100+ AVERAGE QUESTIONS WITH SOLUTIONS

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The average weight of 39 Students in a class is 23. Among them Sita is the heaviest while Tina is the lightest. If both of them are excluded from the class still the average remains same. The ratio of weight of Sita to Tina is 15:8.Then what is the weight of the Tina?
1. 15
2. 16
3. 18
4. 19
5. Cannot be determined

Answer & Explanation
Answer – **2. 16**
Explanation :
S+T = 23*(39-37) = 46
S/T = 15/8
T = 16

• **The ages of Four members of a family are in the year 2010 are 'X','X+12','X+24' and 'X+36'. After some years Oldest among them was dead then average reduced by 3. After how many years from his death, the average age will same as in 2010?**
1. 2 Years
2. 3 Years
3. 4 years
4. 6 Years
5. Cannot be determined

Answer & Explanation
Answer – **2. 3 Years**
Explanation:
In 2010: 4x+72/4 = x+18
After death : 3x+36+3N/3 = x+18-3
N = 3 years
3x+36+3N/3 = (x+18)
N = 6 years
6-3 = 3 years from his death

• **The average of Four numbers is 24.5. of the four numbers, the first is 1.5 times the second, the second is 1/3 rd of the third, and the third is 2 times the fourth number. Then what is smallest of all those numbers?**
1. 12
2. 13
3. 14
4. 15
5. 16

Answer & Explanation
Answer – **3. 14**
Explanation:
First = 1.5x Second = x Third = 3x Fourth = 1.5x
average = 24.5 = (1.5x+x+3x+1.5x)/4
x = 14

• **There are 459 students in a hostel. If the number of students increased by 36, the expenses of the mess increased by Rs .81 Per day while the average expenditure per head reduced by 1. Find the original expenditure of the mess?**
1. 7304
2. 7314
3. 7324
4. 7334
5. 7344

Answer & Explanation
Answer – **5. 7344**
Explanation:
Total expenditure = 459x
36 students joined then total expenditure = 459x+81
average = 459x+81/495 = x-1
x = 16
original expenditure = 16*459 = 7344

• **The average cost 32 different Mobiles is Rs. 9000. Among them, Oppo which is the costliest is 70% higher price than the cheapest Mobile Lava. Excluding those both mobiles, the average of the Mobiles is Rs.8880. Then what is the cost of Oppo Mobile?**
1. Rs. 10000
2. Rs. 11600
3. Rs. 12400
4. Rs.13600
5. Cannot be determined

Answer & Explanation
Answer – **4. Rs.13600**
Explanation:
L+O = 21600
O = L*170/100
O = 13600

• **The average age of a family of 9 members is 22 years. Surya is the youngest and his age is 6 years, then what was the average age of the family just before Surya was born?**
1. 15
2. 16
3. 18
4. 20
5. 24

Answer & Explanation
Answer – **3. 18**
Explanation:
9*22 – 9*6/8 = 18

• **Dhoni scored 8000 runs in a certain number of innings. In the next five innings, he was out of form and hence, could make only 85 runs, as a result his average reduced by 1 run. How many innings did he play in total?**
1. 160
2. 165
3. 170
4. 175
5. Cannot be determined

Answer & Explanation
Answer – **2. 165**
Explanation:
8000/n = a
8085/n+5 = a-1
n² + 90n – 40000 = 0
n = 160
n² + 5 = 165

• **The weights of 19 people are in Arithmetic progression. The average weight of them is 19. If the heaviest is 37 Kgs. Then what is the weight of the Lightest?**

1. 1 Kg
2. 2 Kg
3. 3 Kg
4. 4 kg
5. Cannot be determined

Answer & Explanation
Answer – **1. 1 Kg**
Explanation:
19*19 = 19/2(2a+18d)
38= 2a+18d
37 = a+18d
a = 1

• **The average weight of 40 Students is 32. If the Heaviest and Lightest are excluded the average weight reduces by 1. If only the Heaviest is excluded then the average is 31. Then what is the weight of the Lightest?**
1. 30
2. 31
3. 32
4. 33
5. Cannot be determined

Answer & Explanation
Answer – **2. 31**
Explanation:
40*32 = 1280
1280-H/39 = 31
H =71
1280-71- L/38 = 31
L = 31

• **Average of 17 students in a class is X. When their marks are arranged in ascending order it was found to be in Arithmetic Progression. The class teacher found that rank the students who ranked 15th, 11th, 9th and 7th had copied the exam and hence they are suspended. Now the average of the remaining class is Y. Then**
1. X =Y
2. X >Y
3. X<Y
4. X = 2Y
5. Data insufficient

Answer & Explanation
Answer – **3. X<Y**
Explanation:
17X = 17/2 (2a+16d)
X = a+8d
13Y = 17/2(2a+16d) – (4a+26d)
Y = a+8.46d

•
The average price of 80 mobile phones is Rs.30,000. If the highest and lowest price mobile phones are sold out then the average price of remaining 78 mobile phones is Rs. 29,500. The cost of the highest mobile is Rs.80,000. The cost of lowest price mobile is?
A. Rs. 18000
B. Rs. 15000
C. Rs. 19000
D. Can't be determined
E. None of these

Answer & Explanation
Answer – **C. Rs. 19000**
Explanation :
The price of the costliest and cheapest mobile = (80*3000) – (78*29500) = 99000
Cheapest Mobile Price = 99000 – 80000 = 19000

• **In a Company the average income of all the employees is Rs. 20000 per month. Recently the company announced increment of Rs. 2000 per month for all the employees. The new average income of all the employees is?**
A. 22000
B. 24000
C. 28000
D. 26000
E. None of these

Answer & Explanation
Answer – **A. 22000**
Explanation:
Average income of all employees = 20000
New Average income of all employees = 22000(Average also increased by 2000)

