

The cost for hiring a car for 2 days in 2018 was Rs 264 which was 20% more than 2013? Cost of hiring a car for 2 days in 2013?

Sol

Cost of 2 days hiring in 2018 = 264 Rs.

Cost of 2 days hiring in 2013 = ?

Percentage increase = ?

$$20\% \text{ of } 264 = ?$$

$$\frac{20}{100} \times 264 = x$$

$$x = 52.8$$

So here for cost of 2 days hiring in 2013

price in 2013 = increase in price - Total price (2018)

$$\text{Price in } 2013 = 264 - 52.8$$

$$\text{Price in } 2013 = 212$$

Hence the price of 2 days hiring in 2018 is 264 while in 2013 it was 212.

(Answer)

Q) Blood group of inhabitants of a village were checked. It was found 600 blood group A, 650 blood group B, 550 has AB blood group, 200 has blood group O? Calculate probability of having B and O?

Kindly check these 4 Questions.

Solution

- Blood group A \rightarrow 600
- Blood group B \rightarrow 650
- Blood group AB \rightarrow 550
- Blood group O \rightarrow 200

• Calculate total no of villagers.
 $= 600 + 650 + 550 + 200$
 $= 2000$ villagers

• Probability of having Blood group O
 $= \frac{\text{People having O blood group}}{\text{Total no of villagers}}$
 $= \frac{200}{2000} = \frac{2}{20} = 0.10\%$

• Probability having blood group B.
 $= \frac{\text{people having B blood group}}{\text{total no of villagers.}}$
 $= \frac{650}{2000} = \frac{65}{200} = \frac{13}{40} = 0.32\%$

$$\begin{array}{r} 0.32 \\ 40 \overline{) 130} \\ \underline{120} \\ 100 \\ \underline{80} \\ 20 \end{array}$$

Hence the probability of getting blood group O is 0.10% and B is 0.32%

Answer.

Q) During a sale clerk was putting new price tags on each item. On one sweater it accidentally raised 20% instead of \downarrow in 20%. As a result the price is Rs 80 what was the Original price?

Sol
increase percentage in price = 20%
new price = Rs 80.

first we will calculate 20% of 80

$$\frac{20}{100} \times 80$$

$$= 16$$

$$\begin{array}{r} \cancel{80} \\ - 16 \\ \hline 64 \end{array}$$

So the 20% of 80 is 16
now for Original price of sweater
 $80 - 16 = 64$ Hence the Original price of sweater was 64 rupees

Ans.

Q) A card is drawn random from a box containing 12 cards? number 1 — 12? find probability of drawing 8
2) even no 3) perfect square 4) -ve number 5) no less than 13.

Solution

Total outcomes = 12.

a) So probability of getting even no

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12

here 6 numbers are even 2, 4, 6, 8, 10, 12

$$\text{So } \frac{6}{12} = \frac{1}{2} = 0.5\%$$

b) probability of getting perfect square
only 4 is the perfect square of 2.

$$= \frac{1}{12}$$

$$\begin{array}{r} 1 \\ 12 \\ \times 8 \\ \hline 96 \end{array}$$

$$= 0.08\%$$

c) probability of getting -ve number
as there is no negative number since probability is 0%.

d) Probability of drawing 8

$$\frac{1}{12} = 0.08\%$$

e) probability of getting no less than 13.

$$\frac{12}{12} = 1 \text{ or } 100\%$$