

Question	What is the average of the following set of numbers: 310, 150, 200, 220, 100?	
Type	multiple_choice	
Option	190	incorrect
Option	150	incorrect
Option	156	incorrect
Option	196	correct
Solution	Deviation method Let Avg be 200 Deviations = +110 -50 +0 +20 -100 => -20 So, Avg = 200 - 20/5 = 200-4 = 196Ans	
Marks	1	0

Question	The average age of A, B and C is 26 years. If the average age of A and C is 29 years, what is the age of B in a year?	
Type	multiple_choice	
Option	33,40	incorrect
Option	2000	correct
Option	2,543	incorrect
Option	2,945	incorrect
Solution		
Marks	1	0

Question	In the first 10 overs of a cricket game, the run rate was only 3.2. What should be the run rate in the remaining 40 overs to reach the target of 282 runs?	
Type	multiple_choice	
Option	6.5	incorrect

Option	3.5	incorrect
Option	12.5	incorrect
Option	6.25	correct
Solution	Required run rate $= [282 - (3.2 \times 10)] / 40 = 250 / 4 = 6.25$ Ans	
Marks	1	0

Question	A group consists of two girls, two boys and three men. The average age of the men is 67 years, that of the girls is 35 years and that of the boy is 6 years. What is the average age of the family?	
Type	multiple_choice	
Option	31(5/7)	correct
Option	45(5/7)	incorrect
Option	37	incorrect
Option	45	incorrect
Solution	Required average $= (67 \times 2 + 35 \times 2 + 6 \times 3) / (7) = 222 / 7 = 31(5/7)$ Ans	
Marks	1	0

Question	A grocer has a sale of Rs. 6435, Rs. 6927, Rs. 6855, Rs. 7230 and Rs. 6562 for 5 consecutive months. How much sale must he have in the sixth month so that he gets an average sale of Rs. 6500?	
Type	multiple_choice	
Option	2000	incorrect
Option	1750	incorrect
Option	4991	correct
Option	2090	incorrect

Solution	Total sale for 5 months = Rs. $(6435 + 6927 + 6855 + 7230 + 6562)$ = Rs. 34009. Required sale = Rs. $[(6500 \times 6) - 34009]$ = Rs. $(39000 - 34009)$ = Rs. 4991.	
Marks	1	0

Question	The average of 20 numbers is zero. Of them, at the most, how many may be greater than zero?	
Type	multiple_choice	
Option	1	incorrect
Option	10	incorrect
Option	0	incorrect
Option	19	correct
Solution	Average of 20 numbers = 0. Sum of 20 numbers $(0 \times 20) = 0$. It is quite possible that 19 of these numbers may be positive and if their sum is a then 20th number is $(-a)$.	
Marks	1	0

Question	The average weight of 8 person's increases by 2.5 kg when a new person comes in place of one of them weighing 65 kg. What might be the weight of the new person?	
Type	multiple_choice	
Option	85	correct
Option	79	incorrect
Option	80	incorrect
Option	75	incorrect

Solution	Total weight increased = (8×2.5) kg = 20 kg. Weight of new person = $(65 + 20)$ kg = 85 kg.	
Marks	1	0

Question	The captain of a cricket team of 11 members is 26 years old and the wicket keeper is 3 years older. If the ages of these two are excluded, the average age of the remaining players is one year less than the average age of the whole team. What is the average age of the team?	
Type	multiple_choice	
Option	25	incorrect
Option	50	incorrect
Option	23	correct
Option	19	incorrect
Solution	Let the average age of the whole team by x years. $11x - (26 + 29) = 9(x - 1)$ $11x - 9x = 46$ $2x = 46$ $x = 23$. So, average age of the team is 23 years.	
Marks	1	0

Question	The average monthly income of P and Q is Rs. 5050. The average monthly income of Q and R is Rs. 6250 and the average monthly income of P and R is Rs. 5200. The monthly income of P is:	
Type	multiple_choice	
Option	4000	correct
Option	6000	incorrect
Option	4200	incorrect
Option	4500	incorrect

Solution	$P + Q = (5050 \times 2) = 10100 \dots (i)$ $Q + R = (6250 \times 2) = 12500 \dots (ii)$ $P + R = (5200 \times 2) = 10400 \dots (iii)$ Adding (i), (ii) and (iii), we get: $2(P + Q + R) = 33000$ or $P + Q + R = 16500 \dots (iv)$ Subtracting (ii) from (iv), we get $P = 4000$. P's monthly income = Rs. 4000.	
Marks	1	0

