Simple Probability

Using a deck of cards, find the probability of drawing the following out of the deck.
(**Remember**: probability is always a number between 0 and 1, written as a fraction!)

1. P (queen) 1/13
2. P (3 of hearts) 1/52
3. P (3 OR 5) 2/13
4. P (number from 1 to 5) 5/13
5. P (face card) 1/4
6. P (ace of clubs OR 7) 5/52
7. P (not an ace) 12/13
8. P (number that is not even) 5/13
9. P (card) 1
10. P (13) 0

20/52

Using a die (six-sided cube), find the probability of rolling the following number.

1. P (1) 1/6
2. P (even number) 1/2
3. P (composite number) 1/3
4. P (2 OR 4) 1/3
5. P (number > 7) 0
6. P (not odd) 1/2
7. P (0) 0
8. P (multiple of 6) 1/6
9. P (even OR 1) 2/3
10. P (1 OR 2 OR 3) 1/2

"Simple Probability"

Remember our SKUNK game? Probability is the chance part of the game.

probability - the chance that an event will happen

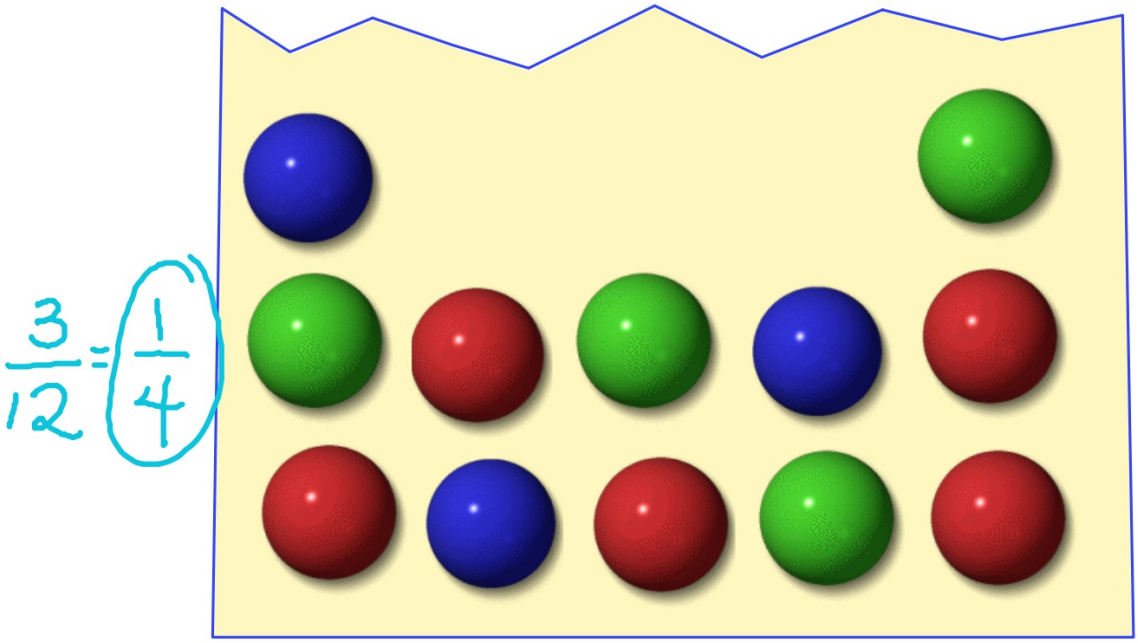
Formula

$$\text{probability} = \frac{\text{\# of ways the event can occur}}{\text{total possible outcomes}}$$

A coin is tossed. What is the probability that will land face up?

$$\frac{1}{2}$$

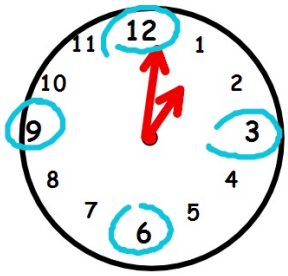
A bag contains 5 red marbles, 4 green marbles, and 3 blue marbles. Shana picks a marble without looking. What is the probability that she will pick a blue marble?



$\frac{3}{12} = \frac{1}{4}$

A 12-hour mantle clock strikes the hour. What is the probability that the hour is divisible by 3?

$\frac{4}{12} = \frac{1}{3}$



A number cube is tossed.

What is the probability that it will land on 6? $\frac{1}{6}$

What is the probability that it will land on an odd number? $\frac{1}{2}$

If a dice is rolled once, what is the probability that it will show an even number? An odd number?

$\frac{1}{2}$ $\frac{1}{2}$

If a dice is rolled once, what is the probability that it will show a prime number (1 is not prime)?

$\frac{3}{6} = \frac{1}{2}$

If a dice is rolled once, what is the probability that it will show a multiple of 3? $\frac{2}{6} = \frac{1}{3}$

If a dice is rolled once, what is the probability that it will show a multiple of 1? A multiple of 7?

1 0

A deck of cards contains 52 cards, 13 form each suit. If a card is flipped over, what is the probability that it is a spade? $\frac{1}{4}$

That it is a face card (J, Q, K) of any suit? $\frac{12}{52} = \frac{3}{13}$

A bag contains two black, eight red, five orange, and five green jelly beans. A blindfolded student draws one jelly bean. Find the probability of each outcome.

1. It is not black $\frac{18}{20} = \frac{9}{10}$
2. It is black or red $\frac{1}{2}$
3. It is not yellow 1
4. It is orange $\frac{5}{20} = \frac{1}{4}$
5. It is blue 0
6. It is red, green, or black $\frac{15}{20} = \frac{3}{4}$