

1. There are 6 marbles in a box with number 1 to 6 marked on each of them . What is the probability of drawing a marble with number 2 ?  
(a)  $\frac{1}{6}$  (b)  $\frac{1}{5}$  (c)  $\frac{1}{3}$  (d) 1
2. A coin is flipped to decide which team starts the game . What is the probability of your team will start ?  
(a)  $\frac{1}{4}$  (b)  $\frac{1}{2}$  (c) 1 (d) 0
3. A die is thrown once . What will be the probability of getting a prime number ?  
(a)  $\frac{1}{6}$  (b)  $\frac{1}{2}$  (c) 1 (d) 0

Cards marked with numbers 1 to 25 are placed in the box and mixed thoroughly. One card is drawn at random from the box. Answer the following questions (Q4-Q13)

4. What is the probability of getting a number 5?  
(a) 1 (b) 0 (c)  $\frac{1}{25}$  (d)  $\frac{1}{5}$
5. What is the probability of getting a number less than 11?  
(a) 1 (b) 0 (c)  $\frac{1}{5}$  (d)  $\frac{2}{5}$
6. What is the probability of getting a number greater than 25?  
(a) 1 (b) 0 (c)  $\frac{1}{5}$  (d)  $\frac{2}{5}$
7. What is the probability of getting a multiple of 5?  
(a) 1 (b) 0 (c)  $\frac{1}{25}$  (d)  $\frac{1}{5}$
8. What is the probability of getting an even number?  
(a) 1 (b) 0 (c)  $\frac{12}{25}$  (d)  $\frac{13}{25}$
9. What is the probability of getting an odd number?  
(a) 1 (b) 0 (c)  $\frac{12}{25}$  (d)  $\frac{13}{25}$
10. What is the probability of getting a prime number?  
(a)  $\frac{8}{25}$  (b)  $\frac{9}{25}$  (c)  $\frac{12}{25}$  (d)  $\frac{13}{25}$

11. What is the probability of getting a number divisible by 3?

- (a)  $\frac{8}{25}$                       (b)  $\frac{9}{25}$                       (c)  $\frac{12}{25}$                       (d)  $\frac{13}{25}$

12. What is the probability of getting a number divisible by 4?

- (a)  $\frac{8}{25}$                       (b)  $\frac{9}{25}$                       (c)  $\frac{6}{25}$                       (d)  $\frac{3}{25}$

13. What is the probability of getting a number divisible by 7?

- (a)  $\frac{8}{25}$                       (b)  $\frac{9}{25}$                       (c)  $\frac{6}{25}$                       (d)  $\frac{3}{25}$

14. A bag has 4 red balls and 2 yellow balls. A ball is drawn from the bag without looking into the bag. What is probability of getting a red ball?

- (a)  $\frac{1}{6}$                                       (b)  $\frac{2}{3}$                                       (c)  $\frac{1}{3}$                                       (d) 1

15. A bag has 4 red balls and 2 yellow balls. A ball is drawn from the bag without looking into the bag. What is probability of getting a yellow ball?

- (a)  $\frac{1}{6}$                                       (b)  $\frac{2}{3}$                                       (c)  $\frac{1}{3}$                                       (d) 1

A box contains 3 blue, 2 white, and 5 red marbles. If a marble is drawn at *random* from the box, then answer the questions from 1 to 5.

1. What is the probability that the marble will be white?

- (a)  $\frac{1}{6}$  (b)  $\frac{1}{5}$  (c)  $\frac{1}{3}$  (d) 1

2. What is the probability that the marble will be red?

- (a)  $\frac{1}{6}$  (b)  $\frac{1}{2}$  (c) 1 (d) 0

3. What is the probability that the marble will be blue?

- (a)  $\frac{3}{10}$  (b)  $\frac{1}{2}$  (c) 1 (d) 0

4. What is the probability that the marble will be any one colour?

- (a)  $\frac{1}{6}$  (b)  $\frac{1}{2}$  (c) 1 (d) 0

5. What is the probability that the marble will be red or blue?

- (a) 1 (b)  $\frac{4}{5}$  (c)  $\frac{1}{5}$  (d)  $\frac{2}{5}$

A die is thrown once, then answer the questions from 6 to 10.

