



Average Most Asked Common Questions (Last 5 years)

${f Q1.}$ There are 40 children in a class in which boys are 4 more than the girls. Average weight of all the
students is $42.5~\mathrm{kg}$ and the average weight of all the girls is $48~\mathrm{kg}$, then find the average weight of all the
boys?

- (a) 39.5 kg
- (b) 38 kg
- (c) 40.5 kg
- (d) 36.75 kg
- (e) 40.25 kg

Q2. The average salary of the entire staff in an office is Rs 3200 per month. The average salary of officers is Rs 6800 and that of non-officers is Rs 2000. If the number of officers is 5, then find the number of non-officers in the office?

- (a) 8
- (b) 12
- (c) 15
- (d) 5
- (e) None of these

Q3. The difference between average of a & b and average of b & c is 68. Find the difference of a and c?

- (a) 136
- (b) 134
- (c) 132
- (d) 128
- (e) 130

Q4. Total cost of x pens and (x-2) pencils is Rs 424. If one pencil and one pen costs Rs 4 and Rs 20 respectively then find x?

- (a) 16
- (b) 18
- (c) 15
- (d) 20
- (e) 21

Q5. Average weight of a group is 36 kg. If a student having weight of 48 kg left the group, then the average weight of a group is decreased by one kg., then find the number of people in the group initially?

- (a) 10
- (b) 13
- (c) 15
- (d) 16
- (e) 20





(e) 42



Q6. Average age of nine member of a family is 31 years and four months. If the age of youngest members of the family is 18 years, then find the average age (in years) of remaining eight members of the family six years ago? (a) 30 (b) 28 (c) 23 (d) 27 (e) 29
Q7. The average marks scored by 25 students in an exam is 220. If marks of a new student is included then the average marks of all the students is increased by 5. Find the total marks obtained by the new student. (a) 320 (b) 350 (c) 325 (d) 370 (e) 300
Q8. Certain number of people are attending a five days seminar on each day. First two days average number of people attending the seminar is 20 and las two days average number of people attending the seminar on all five days is 23, then find the total number of people attending seminar on third day. (a) 37 (b) 33 (c) 31 (d) 29 (e) 27
Q9. The average of 25 number is 90 and when one new number added in these 25 numbers, then average increased by 5. Find the new number. (a) 220 (b) 240 (c) 280 (d) 300 (e) 320
Q10. A person bought 30 pens of Rs. 40 each and he bought 20 pens of Rs. 45 each. Find the average price of all the pens he bought. (a) 32 (b) 38 (c) 48 (d) 44





211. Marks of A, B, C and D are 30, 35, 15 and 20 respectively and the average of A, B, C, D and E re 25. Find the marks of E. (a) 30 (b) 25 (c) 15 (d) 35 (e) 20
212. The average weight of the 10-person group is 50 kg. A person left the group and the average weight of the group decreased by one kg. If one new person joins the group of remaining people, hen the average weight of the group becomes 52 kg. Find the difference between the weight of the person who left the group and the person who joined the group. (a) 30 kg
b) 16 kg c) 18 kg d) 24 kg e) 20 kg
213. The average of 20 number is 50. When another number X is added, then the average is a ncreased by 2. Find the value of 2X. (a) 76 (b) 86
c) 42 d) 92 e) 184 214. The average weight of 24 students is 38 1/8 kg, and the ratio of boys to girls is 5:3. The
verage weight of the girls is 35 kg. If 3 boys joined with a total weight of 174 kg, then find how nuch average weight of the boys increased. a) 3 kg b) 4 kg c) 1 kg d) 1.5 kg e) 2.5 kg
215. The average of X, Y, and Z is 9, and the difference between Z and X is 5, which is half of Y. If is greater than X, then find the value of Z. a) 9 b) 10 c) 12 d) 11 e) 7





Q16. The average marks obtained by a student in five subjects is 105. If we exclude marks of three subjects which average is 72 excluding highest and lowest mark obtained by the student, then find the sum of highest and lowest mark obtained by the student?

- (a) 311
- (b) 315
- (c) 309
- (d) 319
- (e) 330

Q17. The average weight of eight people is X kg. Two new people joined them with total weight of 151 kg and average weight of all people increased by $\frac{3}{2}$ kg. If the weight of lightest people out of two people joined is X-5 kg, the find the difference between weight these two people who joined later.