• **Pranav went to the bank at the speed of 60 kmph while returning for his home he covered the half of the distance at the speed of 10 kmph, but suddenly he realized that he was getting late so he increased the speed and reached the home by covering rest half of the distance at the speed of 30 kmph.The average speed of the Pranav in the whole length of journey is?**
A. 24 kmph
B. 14 kmph
C. 16 kmph
D. 10 kmph
E. 28 kmph

Answer & Explanation
Answer – **A. 24 kmph**
Explanation:
Distance between home and Bank – x km
Total distance = x + x = 2x
Total time taken = x/60 + (x/2)/10 + (x/2)/30
= x/12
Average speed = 2x/(x/12) = 24 kmph

• **The average expenditure of Sharma for the January to June is Rs. 4200 and he spent Rs. 1200 in January and Rs.1500 in July. The average expenditure for the months of February to July is:**
A. 2750
B. 3250
C. 4250
D. 4500
E. 3500

Answer & Explanation
Answer – **C. 4250**
Explanation:
Total Expenditure(Jan – June) = 4200 * 6 = 25200
Total Expenditure(Feb – June) = 25200 – 1200 = 24000
Total Expenditure(Feb – July) = 24000 + 1500 = 25500/6 = 4250

• **The average weight of all the 11 players of CSK is 50 kg. If the average of first six lightest weight players of CSK is 49 kg**

and that of the six heaviest players of CSK is 52 kg. The average weight of the player which lies in the sixth position in the list of players when all the 11 players of CSK are arranged in the order of increasing or decreasing weights.

A. 54 kg
B. 50 kg
C. 53 kg
D. 56 kg
E. 52 kg

Answer & Explanation
Answer – **D. 56 kg**
Explanation:
Average of First six players = 49 * 6 = 294
Average of Last six players = 52 * 6 = 312;
Average of all players = 50 * 11 = 550
Average weight of sixth player = 294 + 312 − 550 = 56

• **The average presence of students of a class in a College on Monday, Tuesday and Wednesday is 32 and on the Wednesday, Thursday, Friday and Saturday is 30. if the average number of students on all the six days is 26 then the number of students who attended the class on Wednesday is?**

A. 50
B. 40
C. 60
D. 70
E. 80

Answer & Explanation
Answer – **C. 60**
Explanation:
32 * 3 + 30 * 4 − 26 * 6 = 96 + 120 − 156 = 60

• **Suresh started his journey from P to Q by his bike at the speed of 40 kmph and then, the same distance he travelled on his foot at the speed of 10 kmph from Q to R. Then he returned from R to P via Q at the speed of 24 kmph. The average speed of the whole trip is:**

A. 18.5 kmph
B. 19.8 kmph
C. 18.2 kmph
D. 19.2 kmph
E. None of these

Answer & Explanation
Answer – **D. 19.2 kmph**
Explanation:
Average speed from P to R = 2 * 40 * 10 / (40 + 10) = 16 kmph
Average Speed = 2 * 16 * 24 / (16 + 24) = 19.2 kmph

• **Ramesh walked 6 km to reach the station from his house, then he boarded a train whose average speed was 60 kmph and thus he reached his destination. In this way he took a total time of 3 hours. If the average speed of the entire journey was 32 kmph then the average speed of walking is:**

A. 5 kmph
B. 8 kmph
C. 2 kmph
D. 4 kmph
E. None of these

Answer & Explanation
Answer – **D. 4 kmph**
Explanation:
Total Distance = 32 * 3 = 6 + 60 * x
x = 1.5 hour ; Walking Speed = 6/1.5 = 4 kmph

• **Bala travels first one-third of the total distance at the speed of 10 kmph and the next one-third distance at the speed of 20 kmph and the last one – third distance at the speed of 60 kmph. What is the average speed of Bala?**

A. 18 kmph
B. 19 kmph
C. 16 kmph
D. 12 kmph
E. None of these

Answer & Explanation
Answer – **A. 18 kmph**
Explanation:

= 3 * 10 * 20 * 60 / (200 + 1200 + 600)
= 18 kmph

- **The average income of Arun, Bala and Chitra is Rs. 12,000 per month and average income of Bala, Chitra and David is Rs. 15,000 per month. If the average salary of David be twice that of Arun, then the average salary of Bala and Chitra is in Rs?**
A. 15,000
B. 20,000
C. 14500
D. 13500
E. None of these

Answer & Explanation
Answer – **D. 13500**
Explanation:
Arun + Bala + Chitra = 12000*3
Bala + Chitra + David = 15000*3
David – Arun = 3000*3 = 9000
David = 2Arun
David = 18000 and Arun = 9000
Average salary of Bala and Chitra,
= (45000-18000)/2 = 13,500

- **The average monthly expenditure of Mr.Ravi's family for the first three months is Rs 2,750, for the next three months is Rs 2,940 and for the last three months Rs 3,150. If his family saves Rs 4980 for nine months, find the average monthly income of the family for the 9 months?**
A. Rs. 3800
B. Rs. 3500
C. Rs. 3400
D. Rs. 4200
E. Rs. 4500

Answer & Explanation
Answer – **B. Rs. 3500**
Explanation :
Average monthly expenditure for 3 months = Rs. 2750
Total expenditure for 3 months = Rs 2750 x 3 = Rs. 8250

Average monthly expenditure for 3 months = Rs. 2940
Total expenditure for 3 months = Rs 2940 x 3 = Rs. 8820
Average monthly expenditure for 3 months = Rs. 3150
Total expenditure for 3 months = Rs 3150 x 3 = Rs. 9450
Total savings for 9 months = 4980
Average monthly income for 9 months = (8250 + 8820 + 9450 + 4980)/9 = 3500

