



Exercise 14D

Question 12:

Mean weight of the boys = 48 kg

$$\text{Therefore, Mean weight} = \frac{\text{Sum of the weight of six boys}}{6} = 48$$

Sum of the weight of 6 boys = $(48 \times 6)\text{kg} = 288\text{kg}$

Sum of the weights of 5 boys = $(51+45+49+46+44)\text{kg} = 235\text{kg}$

Weight of the sixth boy = (sum of the weights of 6 boys) - (sum of the weights of 5 boys)

$$= (288 - 235) = 53\text{kg.}$$

\therefore weight of the sixth boy = 53kg

Question 13:

Calculated mean marks of 50 students = 39

calculated sum of these marks = $(39 \times 50) = 1950$

Corrected sum of these marks

$$= [1950 - (\text{wrong number}) + (\text{correct number})]$$

$$= (1950 - 23 + 43) = 1970$$

$$\therefore \text{correct mean} = 1970/50 = 39.4$$

Question 14:

calculated mean of 100 items = 64

sum of 100 items, as calculated = $(100 \times 64) = 6400$

Correct sum of these items = $[6400 - (\text{wrong items}) + (\text{correct items})]$

$$= [6400 - (26+9) + (36+90)]$$

$$= [6400 - 35 + 126] = 6491$$

$$\therefore \text{Correct mean} = 6491/100 = 64.91$$

Question 15:

Mean of 6 numbers = 23

Sum of 6 numbers = $(23 \times 6) = 138$

Again, mean of 5 numbers = 20

Sum of 5 numbers = $(20 \times 5) = 100$

The excluded number = (sum of 6 numbers) - (sum of 5 numbers)

$$= (138 - 100) = 38$$

\therefore The excluded number = 38.

***** END *****