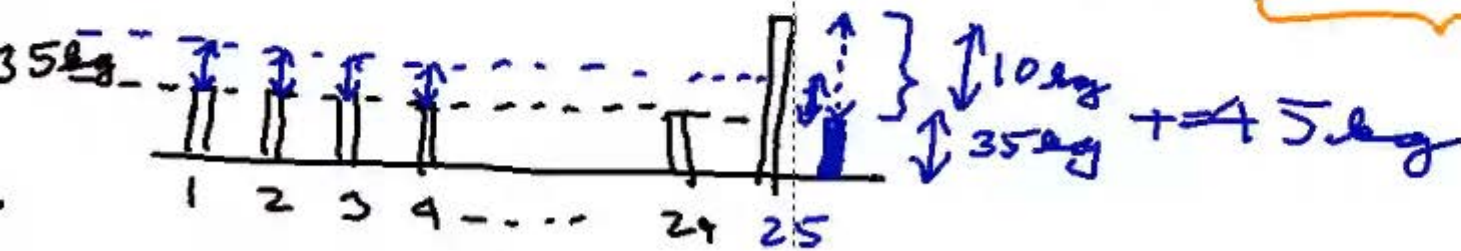


In a class there are 24 students with an average weight of 35 kgs.

1) A teacher walks into the class, and hence the average increases by 400 gms. What is the weight of the teacher?



400 gms

$$25 \times 0.4 = 10 \text{ kg}$$

$$\text{Tot Wt of 24 Stud} = (24 \times 35) = \alpha$$

$$\text{Teach} = x$$

$$\frac{\alpha + x}{25} = (35 + 0.4)$$

$$x = (25 \times 35.4) - \alpha$$

In a class there are 24 students with an average weight of 35 kgs.

1) A teacher walks into the class, and hence the average increases by 400 gms. What is the weight of the teacher?

2) 2 teachers walk into the class, and the average increases by 500 gms. What is the total weight of both the teachers?

$$25 \times 35 + \cancel{25} \times 0.5$$

$$26 \times 0.5 \text{ kg} = 13 \text{ kg}$$
$$\begin{array}{r} 13 \text{ kg} \\ + \\ 35 + 35 \\ \hline 83 \text{ kg} \end{array}$$

In a class there are 24 students with an average weight of 35 kgs.

1) A teacher walks into the class, and hence the average increases by 400 gms. What is the weight of the teacher?

2) 2 teachers walk into the class, and the average increases by 500 gms. What is the total weight of both the teachers?

3) 1 student ran away. As a result the average increased by 100 gms. What is the weight of the student who ran away?

4) 2 students ran away. As a result the average decreased by 200 gms. What was the total weight of the 2 students who ran away?

The diagram illustrates the change in average weight when two students leave the class. It starts with a cloud-shaped box containing the initial state: 22 students and an average weight of 35 kg. An arrow points to the right, where the state after two students leave is shown: 2 students and a new average weight of 35 kg. Below the initial state, it is noted that the average decreased by 200 gms. To find the total weight of the two students who left, the calculation $22 \times 0.2 = 4.4 \text{ kg}$ is shown. On the right, the new average is calculated as $35 + 35 = 70$, and then $70 - 4.4 = 65.6$ is written, though the final result shown is 74.4 kg, which appears to be a miscalculation or a different interpretation of the problem.

22 students
35 kg

2 students

35 + 35
+
4.4
74.4 kg

Avg 200 gms ↓

Total choric = $22 \times 0.2 = 4.4 \text{ kg}$