worksheet 1

Average

Selection Series CUET GAT 2026 Special

Total Q. 10.

1.If the average weight of 10 students is 25 kg and that of other 10 students is 35 kg , then the average weight of these 20 students is:

(1) 30 kg (2) 35 kg (3) 25 kg (4) 20 kg Ans : 30 kg.

Sol.

10 − 25 → 250 Concept

10 − 35 → 350

600

= 600/20 = 30

Average = total Sum / total No.

2.The mean of scores obtained by 50 students is found to be 79.5 . Later on, it was found that the score of one student was read as 94 in place of 49 and the score of another student was read as 69 in place of 89. Find the correct mean.

(1) 85.52 (2) 79.35 (3) 79 (4) 78 Ans: 79.

Sol.

Average 50 → 79.5 New Correct mean = 79.5 − .5 = 79

94 −45→ 49 ↘ total marks difference

69 +20→ 89 ↗ −45+20 = −25

Average difference = 25/50 = .5

3. If the mean of 5 observations $x, x+2, x+4, x+6$ and $x+8$ is 11 , then value of x :

(1) 7 (2) 43 (3) 51 (4) 8 Ans: 7.

Sol.

Average = total Sum / total No

11 = (5x + 20)/5

55 = 5x + 20

7 35 = 5x

2nd Approch.

Mean term = x+4

11 = x + 4

x = 7

4.Eight persons with an average weight of 49 kg were in a lift. Two more persons Anita and Kamal boarded the lift and the average weight of the persons in the lift increased by 2.8 kg . What is the average weight of Anita and Kamal?
(1) 51.8 kg (2) 54.6 kg (3) 59 kg (4) 63 kg Ans: 63 kg.

Sol.

8P → Average 49 kg.

10P → Average 51.8 kg.

Weight Added by two new person.

$= 49 + 49 + 28 = 126$ kg.

Average weight of Anital and kamal

$= \frac{126}{2} = 63$ kg.

5.The average age of group of 5 friends is 32 years. The youngest friend amongst them is 4 years old. What was the average age of the group at the time of birth of the youngest friend?
(1) 36 years (2) 35 years (3) 34 years (4) 33 years Ans: 35 yr.

Sol.

5P → 32 yr. total Age = 160 yr.

4 yr Ago → (4 yr. Less × 5) −20 = 140

Average Age $= \frac{140}{4} = 35$ yr

8. The average of 40 numbers is 36 . The average of the first 25 numbers is 31 and the average of last 16 numbers is 43 . Find the 25 th number.
(1) 23 (2) 24 (3) 21 (4) 22 Ans: 23

Sol.

40 → 36 ⇒ 1440

25 → 31 ⇒ 775 ⎫ ⇒ 1463

16 → 43 ⇒ 688 ⎭ +

25 th No ⇒ 1463 − 1440 = 23

9. The sum of 17 consecutive numbers is 289 . The sum of another 10 consecutive numbers, whose first term is 5 more than the average of the first set of consecutive numbers is

(1) 315 (2) 285 (3) 265 (4) 300 **Ans:** 265.

Sol.

No.	Sum	Average.
17	289	17

New series First term = 17+5 = 22

22, 23, 24, 25, 26, 27, 28, 29, 30, 31

$\text{Sum} = \frac{5}{\cancel{10}_{2}}(2\times 22 + 9\times 1) = 5\times 53 = 265$

= A.P series. a = 22 d = 1

$\left\{\because S_n = \frac{n}{2}(2a + (n-1)\times d)\right\}$

10. The average of 24 numbers is 26 . The average of the first 15 numbers is 23 and that of the last 8 number is 33 . Find the 16th number.

(1) 15 (2) 16 (3) 17 (4) 18 **Ans:** 15.

Sol.

No.		Av.	Sum
24	→	26	624
15	→	23	345
8	→	33	264

$\left.\begin{matrix}345\\264\end{matrix}\right\} \Rightarrow 609$

16th No. $\Rightarrow$ 624 − 609 = 15