Question	The average age of husband, wife and their child 3 years ago was 27 years and that of wife and the child 5 years ago was 20 years. The present age of the husband is:	
Type	multiple_choice	
Option	50	incorrect
Option	45	incorrect
Option	60	incorrect
Option	40	correct
Solution	Sum of the present ages of husband, wife and child = $(27 \times 3 + 3 \times 3)$ years = 90 years. Sum of the present ages of wife and child = $(20 \times 2 + 5 \times 2)$ years = 50 years. Husband's present age = $(90 - 50)$ years = 40 years.	
Marks	1	0

Question	In Arun's opinion, his weight is greater than 65 kg but less than 72 kg. His brother does not agree with Arun and he thinks that Arun's weight is greater than 60 kg but less than 70 kg. His mother's view is that his weight cannot be greater than 68 kg. If all are correct in their estimation, what is the average of different probable weights of Arun?	
Type	multiple_choice	
Option	67	correct
Option	68	incorrect

Option	70	incorrect
Option	Data inadequate	incorrect
Solution	<p>Let Arun's weight by X kg. According to Arun, $65 < X < 72$ According to Arun's brother, $60 < X < 70$. According to Arun's mother, $X \leq 68$ The values satisfying all the above conditions are 66, 67 and 68.</p> <p>Required average $= (66 + 67 + 68)/3 = 67$ kg Ans</p>	
Marks	1	0

Question	The average weight of A, B and C is 45 kg. If the average weight of A and B be 40 kg and that of B and C be 43 kg, then the weight of B is:	
Type	multiple_choice	
Option	30	incorrect
Option	50	incorrect
Option	31	incorrect
Option	40	correct
Solution	<p>Let A, B, C represent their respective weights. Then, we have: $A + B + C = (45 \times 3) = 135$ (i) $A + B = (40 \times 2) = 80$ (ii) $B + C = (43 \times 2) = 86$(iii) Adding (ii) and (iii), we get: $A + 2B + C = 166$ (iv) Subtracting (i) from (iv), we get : $B = 31$. B's weight = 31 kg.</p>	
Marks	1	0

Question	A library has an average of 510 visitors on Sundays and 240 on other days. The average number of visitors per day in a month of 30 days beginning with a Sunday is:	
Type	multiple_choice	
Option	285	correct
Option	245	incorrect

Option	250	incorrect
Option	260	incorrect
Solution	<p>Since the month begins with a Sunday, to there will be five Sundays in the month.</p> <p>Required average $= (510 \times 5 + 240 \times 25)/30$</p> <p>$= 8550/30$</p> <p>$= 285$ Ans</p>	
Marks	1	0

Question	If the average marks of three batches of 55, 60 and 45 students respectively is 50, 55, 60, then the average marks of all the students is:	
Type	multiple_choice	
Option	58.68	incorrect
Option	60	incorrect
Option	50	incorrect
Option	54.68	correct
Solution	<p>Required average $= (55 \times 50 + 60 \times 55 + 45 \times 60) / (55 + 60 + 45)$</p> <p>$= 8750/160$</p> <p>$= 54.68$</p>	
Marks	1	0

Question	A student marks were wrongly entered as 83 instead of 63. Due to that the average marks for the class got increased by half ($1/2$). The number of pupils in the class is:	
Type	multiple_choice	
Option	40	correct
Option	30	incorrect

Option	29	incorrect
Option	20	incorrect
Solution	<p>Let there be x students in the class.</p> <p>Total increase in marks = $x * 1/2 = x/2$</p> <p>A/Q</p> $x/2 = (83 - 63)$ $x = 40 \text{ Ans.}$	
Marks	1	0

Question	The average of five consecutive odd numbers is 61. What is the difference between the highest and lowest numbers	
Type	multiple_choice	
Option	10	incorrect
Option	14	incorrect
Option	9	incorrect
Option	8	correct
Solution	<p>Let the numbers be x, x + 2, x + 4, x + 6 and x + 8.</p> <p>Then $[x + (x + 2) + (x + 4) + (x + 6) + (x + 8)] / 5 = 61$.</p> <p>or $5x + 20 = 305$ or $x = 57$.</p> <p>So, required difference = $(57 + 8) - 57 = 8$</p>	
Marks	1	0

Question	The average weight of 8 persons increases by 2.5 kg when a new person comes in place of one of them weighing 65 kg. What might be the weight of the new person ?	
Type	multiple_choice	
Option	85	correct
Option	75	incorrect
Option	72	incorrect

Option	70	incorrect
Solution	Total weight increased = (8×2.5) kg = 20 kg. Weight of new person = $(65 + 20)$ kg = 85 kg.	
Marks	1	0

