Bellwork Wednesday, May 14, 2014

1. You want to frame a picture to hang at home. At the frame shop there are 12 different frame styles to choose from, 15 different background colors to choose from, and 5 different frame sizes to choose from. How many different pictures can you create?

2. Ten students are going to receive an award. Your job is to give the principal a list of these ten students to be read aloud at an assembly. How many different lists can you give the principal to read?

3. For dinner your parents bring home a bag full of food. In the bag there are 2 salami sandwiches, 4 Balogna sandwiches and 3 turkey sandwiches. Find each probability as a fraction.

a) You reach in and randomly grabs a sandwich and eat it and then your brother randomly grabs a sandwich too.

P(turkey sandwich and turkey sandwich)=

b) You randomly grab a sandwich, look at and decide that you don't want that kind, then grab another sandwich.

P(Salami and Balogna) =

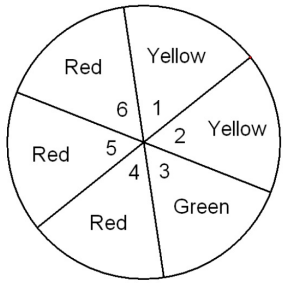
4. You spin the spinner shown once. Find each probability as a fraction.

a) P(Prime and Red)

b) P(Yellow and Odd)

c) P(Factor of 6 or Green)

d) P(Red or Even)



5. The probability that the driver gets a speeding ticket is $\frac{4}{15}$ and the probability that the driver gets a ticket for no seat belt is $\frac{2}{9}$. Find the following probability as a fraction.

P(Speeding Ticket or Seat Belt Ticket) =

6. There are 8 volumes to a set of Encyclopedias.

a) How many ways can you arrange the 8 volumes on the shelf?

b) If there is only room for 6 of the volumes how many ways can 6 of the volumes be arranged on the shelf?

7. You are painting your bedroom. You've narrowed it down to 8 choices for wall color, 4 choices for color of the window trim, and 2 choices for ceiling color. How many different color schemes for your room are there?

8. Use the results of the survey to find each probability as fraction:

	Snakes	Spiders	Mice	Dogs	Total
Boys	23	14	5	2	44
Girls	35	20	8	3	66
Total	58	34	13	5	110

a) P(Snakes | Boys)=

b) P(Mice and Girls)=

c) P(Boys or Spiders)=

d) P(Girls | Dogs)=

e) P(Spiders or Snakes)=

9. There are 9 different ice cream flavors to choose from, 4 different toppings to choose from, and 3 different sizes. Find the number of 2-scoop Sundaes with 3 toppings that are possible.

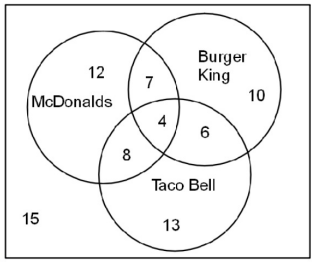
10. A license plate contains 3 numbers and 3 letters. If numbers can't repeat but letters can, find the number of license plates that are possible.

11. There are 12 people that work in an office.

a) If you want to buy 4 new chairs and give them to the workers how many different ways could this be done?

b) You are completing a technology upgrade and are giving everybody their own phone number. How many different ways could you assign phone numbers?

12. Use the following Venn Diagram to find each probability as a fraction.



a) P(McD and BK)=

b) P(TB or McD but NOT BK)=

c) P(Not McD)=

d) P(BK but not TB)=