Exercise 10A

Q6

Answer :

Number of male:Number of female = 5:3

Let the number be x.

Number of male = $5x$

Number of female = $3x$

Number of male workers = 115

Now, $5x = 115$

$\Rightarrow x = \frac{115}{5} = 23$

Number of female workers in the mill = $3x = 3 \times 23 = 69$

Q7

Answer :

Boys:Girls = 9:5

Let the number of boys = $9x$

Let the number of girls = $5x$

Total strength of the school = 448

According to given condition, we have:

$$9x + 5x = 448$$

$$\Rightarrow 14x = 448$$

$$\Rightarrow x = \frac{448}{14} = 32$$

Number of boys = $9x = 9 \times 32 = 288$

Number of girls = $5x = 5 \times 32 = 160$

Q8

Answer :

Kamal:Madhu = 7:2

Sum of the ratio terms = 7 + 2 = 9

Kamal's share = $\frac{7}{9} \times 1575 = \frac{11025}{9}$ = Rs 1225

Madhu's share = $\frac{2}{9} \times 1575 = \frac{3150}{9}$ = Rs 350

Q9

Answer :

A:B:C = 3:5:7

Sum of the ratio terms = 3 + 5 +7 = 15

A's share = $\frac{3}{15} \times 3450 = \frac{10350}{15}$ = Rs 690

B's share = $\frac{5}{15} \times 3450 = \frac{17250}{15}$ = Rs 1150

C's share = $\frac{7}{15} \times 3450 = \frac{24150}{15}$ = Rs 1610

Q10

Answer :

Two number are in the ratio 11:12.

Let the numbers be $11x$ and $12x$.

Given: $11x + 12x = 460$

$\Rightarrow 23x = 460$

$\Rightarrow x = \frac{460}{23} = 20$

First number = $11x = 11 \times 20 = 220$

Second number = $12x = 12 \times 20 = 240$

Hence, the numbers are 220 and 240.

Q11

Answer :

Ratio of the two parts of line segment = 4:3

Sum of the ratio terms = 4 + 3 = 7

First part = $\frac{4}{7} \times 35$ cm = 4×5 cm = 20 cm

Second part = $\frac{3}{7} \times 35$ cm = 3×5 cm = 15 cm

Q12

Answer :

Number of bulbs produced each day = 630

Out of 10 bulbs, 1 is defective.

Number of defective bulbs = $\frac{630}{10} = 63$

$\therefore$ Number of defective bulbs produced each day = 63

Q13

Answer :

Price of pencil = Rs 96 per score

Price of ball pen = Rs 50.40 per dozen

Price per unit of pencil = $\frac{96}{20} = 4.8$

Price per unit of ball pen = $\frac{50.40}{12} = 4.2$

Ratio = $\frac{4.8}{4.2} = \frac{48}{42} = \frac{48 \div 6}{42 \div 6} = \frac{8}{7}$

Price of a pencil:Price of a ball pen = 8:7

********** END **********