



### Exercise 15A

Question 1:

Total numbers of trials = 500

Numbers of heads = 285

Numbers of tails = 215

(i) Let E be the event of getting a head

$$\begin{aligned}\therefore P(\text{getting ahead}) &= P(E) = \frac{\text{numbers of heads coming up}}{\text{total number of trials}} \\ &= \frac{285}{500} = 0.57\end{aligned}$$

(ii) Let F be the event of getting a tail

$$\begin{aligned}\therefore P(\text{getting a tail}) &= P(F) = \frac{\text{numbers of tails coming up}}{\text{total number of trials}} \\ &= \frac{215}{500} \\ &= 0.43\end{aligned}$$

Question 2:

Total numbers of trials = 400

Numbers of times 2 head appears = 112

Number of times 1 head appears = 160

Number of times 0 head appears = 128

In a random toss of two coins, Let  $E_1$ ,  $E_2$ ,  $E_3$ , be the events of P(getting 2 heads)

$$= P(E_1) = \frac{\text{numbers of times 2 heads appear}}{\text{total number of trials}} = \frac{112}{400} = 0.28$$

$$\begin{aligned}P(\text{getting 1 head}) &= P(E_2) = \\ \frac{\text{numbers of times 1 head appears}}{\text{total number of trials}} &= \frac{160}{400} = 0.4\end{aligned}$$

$$\begin{aligned}P(\text{getting 0 head}) &= P(E_3) = \\ \frac{\text{numbers of times 0 head appears}}{\text{total number of trials}} &= \frac{128}{400} = 0.32\end{aligned}$$

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