- **The average age of a family of 8 members is 24 years. If the age of the youngest member be 6 years, the average age of the family at the birth of the youngest member was?**
A. 23.42 years
B. 21.42 years
C. 27.42 years
D. 26.42 years
E. 24.42 years

Answer & Explanation
Answer – **B. 21.42 years**
Explanation:
Total present age of the family (8*24) = 192 years
Total age of the family 6 years ago = (192 – 6*7) = 150 years
At that time, Total members in the family = 7
Therefore Average age at that time = 150/7 = 21.42 years

- **Mr. Ravi's family has 10 males and a few females, the average monthly consumption of rice per head is 8 kg. If the average monthly consumption of rice per head be 10 kg in the case of males and 6 kg in the case of females, find the number of females in Ravi's family?**
A. 2
B. 4
C. 6
D. 10
E. 8

Answer & Explanation

Answer – **D. 10**
Explanation:
Let number of females be x.
$(10*10+x*6)/(10+x) = 8$
$=> x = 10$

• **In a famous hotel the rooms were numbered from 201 to 230, each room gives an earning of Rs. 5000 for the first fifteen days of a month and for the latter half, Rs. 3000 per room. Find the average income per room per day over the month. (September)?**
A. 2000
B. 3000
C. 4000
D. 5000
E. 3500

Answer & Explanation
Answer – **C. 4000**
Explanation:
Total number of rooms = 29
Average = $[(5000 * 30 * 15) + (3000 * 30 * 15)]/(30*30)$
Average earning per room = 4000

• **In a famous hotel, the rooms are numbered from 101 to 130 on the first floor, 201 to 220 on the second floor and 301 to 330 on the third floor. In the month of September, the room occupancy was 50% on the first floor, 80% on the second floor and 40% on the third floor. If it is also known that the room charges are Rs 200, Rs. 250 and Rs. 300 on each of the floors respectively, then find the average income per room in the hotel for the month of September?**
A. Rs. 123.75
B. Rs. 132.50
C. Rs. 128.50
D. Rs. 143.50
E. Rs. 223.75

Answer & Explanation
Answer – **B. Rs. 132.50**
Explanation:
Total number of rooms in first, second and third floor = 30, 20, 30
Occupied rooms in first, second and third floor = 15, 16, 12
Average income = $(15 * 200 + 16 * 250 + 12 * 300)/ 80$ = Rs. 132.5

• **There were 46 students in a Boys hostel. Due to the admission of eight new students the expenses of the hostel mess were increased by Rs.42 per day while the average expenditure per head diminished by Rs 1. What was the original expenditure of the hostel mess?**
A. Rs.562
B. Rs.542
C. Rs.532
D. Rs.452
E. Rs.552

Answer & Explanation
Answer – **E. Rs.552**
Explanation:
$54*(x-1)-46*x = 42$
$8x = 96$
$x = 12$
Original total expenditure:
$46*x = 46*12 = $ Rs.552

• **The average salary of the entire staff in a office is Rs 250 per month. The average salary of officers is Rs 520 and that of non-officers is Rs. 200. If the number of officers is 15, then find the number of non–officers in the office**
A.823
B. 81
C. 87
D. 56
E. 62

Answer & Explanation
Answer – **B. 81**
Explanation:
Let the required number of non–officers = x
$200x + 520 x 15 = 250 (15 + x)$
$250x – 200x = 520 * 15 – 250 x 15$
$50x = 4050$
$x = 81$

• **Mr.Suresh's average monthly expenditure for the first four months of the year was Rs.260 For the next five months,the average monthly expenditure was Rs.40 more than what it was during the first four months. If he spent Rs.560 in all during the remaining three months of the year, Find what percentage of his annual income of Rs.5000 did he save in the year?**
A. 42%
B. 48%
C. 38%
D. 24%
E. 28%

Answer & Explanation
Answer – **C. 38%**
Explanation:
Suresh's average monthly expenditure for the first four months of the year = Rs.260.
260 * 4 = Rs. 1040
For the next five months,the average monthly expenditure was Rs.40 more than what it was during the first four months. He spent 260 + 40 for one month
In 5 months he spent 300 * 5 = 1500
He spent Rs.560 in all during the remaining three months of the year.
Total expenditure = 1040 + 1500 + 560 = 3100
Savings = 5000-3100 = 1900
% savings = 1900/5000 * 100 = 38%

• **The average age of a group of persons going for tour to Shimla is 22 years. 25 new persons with an average age of 10 years join the group and their average age becomes 12 years. The number of persons initially going for tour is?**
A. 10
B. 8
C. 7
D. 5
E. 4

Answer & Explanation

Answer – **D. 5**
Explanation:
Initial number of persons = x
= 22x + 25 * 10 − 12(x + 25)
= 22x + 250 − 12x − 300
10x = 50
x = 5

• **In English exam, the average of Class "A" was found to be "x" marks. After deducting a computational error, the average marks of 100 candidates got reduced from 74 to 54. The average thus came down by 25 marks. The total numbers of candidates who took the English exam were?**
A. 50
B. 20
C. 80
D. 70
E. 60

Answer & Explanation
Answer – **C. 80**
Explanation:
(74 – 54) * 100 = 25 * x
x = 20 * 100 / 25 = 80

•
The average salary of 90 employees in an organization is Rs.14.500 per month. If the no of executive is twice the no of clerks, then find the average salary of clerk ?
1.11,500
2.12,000
3.13,200
4.Can't be determined
5.None of these

Answer & Explanation
Answer – **4.Can't be determined**
Explanation :
90 => 2:1=> 60:30
Total Salary = 60*salary of executive +30 * salary of clerk
90*14500 = 60*x+30*y
X, y not given so we can't determine

