

Ex 15.1

$$P(E) = \frac{\text{no. of trials in which the event happened}}{\text{total no. of trials}}$$

① Total no. of balls played = 30

no. of balls on which boundary was not hit = $30 - 6 = 24$

$$P(\text{boundary not hit}) = \frac{24}{30} = \frac{4}{5}$$

② $P(2 \text{ girls}) = \frac{475}{1500} = \frac{19}{60}$

$$P(1 \text{ girl}) = \frac{814}{1500} = \frac{407}{750}$$

$$P(\text{no girl}) = \frac{211}{1500}$$

③ Total students = 40

no. of children born in August = 6

$$P(\text{student of class was born in August}) = \frac{6}{40} = \frac{3}{20}$$

④ $P(2 \text{ heads}) = \frac{72}{200} = \frac{9}{25}$

⑤ i $P(\text{earning } 10000 - 13000 \text{ and own. exactly } 2 \text{ veh.}) = \frac{29}{2400}$

ii $P(\text{earning above Rs. } 16000 \text{ and own. exactly } 1 \text{ veh.}) = \frac{579}{2400}$

iii $P(\text{earning less than Rs } 7000 \text{ and own. no veh.}) = \frac{10}{2400} = \frac{1}{240}$