



Exercise 1G

Q16

Answer :

Ratio of the read book = $\frac{7}{9}$

Ratio of the unread book = $1 - \frac{7}{9}$

$$= \frac{2}{9}$$

Let x be the total number of pages in the book.

Thus, we have:

$$\frac{2}{9} \times x = 40$$

$$\Rightarrow x = 40 \div \frac{2}{9}$$

$$= 40 \times \frac{9}{2}$$

$$= \frac{40}{1} \times \frac{9}{2}$$

$$= \frac{40 \times 9}{1 \times 2}$$

$$= \frac{360}{2}$$

$$= 180$$

Hence, the total number of pages in the book is 180.

Q17

Answer :

Amount of money spent on notebooks = $300 \times \frac{1}{3}$

$$\begin{aligned} &= \frac{300}{1} \times \frac{1}{3} \\ &= \frac{300}{3} \\ &= 100 \end{aligned}$$

\therefore Money left after spending on notebooks = $300 - 100$
 $= 200$

Amount of money spent on stationery items from the remainder = $200 \times \frac{1}{4}$

$$\begin{aligned} &= \frac{200}{1} \times \frac{1}{4} \\ &= \frac{200}{4} \\ &= 50 \end{aligned}$$

\therefore Amount of money left with Rita = $200 - 50$
 $= \text{Rs } 150$

Q18

Answer :

Total amount of money Amit earns = Rs 16000

Amount of money spent on food = $16000 \times \frac{1}{4}$

$$\begin{aligned} &= \frac{16000}{1} \times \frac{1}{4} \\ &= \frac{16000}{4} \\ &= \text{Rs } 4000 \end{aligned}$$

\therefore Amount of money left after spending on food = $16000 - 4000$
 $= \text{Rs } 12000$

Amount of money spent on house rent from the remainder = $12000 \times \frac{3}{10}$

$$\begin{aligned} &= \frac{12000}{1} \times \frac{3}{10} \\ &= \frac{12000 \times 3}{1 \times 10} \\ &= \frac{36000}{10} \\ &= \text{Rs } 3600 \end{aligned}$$

\therefore Amount of money left after spending on food and house rent = $12000 - 3600$

$= \text{Rs } 8400$

Amount of money spent on children's education from the remainder = $8400 \times \frac{5}{21}$

$$\begin{aligned} &= \frac{8400}{1} \times \frac{5}{21} \\ &= \frac{42000}{21} \\ &= \text{Rs } 2000 \end{aligned}$$

\therefore Amount of money left = $8400 - 2000$
 $= \text{Rs } 6400$

Hence, the amount of money left with Amit is Rs 6400.

Q19

Answer :

Let x be the required number.

We know that $\frac{3}{5}$ of the number exceeds its $\frac{2}{7}$ by 44.

That is,

$$\frac{3}{5} \times x = \frac{2}{7} \times x + 44$$

$$\frac{3}{5} \times x - \frac{2}{7} \times x = 44$$

$$\left(\frac{3}{5} - \frac{2}{7} \right) \times x = 44$$

$$\left(\frac{3}{5} + \text{Additive inverse of } \frac{2}{7} \right) \times x = 44$$

$$\left(\frac{21-10}{35} \right) \times x = 44$$

$$\frac{11}{35} \times x = 44$$

$$x = 44 \div \frac{11}{35}$$

$$= 44 \times \frac{35}{11}$$

$$= \frac{44}{1} \times \frac{35}{11}$$

$$= \frac{44 \times 35}{1 \times 11}$$

$$= \frac{1540}{11}$$

$$= 140$$

Q20

Answer :

$$\text{Ratio of spectators in the open} = 1 - \frac{2}{7}$$

$$= \frac{5}{7}$$

Total number of spectators in the open = x

$$\text{Then, } \frac{5}{7} \times x = 15000$$

$$\Rightarrow x = 15000 \div \frac{5}{7}$$

$$= 15000 \times \frac{7}{5}$$

$$= \frac{15000}{1} \times \frac{7}{5}$$

$$= \frac{15000 \times 7}{1 \times 5}$$

$$= \frac{105000}{5}$$

$$= 21000$$

Hence, the total number of spectators is 21,000

***** END *****