• **The average value of property of Agil, Mugilan and Anitha is Rs.130cr.The Property of Agil is 20cr greater than the property value of Mugilan and Anitha property value is 50cr greater than the Agil property value. The value of property of Anitha is**
1.120cr
2.170cr
3.100cr
4.150cr
5.None of these

Answer & Explanation
Answer – **2.170cr**
Explanation :
Property value of Mugilan x
130*3 = x+x+20+x+20+50
390 = 3x+90
3x=300
X=100
Anitha = 100+20+50 = 170

• **If the average marks of 1/5th of class is 70% and 2/5th class is 45% and the average mark of remaining class is 60%, then the average % of the whole class is**
1.73%
2.45%
3.62%
4.56%
5.None of these

Answer & Explanation
Answer – **4.56**
Explanation :
Avg = 100*[x/5 *70/100 + 2x/5 * 45/100 +2x/5*60/100] /x
= 70+90+20/5
=56

• **The average price of 100 mobiles in an electronic shop is Rs.27,000. If the highest and lowest mobiles are sold out then the remaining 98 mobiles average price is 26,400.The cost of lowest mobile is Rs.18,000.Find the cost of highest mobile price**
1.76500

2.94800
3.96400
4.82000
5.None of these

Answer & Explanation
Answer – **2.94800**
Explanation :
100*27000 – 98*26400 = 27,00,000 – 25,87,200 = 1,12,800
The cost of highest mobile price = 1,12,800 -18,000 = 94800

• **There are 10 compartments in passenger train carries on average 15 passengers per compartment. If atleast 15 passengers were sitting in each compartment, no any compartment has equal no of passengers , and any compartment does not exceed the number of average passengers except 10th compartment.Find how many passengers can be accommodated in 10thcompartment ?**
1.38
2.51
3.47
4.50
5.None of these

Answer & Explanation
Answer – **2.51**
Explanation :
No of passengers = 15*10 = 150
15+14+13+12+11+10+9+8+7 = 99
150 -99 = 51

• **There are five times the number of two wheelers as there are three wheelers. The no of four wheelers are equal to the number of two wheelers. Find the average number of wheel per vehicle ?**
1.5
2.4
3.2
4.3
5.None of these

Answer & Explanation

Answer – **4.3**
Explanation :
No of 3 wheeler = x, no of wheels = 3x
No of 2 wheeler = 5x, no of wheels = 10x
No of 4 wheeler =5x, no of wheels = 20x
Avg = 3x+10x+20x/x+5x+5x = 33x/11x = 3

• **In a particular week the average number of people visited the museum is 70. If we exclude the holidays then the average number is increased by 28. Further if we exclude the day which the maximum of 210 visitors visited the museum, then the average become 40.Find the no of holidays in the week**
1.None
2.One
3.Three
4.Two
5.Can't be determined
Answer & Explanation
Answer – **4.Two**
Explanation :
Total no of visitors in a week = 70* 7 = 490
X = no of holidays
Exclude hloidays
(7-x)*98 =490
7-x = 5
X = 2

• **Arjun gets 62 marks out of 100 in English, 81 out of 120 in Chemistry and 75 out of 150 in maths. The average marks of Arjun(in %) in all the three subjects is**
1.60%
2.53%
3.47%
4.72%
5.None of these
Answer & Explanation
Answer – **1.60%**
Explanation :
62/100 = 62%
81/120 = 67.5%
75/150 = 50%

Avg = 62+67.5+50/3 = 179.5/3 = 59.8 = 60%

• **The average salary of 120 employees in the bank is Rs.15,000 per month. If the no of assistant is thrice the no of POs and average salary of assistant is 1/3rdof the average salary of POs then find the average salary of POs ?**
1.18,000
2.25,000
3.36,000
4.30,000
5.None of these
Answer & Explanation
Answer – **4.30,000**
Explanation :
120 = 1:3 =30:90 = PO : Assistant
120*15000 = 30*x+ 90 *x/3
18,00,000 = 90x+90x/ 3
54,00,000*3 = 180x
X = 30000

• **In a class of 60 students 23 are girls. The average mark of boys is 45 and average mark of girls is 52. What is the average mark of the class?**
1.42.7
2.52.2
3.47.7
4.62.1
5.None of these
Answer & Explanation
Answer – **3.47.7**
Explanation :
60 students => 23 G and 37 B
Average = 23*52 + 37*45/ 60
= 2965/60 = 47.7

•
The average weight of 40 students in a class is 75 kg. By mistake the weights of two students are read as 74 kg and 66 kg respectively instead of 66 kg and 54 kg. Find the corrected average weight of the class
a) 73.50 kg

b) 74.50 kg
c) 75.50 kg
d) 76.50 kg
e) None of these

Answer & Explanation
Answer – **b) 74.50 kg**
Explanation :
Weight of 40 students = 40*75
new weight = 40*75 – 74 – 66 + 66 + 54 = 40*75 – 20
so new average =(40*75 – 20)/40 = 74.50 kg

• **The average weight of 40 balls is 5 grams. When the weight of the basket is added to the weight of balls, the average increased by 0.5 grams. Find the weight of the basket.**
a) 20.5 gm
b) 22.5 gm
c) 25.5 gm
d) 28.5 gm
e) None of these

Answer & Explanation
Answer – **c) 25.5 gm**
Explanation :
(40*5 + B)/41 = 5.5 (B is the weight of basket)

• **There are 50 students in a hostel. Now the number of students got increased by 8. Due to this the expenses of the mess increased by 30 rupees per day while the average expenditure is decreased by 2 rupees. Find the original expenditure.**
a) 812.5 rupees
b) 912.5 rupees
c) 1012.5 rupees
d) 1112.5 rupees
e) None of these

Answer & Explanation
Answer – **b) 912.5 rupees**
Explanation :
Let initial expenditure is E per day. Now it is increased by 30 rupees per day,
Initial students = 50 and now they are 58,

E/50 – (E + 30)/58 = 2
Solve for E, We will get E = 912.5 rupee.

