent

- 5) You toss a coin and then roll a standard die. Find the probability that the coin lands on heads and the die lands on a number greater than 4.

(Circle one) Independent Dependent

51