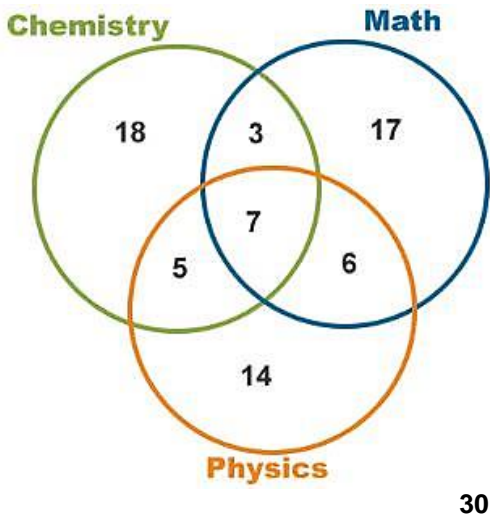


1.



$P(\text{Chemistry}) =$

$P(\text{Math}) =$

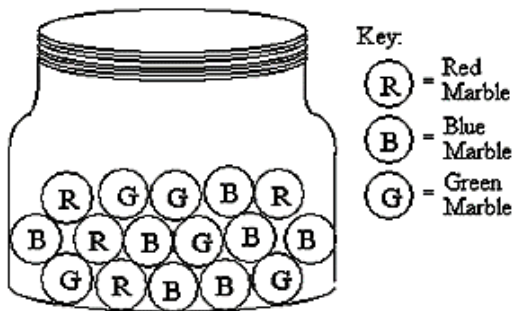
$P(\text{Physics}) =$

$P(\text{Chemistry} \cap \text{Math}) =$

$P(\text{math} \cup \text{Physics}) =$

$P(\text{Chemistry} \cap \text{Math} \cap \text{Physics}) =$

2.



What is the probability of choosing a green and then a red marble with replacement

What is the probability of choosing a green and then a red marble without replacement.

What is the probability of choosing a blue and then a red marble without replacement.

What is the probability of choosing a blue or red marble.

3.

Standard Deck of 52 Playing Cards

Clubs	Spades	Hearts	Diamonds
A♣	A♠	A♥	A♦
2♣	2♠	2♥	2♦
3♣	3♠	3♥	3♦
4♣	4♠	4♥	4♦
5♣	5♠	5♥	5♦
6♣	6♠	6♥	6♦
7♣	7♠	7♥	7♦
8♣	8♠	8♥	8♦
9♣	9♠	9♥	9♦
10♣	10♠	10♥	10♦
Jack♣	Jack♠	Jack♥	Jack♦
Queen♣	Queen♠	Queen♥	Queen♦
King♣	King♠	King♥	King♦

What is the probability of drawing a heart or diamond?







What is the probability of drawing a hear or king?

What is the probability of drawing a heart, replacing it, then drawing another heart?

What is the probability of drawing a heart, not replacing it, then drawing another heart?

What is the probability of drawing a heart, holding onto it, then drawing another heart?

4.

	2	3	4	5	6	7
	3	4	5	6	7	8
	4	5	6	7	8	9
	5	6	7	8	9	10
	6	7	8	9	10	11
	7	8	9	10	11	12

What is the probability of rolling a sum of 5 or a sum of 6?

What is the probability of rolling a double or a sum of 5?

What is the probability of rolling a double or sum of 10?

5.

What is your favorite sport to watch on television?			
	Football	Basketball	Baseball
Males	40	22	15
Females	12	16	45
Total	52	38	60

$$P(\text{Football}) =$$

$$P(\text{Males}) =$$

$$P(\text{Basketball} \cap \text{Female}) =$$

$$P(\text{Basketball} \cup \text{Female}) =$$

$$P(\text{Female})' =$$

$$P(\text{Male}|\text{Baseball}) =$$

$$P(\text{Baseball}|\text{Male}) =$$

6. Using the letters in **MISSISSIPPI**.

Find the probability of picking a M.

Find the probability of picking a M or S.

Find the probability of drawing an S, replacing it, then drawing a P.

Find the probability of drawing an S, without replacing it, then drawing a P.

7. Decide if each set of events is independent or dependent.

$$P(A) = 0.5; P(B) = 0.3; P(A \cap B) = 0.15$$

$$P(A) = \frac{1}{2}; P(B) = \frac{2}{5}; P(A \cap B) = \frac{2}{5}$$

A boy chooses a marble from a bag, puts it back in the bag, then chooses a second marble.

A girl chooses a marble from a bag, does not put it back in the bag, then chooses a second marble.

8.

Basic Counting Principle

You and your friends are ordering a pizza. There are 4 types of meat, 2 types of cheese, and 5 types of veggies to choose from. How many different pizzas could you order?

9.

Word Problems – Using the Fundamental Counting Principle



The new frozen yogurt shop down the street offers 20 flavors and 8 toppings. You can order a regular, sugar, waffle, or chocolate frozen yogurt cone. How many possible frozen yogurt cones can you order (assuming that you can only get one type of cone, one flavor of ice cream, and one topping for each yogurt cone)?