- (a) 27 kg
- (b) 21 kg
- (c) 15 kg
- (d) 25 kg
- (e) 22 kg

Solutions

S1. Ans.(b)

Sol. Let the number of girls be x

Then, boys = x+4

ATQ

x+4+x=40

x = 18

total weight of all students= $40 \times 42.5 = 1700 kg$

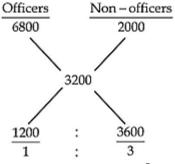
total weight of girls= $18 \times 48 = 864 kg$

weight of all boys=1700-864=836 kg

average weight of all boys= $\frac{836}{22}$ =38 kg

S2. Ans.(c)

Sol.



No. of non-officers = $\frac{3}{1} \times 5 = 15$



S3. Ans.(a)

Sol. ATQ,

$$\frac{a+b}{2} - \frac{b+c}{2} = 68$$

Or.

$$\frac{b+c}{2} - \frac{a+b}{2} = 68$$

$$a - c = 136$$

or

$$c - a = 136$$

required difference = 136

S4. Ans.(b)

Sol. ATQ

$$20x + 4 \times (x - 2) = 424$$

$$24x = 432$$

$$x = 18$$

S5. Ans.(b)

Sol. Let the number of the people in the group initially = x

ATQ,
$$36x - 48 = (36 - 1) \times (x - 1)$$

$$x = 13$$

S6. Ans.(d)

Sol. Total age of nine members = $\frac{94}{3} \times 9 = 282$ years

Total age of eight member six years ago = $(282 - 18) - (6 \times 8) = 216$ years

Required average = $\frac{216}{8}$ = 27 years

S7. Ans.(b)

Sol. Total marks obtained by all 25 students = $25 \times 220 = 5500$

When marks of a new student are included, then total marks obtained by all 26 students = $26 \times 225 = 5850$

So, total marks obtained by the new student = 5850 - 5500 = 350

S8. Ans.(e)

Sol. Total number of people attending seminar on all five days = $23 \times 5 = 115$

Total number of people attending seminar on third day = $115 - [(20 \times 2) + (24 \times 2)] = 27$

S9. Ans.(a)

Sol. Sum of the 25 numbers = $25 \times 90 = 2250$

When a new number added then total = $(90 + 5) \times 26 = 2470$

So, new number = 2470 - 2250 = 220

S10. Ans.(e)

Sol. Required average =
$$\frac{30 \times 40 + 45 \times 20}{50} = 42$$



S11. Ans.(b)

Sol. Total marks = $25 \times 5 = 125$

Let the marks of E be X

$$30 + 35 + 15 + 20 + X = 125$$

$$X = 125 - 100$$

X = 25

S12. Ans.(e)

Sol. Total weight of the group = $10 \times 50 = 500$

Total weight of the person who left the group = $500 - (49 \times 9) = 59 \text{ kg}$

Total weight of the person who joins the group = $52 \times 10 - 49 \times 9 = 79 \text{ kg}$

Required difference = 79 - 59 = 20 kg

S13. Ans.(e)

Sol. Total of 20 number = $20 \times 50 = 1000$

$$X = 21 \times 52 - 1000 = 92$$

So, 2X = 184

S14. Ans.(a)

Sol. Total boys =
$$24 \times \frac{5}{8} = 15$$

Total girls =
$$24 \times \frac{3}{8} = 9$$

Total weight of 24 students =
$$24 \times \frac{305}{8} = 915 \text{ kg}$$

Total weight of 9 girls = $9 \times 35 = 315 \text{ kg}$

Total weight of 15 boys = 915-315 = 600 kg

Total weight of 18 boys = 600+174 = 774 kg

Required answer = $\frac{774}{18} - \frac{600}{15} = 43 - 40 = 3 \text{ kg}$

S15. Ans.(d)

Sol. Given,
$$X+Y+Z=9\times 3$$

$$X + Y + Z = 27...(i)$$

And

$$Z - X = 5$$

$$Z = X + 5$$

$$Y = 5 \times 2 = 10$$

Z & Y values put in (i)

X+X+5+10=27

2X = 12

X=6

So, Z = X + 5 = 6 + 5 = 11

S16. Ans.(c)

Sol. Total marks obtained by the student in all five subjects = $105 \times 5 = 525$

Total highest and lowest mark obtained by the student = $525 - 72 \times 3$

= 525 - 216 = 309





S17. Ans.(d)

Sol. ATQ,
$$\frac{8X+151}{10} = X + \frac{3}{2}$$

8X + 151 = 10X + 15

2X = 136

X = 68

Weight of lightest people = (68 - 5) = 63 kg

Required difference = (151-63) - 63 = 25 kg