• **The average age of the class is 15 years. The average age of boys and girls is 13 and 16 years respectively. If the number of girls in the class is 18 then find the number of boys in the class.**
a) 6
b) 8
c) 9
d) 12
e) None of these

Answer & Explanation
Answer – **c) 9**
Explanation :
B*13 + 18*16 = 15*(18 + B)

• **A cricketer has an average of 55 after playing 20 innings. How much runs should he scores in the next inning so as to increase the average to 57.**
a) 95
b) 96
c) 97
d) 98
e) None of these

Answer & Explanation
Answer – **c) 97**
Explanation :
Runs after 20 innings = 55*20, so (1100 + X)/21 = 57, after solving we will get X = 97

• **The average marks obtained by 100 candidates in an examination are 45. If the average marks of the passed students are 50 while the average marks of the failed students is 40. Then find the number of students who passed the examination.**
a) 30
b) 40
c) 50
d) 60
e) None of these

Answer & Explanation

Answer – **c) 50**
Explanation :
Let P = passed students and failed students = F. So
45*100 = 50*P + 40*F and P + F = 100.
Solve for F and P, we will get P = 50.

- **The average age of 30 students is 16 years. If the age of the teacher is also included then the average age increased by 1 year, find the age of the teacher.**
a) 45 year
b) 46 year
c) 47 year
d) 49 year
e) None of these

Answer & Explanation
Answer – **c) 47 year**
Explanation :
Teacher age is T years. So, 30*16 + T = 31*17

- **The present average age of a family of 5 members is 40 years. If the youngest member of the family is 12 years old, then find the average age of the family at the time of birth of the youngest member.**
a) 32
b) 33
c) 34
d) 35
e) None of these

Answer & Explanation
Answer – **d) 35**
Explanation :
Present age of the family = 5*40 = 200 years.
12 years ago at the time of the birth of youngest member, age of family = 200 – 12*5 = 140.
So average age = 140/4 = 35 year

- **The average age of a husband and wife at the time of marriage is 22 years. After 3 years, they have a one year old child. Find the average age of the family of three at the time of birth of the child.**

a) 14 years
b) 15 years
c) 16 years
d) 17 years
e) None of these

Answer & Explanation
Answer – **c) 16 years**
Explanation :
At the time of marriage sum of the age of husband and wife = 44 years.
After three years, total age of the family = 44 + 3+ 3+ 1 = 51 years.
At the time of child birth, age of family = 51 -1-1-1 = 48 years.
So average age = 48/3 = 16 years

- **In a certain year the average monthly salary of a person is 5000 rupees. If for the first 7 months the average salary is 5300 and for the last 6 months, the average salary is 4600 rupees. Find the income of the person in 7th month.**
a) 3700
b) 4700
c) 5700
d) can't be determined
e) None of these

Answer & Explanation
Answer – **b) 4700**
Explanation :
Let the income of seventh month is A, then
12*5000 = 5300*7 + 5300*6 – A

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The average age of a husband and his wife was 25 years when they were married 7 years ago. Now the average age of husband, wife and his son is 23 years. Find the age of son now.
1.3yr
2.4yr
3.5yr
4.6yr
5.None of these

Answer & Explanation
Answer – **3.5yr**
Explanation :

(h+w – 14)/2 = 25
H+w = 64
Now, (h+w+s)/3 = 23
S = 69-64 = 5 years

• **The average of 10 reading is 25.5. In this the average of first three is 20 and the next four is 26. If the eight reading is 5 less than the night one and also 8 less than the tenth one, then find the eight reading?**
1.22
2.24
3.26
4.28
5.None of these

Answer & Explanation
Answer – **3.26**
Explanation :
sum of all ten reading = 255
sum of first three = 60 and sum of next 4 = 104.
Sum of 8th, 9th and 10th reading = 91 = 3*x + 13
X = 26

• **The average of first and second number is 25 more than the average off the second and third number. Find the difference between the first and the third number**
1.20
2.30
3.40
4.50
5.None of these

Answer & Explanation
Answer – **4.50**
Explanation :
(a+b)/2 = 25 + (b+c/2)

• **In a hostel there are 30 students and if the number of students increased by 5 then the expense is increased by 40 per day. But the average expenditure diminishes by 3. Find the original expenditure.**
1.810
2.870

3.910
4.950
5.None of these

Answer & Explanation
Answer – **2.870**
Explanation :
Let average expenditure be P.
(30*P + 40)/35 = P-3
P = 29. So expenditure = 29*30 = 870

• **The average age of a class is 19 years. While the average age of boys is 20 and the average age of girls is 17. If the number of boys is 20 then find the number of girls in the class**
1.10
2.15
3.16
4.18
5.None of these

Answer & Explanation
Answer – **1.10**
Explanation :
Average of class = 19 = Sum/(b+g)
sum (girls) = g*17
sum (boys) = b*20
19b + 19g = 17g + 20b
2g = b = 20. So girls = 10

• **The average age of a family of 4 members 3 years ago is 21 years. A baby is born and now the average age of the family is same as before. Find the age of baby.**
1.8yrs
2.9yrs
3.10yrs
4.11yrs
5.None of these

Answer & Explanation
Answer – **2.9yrs**
Explanation :
(X-12)/4 = 21
X = 96. Now, (96+baby)/5 = 21
Baby = 9yrs