Question	20 pens and 46 pencils were purchased for Rs. 235. If the average price of a pencil is Rs. 2.50 then calculate the average price (in Rs.) of a pen.	
Type	multiple_choice	
Option	6	correct
Option	5	incorrect
Option	8	incorrect
Option	7	incorrect
Solution	A/Q Cost price of pencils = 46×2.50 = Rs 115 Remaining amount = $235 - 115$ = Rs 120 So, avg price of 20 pens = $120/20$ = Rs 6 Ans	
Marks	1	0

Question	The average of two numbers is 10 and the product of two numbers is 96. Find the two numbers.	
Type	multiple_choice	
Option	48,2	incorrect
Option	12,8	correct
Option	24,4	incorrect
Option	16,6	incorrect

Solution	Let numbers be a, b A/q $a \cdot b = 96$ $a + b = 10 \cdot 2 = 20$ Solving $a = 12$ and $b = 8$ Best method Check by option.	
Marks	1	0

Question	The average height of 40 students in a class is 163 cm. When the school opened after the vacation, three students were absent and the average height of the students present was found to be 162 cm. If the heights of the two students absent were equal to each other, and the height of the third absent student was 2 cm less than either of other two, what was the height of the third absent student?	
Type	multiple_choice	
Option	200 cm	incorrect
Option	176 cm	correct
Option	160cm	incorrect
Option	165 cm	incorrect
Solution	Let the height of A, B, C be y cm, y cm and $(y - 2)$ cm respectively. Now, sum of height of 40 students = $163 \times 40 = 6520$ cm Sum of height of 37 students excluding A, B and C = $162 \times 37 = 5994$ cm. \therefore Sum of heights of A, B and C = $(6520 - 5994) = 526$ cm According to question , $\Rightarrow y + y + y - 2 = 526$ $\Rightarrow 3y = 526 + 2 = 528$ $\Rightarrow y = 528 \div 3 = 176$ cm \therefore Height of A = 176 cm	
Marks	1	0

Question	The average of three numbers is 42. The first is twice the second and the second is twice the third. What is the difference between the largest and the smallest number?	
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Type	multiple_choice	
Option	78	incorrect
Option	90	correct
Option	65	incorrect
Option	95	incorrect
Solution	<p>Let the third number be X A/Q The second number = 2X The first number = 4X $X+2X+4X=42*3$ $7X=126$ $X=18$ The sum of smallest and largest number = $X+4X = 18+72=90$ Ans</p>	
Marks	1	0

Question	If ages of three boys are in the ratio of 3 : 5 : 7 at an average of 15 years, the age of the youngest boy is?	
Type	multiple_choice	
Option	3:7	incorrect
Option	5:7	correct
Option	7:5	incorrect
Option	2:5	incorrect
Solution	<p>Given, $(5a-3b) : (4a-2b) = 2:3$ $= 3(5a-3b) = 2(4a-2b)$ $= 15a-8a = -4b+9b$ $= 7a=5b$ $a/b=5/7$ Ans.</p>	
Marks	1	0

Question	If ages of three boys are in the ratio of 3 : 5 : 7 at an average of 15 years, the age of the youngest boy is?	
Type	multiple_choice	
Option	8yr	incorrect
Option	9yr	correct
Option	7yr	incorrect
Option	6yr	incorrect
Solution	Let age be $3x, 5x, 7x$ Total age $\Rightarrow 3x + 5x + 7x = 15 \times 3$ $x = 3$ A/q youngest age = $3x = 3 \times 3 = 9$ yr	
Marks	1	0

Question	The average marks of 50 students in a class is 72. The average marks of boys and girls in that subject are 70 and 75 respectively. The number of boys in the class is?	
Type	multiple_choice	
Option	50	incorrect
Option	30	correct
Option	35	incorrect
Option	20	incorrect
Solution	Let Number of students in the class = n \therefore Number of girls = $50 - n$ According to the question, $n \times 70 + (50 - n) \times 75 = 50 \times 72$ $\Rightarrow 70n + 3750 - 75n = 3600$ $\Rightarrow 3750 - 5n = 3600$ $\Rightarrow 5n = 3750 - 3600 = 150$ $\Rightarrow n = 150/5$ $\Rightarrow n = 30$ Ans	

Marks	1	0
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Question	Average of all prime numbers between 30 to 50	
Type	multiple_choice	
Option	30	incorrect
Option	39.8	correct
Option	20	incorrect
Option	25	incorrect
Solution	There are five prime numbers between 30 and 50.They are 31 37 41 43 and 47.Therefore the required average= $31+37+41+43+47/5 = 199/5 = 39.8$.	
Marks	1	0

