



Exercise 14E

Question 18:

Mean monthly salary of 75 workers = Rs. 5680

So, Total monthly salary of 75 workers = Rs. 5680×75 = Rs. 426000

Mean monthly salary of 25 workers = Rs. 5400

So, Total monthly salary of 25 workers = Rs. 5400×25 = Rs. 135000

Mean monthly salary of 30 workers = Rs. 5700

So, Total monthly salary of 30 workers = Rs. 5700×30 = Rs. 171000

Remaining workers = $75 - 55 = 20$ workers

Total salary of remaining 20 workers

=Rs. $[426000 - (135000 + 171000)]$

= Rs. $[426000 - 306000]$

=Rs. 120000

\therefore Mean salary of the remaining 20 workers = Rs. $120000/20$

= Rs. 6000

Question 19:

Let the distance of mark from the starting point be x km.

Then, time taken by the ship reaching the marks = $\left(\frac{x}{15}\right)$ hours (since time = $\frac{\text{distance}}{\text{speed}}$)

Time taken by the ship reaching the starting point from the marks = $\left(\frac{x}{10}\right)$ hours

Total time taken = $\frac{x}{15} + \frac{x}{10} = \frac{x}{6}$ hours

Total distance covered = $x + x = 2x$ km.

\therefore average speed of whole journey = $2x \div \frac{x}{6} = \frac{2x \times 6}{x} = 12$ km/hour

Question 20:

Total number of students = 50

Total number of girls = $50 - 40 = 10$

Average weight of the class = 44 kg

Total weight of 50 students = 44×50 kg = 2200kg

Average weight of 10 girls = 40 kg

Total weight of 10 girls = 40×10 kg = 400 kg

\therefore Total weight of 40 boys = $2200 - 400$ kg = 1800 kg

\therefore the average weight of the boys = $1800/40 = 45$ kg

***** END *****