6. Find the probability of getting a prime number

- (a)  $\frac{1}{6}$  (b)  $\frac{1}{2}$  (c) 1 (d) 0

7. Find the probability of getting a number lying between 2 and 6

- (a)  $\frac{1}{6}$  (b)  $\frac{1}{2}$  (c) 1 (d) 0

8. Find the probability of getting an odd number.

- (a)  $\frac{1}{6}$  (b)  $\frac{1}{2}$  (c) 1 (d) 0

9. Find the probability of getting an even number.

- (a)  $\frac{1}{6}$  (b)  $\frac{1}{2}$  (c) 1 (d) 0

10. Find the probability of getting a number greater than 4.

- (a)  $\frac{1}{6}$  (b)  $\frac{2}{3}$  (c)  $\frac{1}{3}$  (d) 1

A box contains 5 red marbles, 6 white marbles and 4 green marbles. If a marble is drawn at random from the box, then answer the questions from 1 to 6.

- What is the probability that the marble will be white?  
(a)  $\frac{1}{6}$  (b)  $\frac{2}{3}$  (c)  $\frac{1}{3}$  (d) 1
- What is the probability that the marble will be red?  
(a)  $\frac{1}{6}$  (b)  $\frac{2}{3}$  (c)  $\frac{1}{3}$  (d) 1
- What is the probability that the marble will be green?  
(a) 0.3 (b)  $\frac{1}{2}$  (c) 1 (d) none of these
- What is the probability that the marble will be any one colour?  
(a)  $\frac{1}{6}$  (b)  $\frac{1}{2}$  (c) 1 (d) 0
- What is the probability that the marble will be red or green?  
(a)  $\frac{2}{5}$  (b)  $\frac{3}{25}$  (c)  $\frac{1}{5}$  (d) none of these
- What is the probability that the marble will be blue?  
(a)  $\frac{1}{6}$  (b)  $\frac{1}{2}$  (c) 1 (d) 0

Cards marked with numbers 1 to 50 are placed in the box and mixed thoroughly. One card is drawn at random from the box. Answer the following questions from 7 to 15.

- What is the probability of getting a number 5?  
(a) 1 (b) 0 (c)  $\frac{1}{25}$  (d)  $\frac{1}{5}$
- What is the probability of getting a number less than 11?  
(a) 1 (b) 0 (c)  $\frac{1}{5}$  (d)  $\frac{2}{5}$
- What is the probability of getting a number greater than 50?  
(a) 1 (b) 0 (c)  $\frac{1}{5}$  (d)  $\frac{2}{5}$
- What is the probability of getting a multiple of 5?  
(a) 1 (b) 0 (c)  $\frac{1}{25}$  (d)  $\frac{1}{5}$

11. What is the probability of getting an even number?

- (a) 1                      (b)  $\frac{1}{2}$                       (c)  $\frac{12}{25}$                       (d)  $\frac{13}{25}$

12. What is the probability of getting an odd number?

- (a) 1                      (b)  $\frac{1}{2}$                       (c)  $\frac{12}{25}$                       (d)  $\frac{13}{25}$

13. What is the probability of getting a prime number?

- (a) 1                      (b)  $\frac{1}{2}$                       (c)  $\frac{4}{10}$                       (d)  $\frac{3}{10}$

14. What is the probability of getting a number divisible by 3?

- (a)  $\frac{8}{25}$                       (b)  $\frac{9}{25}$                       (c)  $\frac{12}{25}$                       (d)  $\frac{13}{25}$

15. What is the probability of getting a number divisible by 4?

- (a)  $\frac{8}{25}$                       (b)  $\frac{9}{25}$                       (c)  $\frac{6}{25}$                       (d)  $\frac{3}{25}$

16. What is the probability of getting a number divisible by 7?

- (a)  $\frac{8}{25}$                       (b)  $\frac{9}{25}$                       (c)  $\frac{6}{25}$                       (d)  $\frac{3}{25}$

1. A coin is tossed 1000 times and 560 times a "head" occurs. The empirical probability of occurrence of a Head in this case is
- A. 0.5                      B. 0.56                      C. 0.44                      D. 0.056

2. Two coins are tossed 200 times and the following out comes are recorded

HH	HT/TH	TT
56	110	34

What is the empirical probability of occurrence of at least one Head in the above case

- A. 0.33                      B. 0.34                      C. 0.66                      D. 0.83

A die is thrown 200 times and the following outcomes are noted, with their frequencies:

