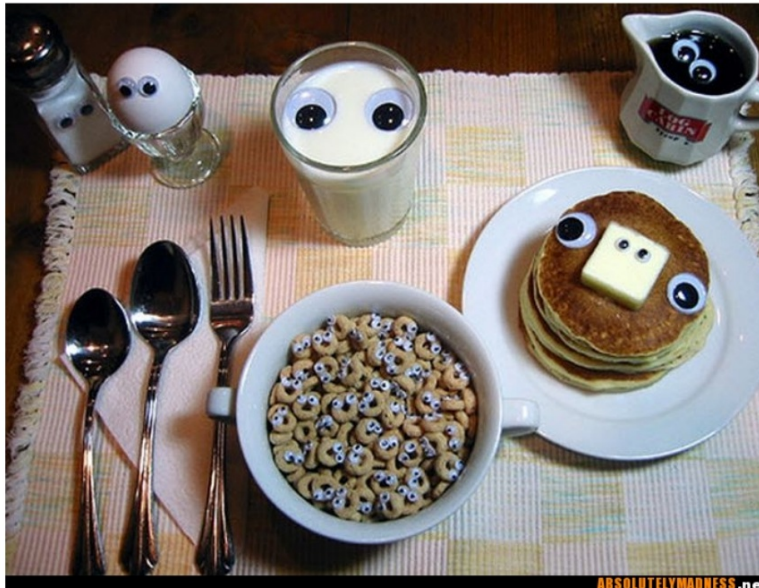


May 17, 2012 ^{M7R}
Get out your homework



5/17 - Basic Counting Principle, Sample Space and Simple Probability

If you were to choose one item from each category in order to create a meal, how many meals could you create?

<u>Main Dish</u>	<u>Side Dish</u>	<u>Drink</u>	<u>Dessert</u>
Pizza	Tater tots	Milk	Cookie
Lasagna	Chip	Choc Milk	Ice Cream
Salad	Fruit	Tampico	
	Vegies	Fruit 66	
3	4	4	2
= 96 possibilities			

If you were to choose one item from each category in order to create an outfit, how many outfits could you create?

<u>Top</u>	<u>Bottom</u>	<u>Shoes</u>
Tshirt	Jeans	Tennis Shoes
Long sleeve	Shorts	Vans
Hoodie	Gym Shorts	

$3 \cdot 3 \cdot 2 = 18 \text{ outfits}$

Create an abbreviated Sample Space for the information on the last page.

~~T-shirt~~
~~Long Sleeve~~
~~Hoodie~~

~~Jeans~~
~~Shorts~~
~~Gym Shorts~~

~~Tennis Shoes~~
~~Vans~~

TJT
TJV
TST
TSV
TGT
TG V

LJT
LJV
LST
LSV
LGT
LG V

HJT
HJV
HST
HSV
HGT
HG V

Create an abbreviated Sample Space for flipping a coin and then rolling a 6-sided die.



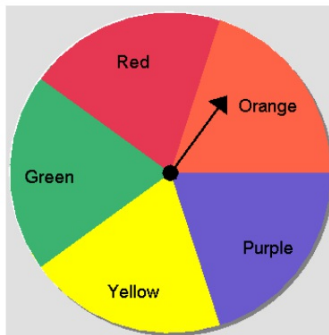
H
T

H1 H2 H3 H4 H5 H6
T1 T2 T3 T4 T5 T6



1 4
2 5
3 6

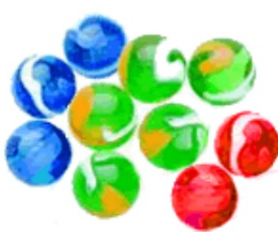
Create an abbreviated Sample Space for spinning this spinner then flipping a coin.



RH OH PH YH GH
RT OT PT YT GT

$$\text{Probability of an event happening} = \frac{\text{Number of ways the event can occur}}{\text{Total number of possible events}}$$

What is the probability of drawing a red marble out of this pile?



of Reds 2
of Marbles 10

$$\frac{2}{10} = \frac{1}{5}$$

What is the probability of drawing a blue marble?

a green?

$$\frac{3}{10}$$

$$\frac{5}{10} = \frac{1}{2}$$

What is the probability of **not** drawing a red marble?

$$\frac{8}{10} = \frac{4}{5}$$



↑
Red

What is the probability of randomly drawing a red card from this group?

$$\frac{3}{10}$$

$$P(2) = \frac{1}{10}$$

$$P(\text{even}) = \frac{5}{10} = \frac{1}{2}$$

count
0

$$P(\text{less than 4}) = \frac{4}{10} = \frac{2}{5}$$

$$P(\text{not purple}) = \frac{7}{10}$$

Homework

Pink *Probability WS1*

Due Tomorrow
Friday