

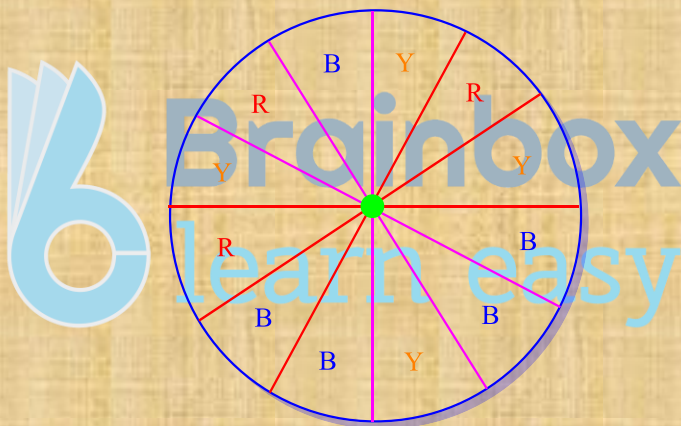
CHAPTER 15

Probability

Example:

A spinner is coloured by '3' different colours: Yellow, Blue and Red in 12 equal sectors. After spinning the wheel, what is the probability that,

- (i) Wheel stops at yellow colour?
- (ii) Wheel stops at red colour?
- (iii) Wheel stops at blue colour?



Sol:

Let 'S' be the sample space, A spinning wheel coloured in 12 equal sectors.

$$\Rightarrow n(S) = 12$$

(i) Let " E_1 " be the event of getting, A spinning wheel stops at yellow colour,

$$\Rightarrow n(E_1) = 4$$

$$P(E_1) = \frac{n(E_1)}{n(S)} = P(E_1) \Rightarrow \frac{4}{12} \Rightarrow P(E) = \frac{1}{3}$$

ii) Let “ E_2 ” be the element of getting, A spinning wheel stops at red colour,

$$\Rightarrow n(E_2) = 3$$

$$P(E_2) = \frac{n(E_2)}{n(S)} \Rightarrow P(E_2) = \frac{3}{12} \Rightarrow P(E) = \frac{1}{4}$$

(iii) Let “ E_3 ” be the event of getting, A spinning wheel stops at blue colour,

$$\Rightarrow n(E_3) = 5$$

$$P(E_3) = \frac{n(E_3)}{n(S)} \Rightarrow P(E_3) = \frac{5}{12}$$

