

29/9/2020
TUESDAY

MATHEMATICS

STD-X
class-37

Assignment

- 1) A box contains 6 blacks and 4 white balls. If a ball is taken from it, what is the probability of it being black? And the probability of it being white?

Ans) Total no. of balls = 10
No. of black balls = 6

6 - Black
4 - white
10 Balls

$$\therefore \text{Probability of getting a black ball} = \frac{6}{10} = \underline{\underline{\frac{3}{5}}}$$

$$\text{No. of white balls} = 4$$

$$\therefore \text{Probability of white} = \frac{4}{10} = \underline{\underline{\frac{2}{5}}}$$

- 2) A bag contains 3 red beads and 7 green beads. Another contains one red and one green more. The probability of getting a red from which bag is more?

Ans) Bag-1

$$\text{Total Beads} = 3 + 7 = \underline{\underline{10}}$$

$$\text{Red beads} = 3$$

$$\therefore \text{Probability of getting a red bead} = \underline{\underline{\frac{3}{10}}}$$

Bag-2

$$\text{Total beads} = 4 + 8 = \underline{\underline{12}}$$

$$\text{Red beads} = 4$$

$$\text{Probability of getting a red bead} = \frac{4}{12} = \underline{\underline{\frac{1}{3}}}$$

\therefore Greater of $\frac{3}{10}$ and $\frac{1}{3}$

$$= \underline{\underline{\frac{1}{3}}}$$

\therefore The probability of getting a red bead from the second bag is more.