

# Probability

1. Something that is unlikely to happen has a probability of between

- (A) 0 and 0.5
- (B) 0.5 and 1
- (C) 1 and 2
- (D) -1 and 0

2. Something that is likely to happen has a probability of between

- (A) 0 and 0.5
- (B) 0.5 and 1
- (C) 1 and 2
- (D) -1 and 0

3. What is the probability of rolling a 4 with a die? - 1 die

- (A)  $\frac{4}{6}$
- (B) 1
- (C) 0
- (D)  $\frac{1}{6}$



4. What is the probability of getting heads when you toss a coin?

- (A) 1
- (B) 0.5
- (C) 0.2
- (D) 0.33



5. What is the probability of rolling an odd number with a die? - one dice

- (A) one sixth
- (B) one third
- (C) one fifth
- (D) one half

6. A coin is thrown 3 times. It lands on heads twice & tails once. What are the odds that the coin will land on tails the next throw?

- (A) 1
- (B) one half
- (C) 0
- (D) impossible to determine



7. A bag contains 7 buttons. Three of them are green. What is the probability of picking a green button from the bag?

- (A) One seventh
- (B) Two sevenths
- (C) Three sevenths
- (D) 1.5 / 3

8. Something that has an even chance of happening has a probability of

- (A) 100%
- (B) 50%
- (C) 0%
- (D) less than 50% most of the time

9. A bag contains just 5 buttons, all of which are blue. What are the odds of picking a red button from the bag

- (A) 0
- (B) 0.5
- (C) 1
- (D) not likely



**10.** A bag contains 4 white buttons. How many black buttons must be added so there is an even chance of picking a white button?

- (A) 4
- (B) 8
- (C) 0
- (D)  $1/2$  the number of white buttons

**11.** A six sided die is tossed twice in a row. What is the chance of getting a 6, then getting another 6?

- (A)  $1/6$
- (B)  $1/36$
- (C)  $1/12$
- (D)  $2/12$

**12.** A six sided die is tossed twice in a row. What is the chance of getting a 3, then getting another 3?

- (A) 16.66%
- (B) 12%
- (C) 8.33%
- (D) 2.77%



**13.** Define random.

- (A) A choice or pick in which each outcome is equally likely.
- (B) A choice or pick in which you get the desired outcome.
- (C) A choice or pick in which you do not care about the outcome.
- (D) Go ask Farmer Brown.

**14.** Define probability.

- (A) Measuring outcomes in games of chance.
- (B) The chance that something will happen.
- (C) Recording percentages of events that occur.
- (D) Developing statistics.

**15.** Define mode.

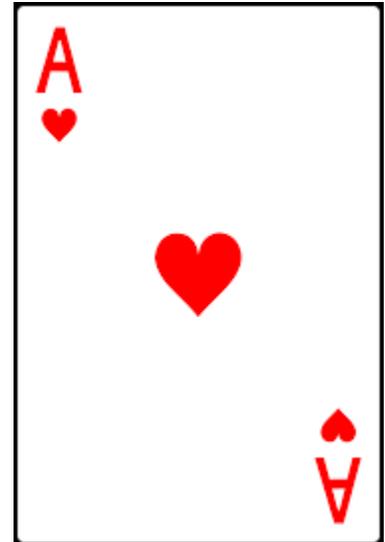
- (A) It's a synonym for range. The difference between the lowest and highest value in the data set.
- (B) The most likely recorded results in a frequency table.
- (C) The value that occurs most frequently in a set of data. There can be more than one mode or no mode.
- (D) The average in a data set.

**16.** What are the odds of getting heads three times consecutively when tossing a coin only three times?

- (A)  $3/9$  or  $1/3$
- (B)  $1/6$
- (C)  $1/4$
- (D)  $1/8$

**17.** With a set of cards what is the chance of getting a card that is hearts but not an ace?

- (A)  $1/4$
- (B)  $13/52$
- (C)  $3/13$
- (D)  $13/12$



**18.** What is the probability of picking a vowel from a bag containing the letters to the word MILLION?

- (A) 0.429
- (B) 0.5
- (C) 0.29
- (D) The crystal ball is cloudy. Please come back tomorrow.



**19.** Natsuko has been practicing at darts. She hits the bulls-eye 3 out of 7 times. Estimate the probability of her not hitting a bulls-eye.

- (A) Even odds
- (B) Some of the time
- (C) Most likely
- (D) Not likely

**20.** If your batting average is 0.400 in baseball. How many hits would you expect to get in 20 at-bats?

- (A) 4
- (B) 8
- (C) 12
- (D) 10

