



Question 23:

Cards are marked with numbers 13, 14, 15, \spadesuit , 60

the number of cards = 48

(i) The numbers on cards which are divisible by 5 are 15, 20, 25, 30, 35, 40, 45, 50, 55, 60

the number of favorable cases = 10

probability of getting a card with a number divisible by 5 = $10/48 = 5/24$

(ii) The numbers on cards which are perfect squares are 16, 25, 36, 49

the number of favorable outcomes = 4

probability of getting a card with number which is a perfect square = $4/48 = 1/12$

Question 24:

The cards are marked 5 to 50

the total number of cards = 46

(i) Prime numbers less than 10 are 5 and 7

There are two prime numbers

Probability of getting a prime number less than 10 = $2/46 = 1/23$

(ii) Perfect square numbers between 5 and 50 are 9, 16, 25, 36, 49

There are 5 cards having perfect square numbers

Probability of getting a card having a perfect square number = $5/46$

Question 25:

A leap year has 366 days i.e., 52 weeks and 2 days. These two days can be

(i) Sunday - Monday

(ii) Monday - Tuesday

(iii) Tuesday - Wednesday

(iv) Wednesday - Thursday

(v) Thursday - Friday

(vi) Friday - Saturday

(vii) Saturday - Sunday

Out of these 7 cases, 2 have Fridays

$P(\text{getting 53 Fridays}) = 2/7$

Question 26:

Probability of winning a game = 0.6

Probability of losing game = $1 - (\text{probability of winning game})$

$= 1 - 0.6 = 0.4$

***** END *****