- **The average height of 50 students in a class is 165cm. On a particular day, three students P,Q and R are absent, so the average of the remaining students becomes 163cm. If the height of P and Q is equal and height of R is 2 cm less than P, then find the height of P.**
1.187
2.192
3.197
4.198
5.None of these

Answer & Explanation
Answer – **3.197**
Explanation :
sum of height (50) = 50*165 = 8250
sum of height (47) = 47*163 = 7661
sum of the height of P, Q and R = 8250-7661 = 589
P+P+P-2 = 589 (as height of P is equal to Q and height of R = P -2)
P = 197

- **The average age of a committee of 12 members is 48 years. A member of the committee age 62 retired and in place of him a new person aged 26 joined the committee. Find the new average of the committee.**
1.44
2.45
3.46
4.48
5.None of these

Answer & Explanation
Answer – **2.45**
Explanation :
Total age of committee = 48*12
new total age of committee = (48*12 – 62 + 26)/12 = 45

- **The average weight of 12 people gets increased by 3.5kg when a person weighs 56 kg got replaced by another man. Find the weight of the new man**
1.90kg
2.92kg

3.96kg
4.98kg
5.None of these

Answer & Explanation
Answer – **4.98kg**
Explanation :
Let the weight of new man is x kg.
(12p – 56 + x)/12 = p + 3.5 [12p is the total weight of 12 people] X = 98kg

- **In an examination the average marks of risha is 74. If she got 16 more marks in hindi and 20 more marks in English then her average would have been 78. Find the total number of subjects he studied?**
1.7
2.8
3.9
4.10
5.None of these

Answer & Explanation
Answer – **3.9**
Explanation :
Let total subjects are P.
Then, (74p + 20 + 16)/p = 78
So, P = 9

-
While calculating the weight of a group of men, the weight of 63 kg of one of the member was mistakenly written as 83 kg. Due to this the average of the weights increased by half kg. What is the number of men in the group?
A) 25
B) 20
C) 40
D) 60
E) 24

Answer & Explanation
C) 40
Explanation:
Increase in marks lead to increase in average by ½
So (83-63) = x/2
x = 40

• **A cricketer had an average number of runs as 32 after playing 10-innings. If he wants to make his average run rate increased by 4, then how much runs will he have to take in his next inning?**
A) 66
B) 84
C) 62
D) 76
E) 72

Answer & Explanation
D) 76
Explanation:
Average after 10 innings = 32, so after 11 inning = 32+4 = 36
So required runs = (36*11) – (32*10)

• **The average temperature in Delhi for the first four days of the month was reported as 58°. It reported as 60° for 2nd, 3rd, 4th and 5th days. The ratio of the temperatures of 1st and 5th day was 7 : 8. Find the temperature on the first day.**
A) 42°
B) 46°
C) 63°
D) 68°
E) 56°

Answer & Explanation
E) 56°
Explanation:
A+B+C+D = 58*4
B+C+D+E = 60*4
Subtract both, E – A = 8
So 8x – 7x = 8, x = 8
So temperature of A(1st day) = 7x = 7*8

• **For three successive years, the cost of petrol were Rs 20 per litre, Rs 22 per litre and Rs 23.50 per litre respectively. If a man spent an average of Rs 8000 per year on petrol, then he spent what average cost of petrol per litre for the three years?**
A) Rs 20
B) Rs 25.3
C) Rs 28.2

D) Rs 21.7
E) None of these

Answer & Explanation
D) Rs 21.7
Explanation:
Quantity used in 1st yr = 8000/20 = 400 l, in 2nd yr = 8000/22 = 363.6, in 3rd yr = 340.4 l
Total used in 3 yrs = 1104 litres, total money spent in 3 yrs = 3*8000 = 24000
So average rate of 3 yrs = 24000/1104

• **In a group of 8 boys, 2 men aged at 21 and 23 were replaced two new boys. Due to this the average cost of the group increased by 2 years. What is the average age of the 2 new boys?**
A) 17
B) 30
C) 28
D) 23
E) 18

Answer & Explanation
B) 30
Explanation:
Average of 8 boys increased by 2, this means the total age of boys increased by 8*2 = 16 yrs
So sum of ages of two new boys = 21+23+16 = 60
Average of these = 60/2

• **The average age of the group having 3 members is 84. One more person joins the group and now the average becomes 80. Now a fifth person comes whose age is 3 years more than that of fourth person replaces the first person. After this the average age of the group becomes 79. What is the weight of the first person?**
A) 75
B) 65
C) 68
D) 82
E) 85

Answer & Explanation

A) 75
Explanation:
Let the ages of these are A, B, C, D, E
So A+B+C = 84*3 = 252
And A+B+C+D = 80*4 = 320
So D = 320-252 = 68, so E = 68+3 = 71
Now B+C+D+E = 79*4 = 316
(A+B+C+D) – (B+C+D+E) = 320- 316
So A-E = 4, so A = 71+4

- **3 years ago, the average age of A, B, and C was 27 years. Also 5 years ago, the average age of B and C was 20 years. What is the present age of A?**
A) 42
B) 40
C) 34
D) 35
E) 48

Answer & Explanation
B) 40
Explanation:
Sum of ages of A+B+C 3 yrs ago = 27*3 = 81
So after 3 yrs, i.e. at present their total = 81 + 3*3 = 90
Similarly sum of present age of B&C = 20*2 +5*2 = 50
So present age of A = 90-50

- **Average age of girls in a class is 16 years. If the average of the boys in class is also added, the average becomes 15.5 years. If there were 20 boys in the class with average age 15 years, how many girls were there in the class?**
A) 15
B) 40
C) 20
D) 25
E) 30

Answer & Explanation
C) 20
Explanation:
Let x girls in the class, so
16x + 20*15 = 15.5 (x+20)

