

1) Total no. of laptops = 10,000

$$n(s) = 10,000$$

$$\text{No. of good laptops} = 10000 - 25 = \underline{9975}$$

$$n(E) = 9975 \quad \cancel{1995} \quad 399$$

$$P(E) = \frac{n(E)}{n(s)} = \frac{\cancel{9975}}{\cancel{10000}} = \frac{399}{400} = 0.99$$

~~2000~~
400

$$2, \quad n(S) = 400$$

No. of Persons having Voter ID = 191

$$\begin{aligned} \text{No. of Persons does not have their Voter ID} &= 400 - 191 \\ &= \underline{209} \end{aligned}$$

$$n(E) = 209$$

$$P(E) = \frac{n(E)}{n(S)} = \frac{209}{400}$$

3) Probability of guessing the CA = $\frac{x}{3}$

" " not " " CA = $\frac{x}{5}$

$$P(E) = \frac{x}{3}$$

$$P(E)' = \frac{x}{5}$$

$$P(E) + P(E)' = 1$$

$$\frac{x}{3} + \frac{x}{5} = 1$$

$$\frac{5x + 3x}{15} = 1$$

$$5x + 3x = 15$$

$$8x = 15$$

$$x = \frac{15}{8}$$

The Value of $x = \frac{15}{8}$

Ans

4, Probability of a player winning a tennis match = 0.72

$$P(E) = 0.72$$

Probability of a player losing the match be $P(E)'$

$$P(E) + P(E)' = 1$$

$$\underline{0.72} + \underline{P(E)'} = 1$$

$$P(E)' = 1 - 0.72$$

$$P(E)' = 0.28$$

Probability of the player losing
the match = 0.28

$$B, \quad n(S) = 1500$$

$$\boxed{860 + 370 + 250} = 1480$$

$$1500 - 1480 = \underline{20}$$

No. of families not using any maids = 20

$$i) \quad E_1, \quad n(E_1) = 250$$

$$P(E_1) = \frac{250}{1500} = \frac{1}{6} = \frac{1}{6}$$

$$ii) E_2 = 860$$

$$P(E_2) = \frac{860}{1500} = \frac{\cancel{86}^{43}}{\cancel{150}_{75}} = \frac{43}{75}$$

$$iii) E_3 = 20$$

$$\frac{20}{1500} = \frac{2^1}{\cancel{150}_{75}} = \frac{1}{75}$$

1, Which of the following cannot be taken as probability of an event

a, 0

b, 0.35

c, $\frac{7}{20}$

d, $-\frac{7}{20}$ ✓

2, A letter is chosen at random from the word
"MATHEMATICS" the Probability of getting a Vowel is

a, $\frac{2}{11}$

b, $\frac{3}{11}$

c, $\frac{4}{11}$ ✓

d, $\frac{5}{11}$

3, if $P(A) = \frac{1}{3}$ then $P(A)^1$ is _____

a, $\frac{1}{3}$

b, $\frac{2}{3}$ ✓

c, $\frac{3}{2}$

d, 1

$$\left(\frac{1}{3}\right)^A, \left(\frac{2}{3}\right)^{A^1}$$

4, An integer is chosen from the first twenty natural numbers, the Probability that it is a Prime number is —

a, $\frac{1}{5}$ ✓

b, $\frac{2}{5}$ ✓✓

c, $\frac{3}{5}$ ✓✓

d, $\frac{4}{5}$ ✓✓

$$\frac{1}{5} = 0.2$$

$$\frac{2}{5} = 0.4$$

$$\frac{3}{5} = 0.6$$

$$\frac{4}{5} = 0.8$$

5, From a well shuffled pack of 52 cards one card is drawn at random. The probability of getting not a king is _____

a, $\frac{12}{13}$ ✓

b, $\frac{1}{13}$

c, $\frac{4}{13}$

d, $\frac{2}{13}$

6, 1500 families with 2 children were selected randomly

No. of girls

2

No. of families

475



0

211

(i) chosen at random having one girl.

$$n(E) = 814$$

$$\frac{407}{\frac{814}{1500}} = \frac{407}{750}$$

7, The record of weather station shows that out of the part 250 consecutive days its weather forecast were correct 175 times. what is the probability that it was not correct on a given data?

$$n(S) = 250$$

$$n(E) = 175$$

$$P(E) = \frac{175}{250} = \frac{7}{10}$$

$$1 - P(E)$$

$$\frac{10}{10} - \frac{7}{10}$$

$$\frac{10 - 7}{10} = \frac{3}{10}$$