



Question 15:

Two dice are thrown simultaneously

Total number of outcomes = $6 \times 6 = 36$

(i) Favourable cases are: (1, 1), (1, 2), (1, 3), (1, 4), (1, 6), (2, 1), (2, 2), (2, 3), (2, 4), (2, 6), (3, 1), (3, 2), (3, 3), (3, 4), (3, 6), (4, 1), (4, 2), (4, 3), (4, 4), (4, 6), (6, 1), (6, 2), (6, 3), (6, 4), (6, 6) = 25.

Probability that 5 will not come upon either die = $25/36$

(ii) Favourable cases are: (1, 5), (2, 5), (3, 5), (4, 5), (5, 5), (6, 5), (5, 1), (5, 2), (5, 3), (5, 4), (5, 6) = 11

Probability that 5 will come at least once = $11/36$

(iii) 5 will come up on both dice in 1 case = (5,5)

probability that 5 will come on both dice = $1/36$

Question 16:

Total number of given numbers = 25

Prime numbers are 2, 3, 5, 7, 11, 13, 17, 19, 23

Number of non - prime numbers = $(25 - 9) = 16$

P(getting a non-prime number) = $16/25$

Question 17:

Out of the given 30 numbers, those divisible by 3 are 3, 6, 9, 12, 15, 18, 21, 24, 27, 30

Total numbers are 10.

So the number of those cards which are not divisible by 3 is 20

P(getting a number not divisible by 3) = $20/30 = 2/3$

Question 18:

Total number of all possible outcomes = 25

(i) Even numbers are 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24

P(getting an even number) = $12/25$

(ii) Prime numbers are 2, 3, 5, 7, 11, 13, 17, 19, 23

P(getting a prime number) = $9/25$

(iii) Numbers that are multiples of 6 are 6, 12, 18, 24

P(getting a multiple of 6) = $4/25$

***** END *****