- **In a class, the average marks got by number of students in English is 52.25. 25% students placed in C category made the average of 31 marks, while 20% who were placed in A category made the average of 80 marks. Find the average marks of the remaining students?**
A) 50
B) 52.2
C) 51
D) 51.8
E) 48.8

Answer & Explanation
D) 51.8
Explanation:
Let there are 100 students in the class, then in category A = 20 students, in C = 25 students, remaining = 55 students. Let x be the average of these 55 students.
So 20*80+ 25*31 + 55*x = 52.25*100

- **The average of 5 numbers is 40. Average of first two and last two is 25 and 45 respectively. Find the middle number.**
A) 60
B) 45
C) 30
D) Cannot be determined
E) None of these

Answer & Explanation
A) 60
Explanation:
5*40 – (2*25 + 2*45)

-
If a man spends 1000rs for the first five months, 2000rs for the next four months and 3000rs for the next 3 months and he saves 2000rs in the whole year then his average monthly salary will be ?
a) 1000
b) 2000
c) 3000
d) 4000

Answer
Answer – **b) 2000**
Explanation :

1000*5 + 2000*4 + 3000*3 + 2000 = 24000
24000/12 = 2000

- **In a family of 6 members, the average age of the family at present is 25 while the age of the youngest member in the family is 5yrs, so what will be the average age of the family at the time of his birth ?**
a) 21
b) 22
c) 23
d) 24

Answer
Answer – **d) 24**
Explanation :
sum of ages = 25*6 = 150
At the time of birth, i.e 5 years back, so
(150-6*5)/5 = 24

- **The average temperature for the the first 5 month of the year is 40'c and the average temperature from second to sixth month is 42'c and the ratio b/w the temperature of 1st day and the 6th day is 3:4, find the temperature of the sixth day ?**
a) 30
b) 40
c) 45
d) 50

Answer
Answer – **b) 40**
Explanation :
1,2,3,4,5 = 200
2,3,4,5,6 = 210
4x – 3x = 10, so temp on sixth day = 40

- **The average age of A and B 10 years ago was 20. The average age of A, B and C today is 30, so what will be the age of C after 5 years.**
a) 25
b) 35
c) 45
d) 50

Answer

Answer – **b) 35**
Explanation :
A+B = 60.
A,B,C = 90
so Age of C = 30+5 = 35

- **The average age of 5 children of a family is 10 years but if we include the age of father and mother then the average age becomes 22 years. It is given that father age is 6 years more than the mother so what will be the age of mother at present.**
a) 47
b) 48
c) 49
d) 50

Answer
Answer – **c) 49**
Explanation :
sum of age of children = 50
50 + M+ F = 22*7 = 154.
M+F = 104 and F= M+6 . So, M = 49

- **The batting average of a batsman for 20 innings is 35 and the difference b/w the runs of best inning and worst inning is 50. If these two innings are not included the average becomes 32 for 18 innings. The best score of the batsman is.**
a) 91
b) 77
c) 87
d) 82

Answer
Answer – **c) 87**
Explanation :
35*20 = 700.
Best(B) – Worst(W) = 50
700 – B – H = 18*32= 576. B+H = 124 and
B-H = 50. So B =87

- **The average age of a class of 20 students is 12 years. Out of which one student whose age is 10 year left the class and two new boys entered the class. The average of the class remains the same and**

the difference between the ages of new boys is 4 year. What will be the age of younger one .
a) 8
b) 9
c) 10
d) 11

Answer

Answer – **b) 9**
Explanation :
240 – 10 + a+ b = 21 * 12
a+ b =22, a-b = 4. So, b= 9

• **The average marks secured by 15 students are 70 and later it was found that one entry is wrong and 65 is written instead of 45. Find out he corrected average.**
a) 67.66
b) 68.66
c) 69.66
d) 70

Answer

Answer –**b) 68.66**
Explanation : (15*70-65+45)/15

• **The average salary of all the workers in factory is 7000. The average salary of 9 mechanic is 5000 and for the rest of the workers it 4000. Find the total number of workers in the factory.**
a) 10
b) 11
c) 12
d) 13

Answer

Answer – **c) 12**
Explanation :
Total workers T, so 7000*T = 9*5000 + (T-9)*4000.
T = 3 so 3+9 =12

• **The average age of a couple at the time of marriage was 20 years. After 8 years of marriage they have a baby of 4 years old. Calculate the average age of the family when the baby was born.**

a) 16
b) 15
C) 17
d) 18

Answer

Answer – **a) 16**
Explanation :
At the time of marriage H+W = 40. So when baby was means means after 4 years from their marriage
so (40+4+4)/3 = 16

•
The average age of Husband and wife was 30yr, 4 yr ago. What will be their average age at present ?
A)30
B)34
C)Cannot be determined
D)None of these

Answer

Answer – B)34
Explanation :
Avg of H and W age 4yr ago = 30
Present avg age of H and W = 30+4 = 34

• **The average weight of 20 students is 60kg.If the weight of the teacher is added, average is increased by 2kg.What was the teacher's weight ?**
A)100kg
B)101kg
C)102kg
D)103kg

Answer

Answer – C)102kg
Explanation :
x/20 =60; x = 1200
x/21 = 62; x = 1302
1302 – 1200 = 102

• **The average mark in 2 subjects is 35 and in three other subject is 40.Then find the average mark in all the five matches ?**
A)37
B)37.5

C)36
D)38

Answer
Answer – D)38
Explanation :
x/2 = 35; x = 70
x/3 = 40; x = 120
5 sub avg = (70+120)/5 = 38

• **The average height of 15 students is calculated as 75. But later it was found that the height of 1 student wrongly entered as 35 instead of 38 and another as 46 instead of 63.The correct average is**
A)71
B)73
C)75
D)76

