Exercise 15A

Question 4:

Total number of trials =300
In a random throw of a die let E_1, E_2, E_3, and E_4 be the events of 3,6,5, and 1 respectively .Then;

(i) P(getting 3)= $P(E_1)$=
$$\frac{\text{numbers of times 3 appeared}}{\text{total number of trials}}$$
$$= \frac{54}{300}$$
$$= 0.18$$

(ii) P(getting 6)= $P(E_2)$=
$$\frac{\text{numbers of times 6 appeared}}{\text{total numberof trials}}$$
$$= \frac{33}{300}$$
$$= 0.11$$

(iii)   P(getting 5)= $P(E_3)$=
$$\frac{\text{numbers of times 5 appeared}}{\text{total number of trials}}$$
$$= \frac{39}{300}$$
$$= 0.13$$

(iv)   P(getting 1)= $P(E_4)$=
$$\frac{\text{numbers of times 2 head appeared}}{\text{total number of trials}}$$
$$= \frac{60}{300}$$
$$= 0.2$$

Question 5:

The number of ladies =200

Number of ladies who like coffee =142

Number of ladies who do not like coffee=58

Let E_1= event that the selected lady likes coffee.

$\therefore$ P(E1) = $\dfrac{\text{numbers of ladies who like coffee}}{\text{total number of trials}} = \dfrac{142}{200} = 0.71$

Let (E2)= event that the selected lady dislikes coffee. Then

$\therefore$ P(E2)= $\dfrac{\text{numbers of ladies who dislike coffee}}{\text{total number of trials}} = \dfrac{58}{200} = 0.29$

********** END *********