Outcome	1	2	3	4	5	6
Frequency	56	22	30	42	32	18

3. What is the empirical probability of getting a 1 in the above case.
- A. 0.28                      B. 0.22                      C. 0.15                      D. 0.21
4. What is the empirical probability of getting a number less than 4 ?
- A. 0.50                      B. 0.54                      C. 0.46                      D. 0.52
5. What is the empirical probability. of getting a number greater than 4.
- A. 0.32                      B. 0.25                      C. 0.18                      D. 0.30

6. On a particular day, the number of vehicles passing a crossing is given below :

Vehicle	Two wheeler	Three wheeler	Four wheeler
Frequency	52	71	77

What is the probability of a two wheeler passing the crossing on that day ?

- A. 0.26                      B. 0.71                      C. 0.385                      D. 0.615

7. The following table shows the blood-group of 100 students

Blood group	A	B	O	AB	B <sup>+</sup>
Number of Students	12	23	35	20	10

One student is taken at random. What is probability that his blood group is B<sup>+</sup>

- A. 0.12                      B. 0.35                      C. 0.20                      D. 0.10



8. In a bag, there are 100 bulbs out of which 30 are bad ones. A bulb is taken out of the bag at random. The probability of the selected bulb to be good is

- A. 0.50                      B. 0.70                      C. 0.30                      D. None of these

9. On a page of telephone directory having 250 telephone numbers, the Frequency of the unit digits of those number are given below :

0	1	2	3	4	5	6	7	8	9
18	22	32	28	40	30	30	22	18	10

A telephone number is selected from the page at random. What is the probability that its unit digit is

(a)2

- A. 0.16                      B. 0.128                      C. 0.064                      D. 0.04

(b) More than 6

- A. 0.20                      B. 0.25                      C. 0.32                      D. 0.16

(c) less than 2

- A. 0.16                      B. 0.18                      C. 0.22                      D. 0.32

10. 10 defective pens are accidentally mixed with 90 good ones. It is not possible to just look at a pen and tell whether or not it is defective. One pen is taken out at random from this lot. Determine the probability that the pen taken out is a good one.

- A. 0.10                      B. 0.20                      C. 0.90                      D. 1.0

One card is drawn from a well-shuffled deck of 52 cards. Answer the question from 1 to 12.

1. Find the probability of getting a king of red colour

- (a)  $\frac{1}{26}$       (b)  $\frac{2}{13}$       (c)  $\frac{1}{13}$       (d)  $\frac{3}{26}$

2. Find the probability of getting a face card.

- (a)  $\frac{1}{26}$       (b)  $\frac{2}{13}$       (c)  $\frac{1}{13}$       (d)  $\frac{3}{13}$

3. Find the probability of getting a black face card

- (a)  $\frac{1}{26}$       (b)  $\frac{2}{13}$       (c)  $\frac{1}{13}$       (d)  $\frac{3}{26}$

4. Find the probability of getting an ace.

- (a)  $\frac{1}{26}$       (b)  $\frac{2}{13}$       (c)  $\frac{1}{13}$       (d)  $\frac{3}{26}$

5. Find the probability of getting a black card.

- (a)  $\frac{1}{2}$       (b)  $\frac{2}{13}$       (c)  $\frac{1}{13}$       (d)  $\frac{3}{26}$

6. Find the probability of getting a face card or an ace.

- (a)  $\frac{4}{13}$       (b)  $\frac{2}{13}$       (c)  $\frac{1}{13}$       (d)  $\frac{3}{13}$

7. Find the probability of getting face card or black card.

- (a)  $\frac{4}{13}$       (b)  $\frac{8}{13}$       (c)  $\frac{7}{13}$       (d)  $\frac{3}{13}$

8. Find the probability of getting a king or red card.

- (a)  $\frac{4}{13}$       (b)  $\frac{8}{13}$       (c)  $\frac{7}{13}$       (d)  $\frac{3}{13}$

9. Find the probability of getting a king and red card.

- (a)  $\frac{1}{26}$       (b)  $\frac{2}{13}$       (c)  $\frac{1}{13}$       (d)  $\frac{3}{26}$

10. Find the probability of getting a king or queen card.

- (a)  $\frac{1}{26}$       (b)  $\frac{2}{13}$       (c)  $\frac{1}{13}$       (d)  $\frac{3}{26}$