

**Q1. Find the following probability, if three coins are tossed together:**

- a. Getting exactly three heads : \_\_\_\_\_
- b. Getting exactly two heads : \_\_\_\_\_
- c. Getting no heads : \_\_\_\_\_

**Q2. If a die is rolled, find the probability of:**

- a. Getting a 6 : \_\_\_\_\_
- b. Getting an even number : \_\_\_\_\_
- c. Getting an even prime number : \_\_\_\_\_
- d. Getting a number which is a factor of 6 : \_\_\_\_\_

**Q3. If two dice are rolled together, fill in the blanks with the correct probability of the following events:**

- a. Sum of two numbers is 15 : \_\_\_\_\_
- b. Sum of two numbers is less than 12 : \_\_\_\_\_
- c. Getting at least one 5 : \_\_\_\_\_

**Q4. A box has red, blue, green and yellow balls of same size in equal number. If a ball is taken out from the box at random, find whether the following statements are True or False:**

- a. The probability of getting a red ball is more than the probability of getting a yellow ball. \_\_\_\_\_
- b. The probability of taking out a blue ball. \_\_\_\_\_
- c. The probability of getting a red or yellow ball is more than the probability of getting a blue ball. \_\_\_\_\_
- d. The probability of getting a coloured ball. \_\_\_\_\_

**Q5. In a box, there are 20 cards with numbers 1 to 20. If a card is selected at random from the box, fill in the blanks with the correct probability of the following events:**

- a. The probability of getting an odd number is \_\_\_\_\_ .
- b. The probability of getting a composite number is \_\_\_\_\_ .
- c. The probability of getting a number more than 10 is \_\_\_\_\_ .
- d. The probability of getting a number divisible by 20 is \_\_\_\_\_ .

**Q6. A bag contains 10 red pencils, 15 blue pencils and 5 orange pencils. All the pencils have same dimensions. A pencil is taken out of the bag at random. Find the probability that the pencil taken out is of:**

- a. red colour : \_\_\_\_\_
- b. red or blue colour : \_\_\_\_\_
- c. any colour but not orange : \_\_\_\_\_

**Q7. Paper chits bearing names of the following 10 children are put in a box. The names of the children are as follows:**

Abhishek, Kamini, Kim, Himani, Hitesh, Sarita, Anita, Ishita, Eesha, Salman

If a chit is taken out at random, find the probability of getting a chit bearing a name:

- a. starting with a vowel : \_\_\_\_\_
- b. containing at least two vowels : \_\_\_\_\_
- c. starting with the letter 'H' : \_\_\_\_\_

**Q8. Two coins are tossed simultaneously 150 times. The distribution of various outcomes is listed below:**

One Head	Two Heads	No Head
80	40	30

Find the probability of each of the following events and verify that the sum of the probabilities is 1.

- a. Probability of getting one head : \_\_\_\_\_
- b. Probability of getting two heads : \_\_\_\_\_
- c. Probability of getting No head : \_\_\_\_\_

Sum of the probabilities = \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

**Q9.** A spinner wheel of fortune is divided into six parts of equal area having colours red, blue, green, yellow, orange and pink. When the pointer moves, it stops at some coloured area. Find the probability that the pointer stops at:

- a. a red coloured sector : \_\_\_\_\_
- b. a blue or green coloured sector : \_\_\_\_\_
- c. any sector but not green sector : \_\_\_\_\_

**Q10.** Find the probability of the following events and fill in the blanks:

- a. Sun setting in the East: \_\_\_\_\_
- b. Getting a dry open ground when it is raining heavily outside: \_\_\_\_\_
- c. Meeting employees in an office on a working day: \_\_\_\_\_
- d. A leap year having 28 days in February: \_\_\_\_\_

## Answers

1. a.  $\frac{1}{8}$ ; b.  $\frac{1}{8}$ ; c.  $\frac{1}{8}$

2. a.  $\frac{1}{6}$ ; b.  $\frac{1}{2}$ ; c.  $\frac{1}{6}$ ; d.  $\frac{2}{3}$

3. a. 0; b.  $\frac{35}{36}$ ; c.  $\frac{11}{36}$

4. a. False; b. True; c. True; d. False

5. a.  $\frac{1}{2}$ ; b.  $\frac{3}{5}$ ; c.  $\frac{1}{2}$ ; d.  $\frac{1}{20}$

6. a.  $\frac{1}{3}$ ; b.  $\frac{5}{6}$ ; c.  $\frac{5}{6}$

7. a.  $\frac{2}{5}$ ; b.  $\frac{9}{10}$ ; c.  $\frac{1}{5}$

8. a.  $\frac{8}{15}$ ; b.  $\frac{4}{15}$ ; c.  $\frac{1}{5}$

$$\text{Sum of the probabilities} = \frac{8}{15} + \frac{4}{15} + \frac{1}{5} = 1$$

9. a.  $\frac{1}{6}$ ; b.  $\frac{1}{3}$ ; c.  $\frac{5}{6}$

10. a. 0; b. 1; c. 1; d. 0