Question	The average weight of a certain number of students in a class is 68.5 kg. If 4 new students having weights 72.2 kg, 70.8kg, 70.3kg and 66.7 kg join the class, then the average weight of all the students increases by 300 g. The number of students in the class, initially is:	
Type	multiple_choice	
Option	15	incorrect
Option	16	correct
Option	12	incorrect
Option	20	incorrect

Solution	<p>Let the total number of students in the class be x.</p> <p>Average weight of all students = 68.5 kg</p> <p>Total weight of all students = 68.5x kg</p> <p>Total weight of four students = (72.2 + 70.8 + 70.3 + 66.7) kg = 280 kg</p> <p>According to the question,</p> $\Rightarrow 68.5x + 280 = 68.8(x + 4)$ $\Rightarrow 68.5x + 280 = 68.8x + 275.2$ $\Rightarrow x = 16$	
Marks	1	0

Question	<p>Three numbers are such that if the average of any two of them is added to the third number, the sums obtained are 168, 174 and 180 respectively. What is the average of the original three numbers?</p>	
Type	multiple_choice	
Option	50	incorrect
Option	87	correct
Option	60	incorrect
Option	40	incorrect
Solution	<p>Let the three number be a, b and c.</p> <p>According to the question</p> $\Rightarrow [(a+b)/2] + c = 168$ $\Rightarrow a+b+2c = 336 \text{ ----(1)}$ $\Rightarrow [(b+c)/2] + a = 174$ $\Rightarrow b+c+2a = 348 \text{ ----(2)}$ $\Rightarrow [(a+c)/2] + b = 180$ $\Rightarrow a+c+2b = 360 \text{ ----(3)}$ <p>Adding equation (1), equation (2) and equation (3)</p> $\Rightarrow 4(a+b+c) = 1044$ $\Rightarrow a+b+c = 261$ <p>-So, Average of all the three numbers = $261/3 = 87$</p>	
Marks	1	0

Question	10 years ago, the average age of a family of five members was 38 years. Now two new members join, whose age difference is 8 years. If the present average age of the family is the same as it was 10 years ago, what is the age (in years) of the new younger member?	
Type	multiple_choice	
Option	5	incorrect
Option	9	correct
Option	6	incorrect
Option	4	incorrect
Solution	<p>Total age of family 10 years ago = $38 \times 5 = 190$ years</p> <p>Total age at present of the family = $38 \times 7 = 266$ years</p> <p>Age of 5 members increased = $5 \times 10 = 50$ years</p> <p>Difference of total age then and now = $266 - (190 + 50) = 26$ (sum of ages of new members)</p> <p>Let the two members be x and y.</p> <p>$X + y = 26$</p> <p>$X - y = 8$</p> <p>On solving two equations,</p> <p>$X = 17$ and $y = 9$</p> <p>Age of younger member = 9</p>	
Marks	1	0

Question	In a class of 40 students, 45% are girls and the remaining are boys. If the average of the girls marks is 54 and that of the boys is 46, what is the average of the whole class?	
Type	multiple_choice	
Option	50	incorrect
Option	49.6	correct
Option	45	incorrect
Option	48	incorrect

Solution	Number of girls in class = $40 \times \frac{45}{100} = 18$ Number of boys in class = $40 - 18 = 22$ Average marks of girls is = 54 Sum of marks of girls is = $54 \times 18 = 972$ Average marks of boys is = 46 Sum of marks of boys is = $46 \times 22 = 1,012$ Total sum of marks of all class = $1,012 + 972 = 1984$ Average marks of whole class = $1984/40 = 49.6$	
Marks	1	0

Question	The total number of students in section A and B of a class is 110. The number of students in section A is 10 more than that of section B. The average score of the students in B, in a test, is 20% more than that of students in A. If the average score of all the students in the class is 72, then what is the average score of the students ?	
Type	multiple_choice	
Option	50	incorrect
Option	66	correct
Option	60	incorrect
Option	80	incorrect
Solution	Let the number of students in section B be x number of students in section A = $x + 10$ According to the question $= x + 10 + x = 110$ $= x = 50$ Number of students in section A = 60 Number of students in section B = 50 Sum of score of all students = $110 \times 72 = 7920$ Let the average score of students in section A be x. Average score of students in section B = $x * \frac{120}{100} = 1.2x$ According to the question $60x + 50 * 1.2x = 7920$ $= 60x + 60x = 7920$ $= x = 7920/120 = 66$ Average score of students of section A = 66	

Marks	1	0
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