



Exercise 14E

Question 10:

The increase in the average of 10 oarsmen = 1.5 kg

Total weight increased $= (1.5 \times 10)$ kg = 15 kg

Since the man weighing 58 kg has been replaced,

Weight of the new man $= (58 + 15)$ kg = 73 kg.

Question 11:

Mean of 8 numbers = 35

\therefore Total sum of 8 numbers = $35 \times 8 = 280$

Since One number is excluded, New mean = $35 - 3 = 32$

\therefore Total sum of 7 numbers = $32 \times 7 = 224$

the excluded number = Sum of 8 numbers - Sum of 7 numbers
 $= 280 - 224 = 56$

Question 12:

Mean of 150 items = 60

Total Sum of 150 items = $150 \times 60 = 9000$

\therefore Correct sum of items = [(sum of 150 items) - (sum of wrong items)
+ (sum of right items)]

$= [9000 - (52 + 8) + (152 + 88)]$

$= [9000 - (52 + 8) + (152 + 88)]$

$= 9180$

\therefore Correct mean = $9180 / 150 = 61.2$

Question 13:

Mean of 31 results = 60

Total sum of 31 results = $31 \times 60 = 1860$

Mean of the first 16 results = $16 \times 58 = 928$

Total sum of the first 16 results = $16 \times 58 = 928$

Mean of the last 16 results = 62

Total sum of the last 16 results = $16 \times 62 = 992$

\therefore The 16th result = $928 + 992 - 1860$

$= 1920 - 1860 = 60$

\therefore The 16th result = 60.

***** END *****