Q1

Answer :

Total number of trials = 300

Number of times a head is obtained = 136

Number of times a tail is obtained= 164

(i) Probability of getting head $= \frac{\text{Number of times heads is obtained}}{\text{Total number of trials}} = \frac{136}{300} = \frac{34}{75}$

(ii) Probability of getting a tail $= \frac{\text{Number of times tails is obtained}}{\text{Total number of trials}} = \frac{164}{300} = \frac{41}{75}$

Q2

Answer :

Total number of trials = 200

Number of times 2 heads are obtained = 58

Number of times one head is obtained = 83

Number of times no head is obtained = 59

(i) Probability of getting 2 heads $= \frac{\text{Number of times 2 heads have been obtained}}{\text{Total number of trials}} = \frac{58}{200} = \frac{29}{100}$

(ii) Probability of getting 1 head $= \frac{\text{Number of times 1 head has been obtained}}{\text{Total number of trials}} = \frac{83}{200}$

(iii) Probability of getting 0 head $= \frac{\text{Number of times head has not been obtained}}{\text{Total number of trials}} = \frac{59}{200}$

Q3

Answer :

Total number of trials = 100

Number of times 3 is obtained = 18

Number of times 6 is obtained = 9

Number of times 4 is obtained = 15

Number of times 1 is obtained = 21

$$\text{(i) Probability of getting a } 3 = \frac{\text{Number of times 3 is obtained}}{\text{Total number of trials}} = \frac{18}{100} = \frac{9}{50}$$

$$\text{(ii) Probability of getting a } 6 = \frac{\text{Number of times 6 is obtained}}{\text{Total number of trials}} = \frac{9}{100}$$

$$\text{(iii) Probability of getting a } 4 = \frac{\text{Number of times 4 is obtained}}{\text{Total number of trials}} = \frac{15}{100} = \frac{3}{20}$$

$$\text{(iv) Probability of getting a } 1 = \frac{\text{Number of times 1 is obtained}}{\text{Total number of trials}} = \frac{21}{100}$$

Q4

Answer :

Total number of ladies surveyed = 100

Ladies who like coffee = 36

Ladies who do not like coffee = 64

$$\text{(i) Probability of choosing a lady who likes coffee} = \frac{\text{Number of ladies who like coffee}}{\text{Total number of ladies}}$$

$$= \frac{36}{100} = \frac{9}{25}$$

$$\text{(ii) Probability of choosing a lady who dislikes coffee}$$

$$= \frac{\text{Number of ladies who dislike coffee}}{\text{Total number of ladies}} = \frac{64}{100} = \frac{16}{25}$$