

Advanced Statistics and Probability for Young Minds

Statistics & Probability · Answer Key · 8 Questions

1. What is the most frequent score on a standard six-sided die when rolled 100 times? (Assuming a fair die)

- A) 1
- B) 6
- C) All scores appear with equal frequency**
- D) It cannot be determined

2. If you flip a fair coin three times, what is the probability of getting heads on all three flips?

- A) $1/8$**
- B) $1/2$
- C) $3/8$
- D) $1/3$

3. In a dataset of numbers, the 'median' refers to:

- A) The number that appears most often
- B) The total sum of all numbers
- C) The middle number when the data is ordered**
- D) The range between the highest and lowest numbers

4. What is the probability of drawing a face card (King, Queen, or Jack) from a standard deck of 52 playing cards in a single draw?

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

5. A 'mode' in statistics represents:

- A) The average of a dataset
- B) The middle value of a dataset
- C) The value that occurs most frequently in a dataset**
- D) The difference between the highest and lowest values in a dataset

6. If a spinner is divided into 5 equal sections labeled 1 through 5, what is the probability of landing on an even number?

- A) $1/5$
- B) $2/5$**
- C) $3/5$
- D) $1/2$

7. When calculating the 'mean' of a set of numbers, you are essentially finding the:

- A) Most common value
- B) Middle value
- C) Average value**
- D) Most spread-out value

8. Consider a bag with 3 red marbles and 2 blue marbles. If you pick one marble without looking, what is the probability that it is red?

- A) $\frac{1}{3}$
- B) $\frac{2}{3}$
- C) $\frac{3}{5}$**
- D) $\frac{2}{5}$