Answer
Answer – D)76
Explanation :
{(15*75)-(35+46)+(38+63)} / 15 = (1125 – 81 + 101) / 15
= 1145/15 = 76.33 = 76

• **Among the three number the first is thrice the third number and second number is half of the first number. If the average of the three number is 65.8 then find the third number**
A)35.56
B)35.85
C)35.89
D)35.69

Answer
Answer – C)35.89
Explanation :
Let third num = x, 1st numb = 3x, second no = 3x/2
[3x+(3x/2)+x] / 3 = 65.8
11x/2 = 197.4
X = (2×197.4) / 11 = 35.89

• **The average weight of 3 students P,Q and R is 84kg.Anothe students S joins the group and the average becomes 80kg. If another man T whose weight is 3kg more**

than that of S, replaces P, then the average weight of Q,R,S and T becomes 79 kg then the weight of P is
A)75
B)82
C)45
D)98

Answer
Answer – A)75
Explanation :
P+Q+R = 84*3 = 252
P+Q+R+S = 4*80 = 320
S = 320 – 252 = 68
Q+R+S+T = 79*4 = 316
Q+R+2S+3 = 316
S =68, Q+R =177
P = 252 – 177 = 75

• **The average of 5 consecutive number is 58.Find the first number ?**
A)55
B)56
C)57
D)58

Answer
Answer – B)56
Explanation :
X+x+1+x+2+x+3+x+4 = 58*5 = 290
5x+10 = 290
X = 290 – 10/5 = 280/5 = 56

• **The average weight of 8 staff is increased by 3kg when one of them whose weight is 50kg is replaced by a new staff. The weight of the new staff is**
A)50
B)64
C)76
D)74

Answer
Answer – D)74
Explanation :50+(8*3) = 50 + 24 = 74.

• **The average age of 15 army men is 60yrs.5 new army men of average age 30yrs join them. Find the new average age**
A)51.5

B)52.5
C)55.2
D)55.8

Answer

Answer – B)52.5
Explanation :
15 army men age = 15*60 =900
5 army men age = 5*30 = 150
New avg = 900+150/20 =52.5

• **The average ages of 4 member, each having the age difference of 2yrs is 54 yrs.What is the sum of the youngest and oldest family member ?**
A) 102
B) 105
C) 107
D) 108

Answer

Answer – D) 108
Explanation :
X+X+2+X+4+X+6 = 54*4 = 216
4X+12 = 216
X = 216-12/4 =51
X+6 = 51+6 = 57
Required = 51+57 = 108

•
The average of four consecutive ODD number is 28.Find the largest number.
A)25
B)31
C)13
D)27

Answer

Answer – B) 31
Explanation :

• **Find the average of first 60 natural numbers**
A)30.5
B)31
C)31.5
D)32

Answer

Answer -A) 30.5
Explanation :

sum of 1st 60 natural number= $\frac{n(n+1)}{2}$

$$= \frac{60 \times 61}{2} = 1830$$

$$Average = \frac{1830}{60} = 30.5$$

•
Find the average of 13+26+39+……..+2 60
A)136.5
B)136
C)137
D)135

Answer

Answer – A)136.5
Explanation :

$$\frac{13(1+2+3+\cdots 20)}{20 \times 2} = \frac{13 \times 20 \times 21}{40}$$

$$= \frac{5460}{40} = 136.5$$

• **The average of five number is 42 ,if one number is excluded the average become 35.The excluded number is**
A)7
B)40
C)70
D)20

Answer

Answer – C)70
Explanation :

$$\frac{x}{5} = 42 => 42 \times 5 = 210$$
$$\frac{x}{4} = 35 => 35 \times 4 = 140$$
$$210-140=70$$

• **The average age of 30 students in a class is 20 years.The average age of 25 students is 15.What is the average age of remaining students**
A)42
B)54
C)34
D)45

Answer
Answer -D)45
Explanation :
Sum of age of 15 students=(40×20)-(25×15)=600-375=225
Average=225/5=45

• **The average of nine number is x and the average of three of these is y,if the average of the remaining three is z,then**
A)3x=y+z
B)2x=y+z
C)x=3y+3z
D)None of these

Answer
Answer – A)3x=y+z
Explanation :

$$x = \frac{3y+3z}{9} => 3x = y + z$$

• **If a,b,c,d,e,f,g are seven consecutive odd number,their average is**
A)(a+6)
B)(abcdefg/7)
C)(a+b+c+d+e+f+g)/7
D)None of these

Answer

Answer – A)(a+6)
Explanation :

$$average = \frac{a+(a+2)+(a+4)+(a+6)+(a+8)+(a+10)+(a+12)}{7}$$
$$= \frac{7a+42}{7} = a+6$$

• **The mean of 1,8,27,64,125………1728**
A)650
B)560
C)600
D)605

Answer
Answer – A)650
Explanation :

: Sum of cube numbers $= \frac{n(n+1)(2n+1)}{6} = \frac{12 \times 13 \times 25}{6}$
$$= \frac{3900}{6} = 650$$

• **4 years ago ,the average age of a family of 6member was 20 years.A baby having been born,the average age of the family is same today.The present age of the baby**
A)1
B)3
C)2
D)4

Answer
Answer -D)4
Explanation :
Total age of 6 members(4 years ago)= 20×6 = 120
Now total age of the family = 120+(4×6)=> 120+24
= 144

Total age of 7 member(now) = 20×7= 140
Age of the baby = 144-140=4

• **Average of ten positive numbers is x.If each number is increased by 12% then x is incresed by**
A)5%
B)12%
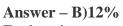C)10%
D)25%

Answer

Answer – B)12%
Explanation :

$$\frac{\frac{120}{100}x_1 + \frac{120}{100}x2 + \cdots + \frac{120}{100}x10}{10} = \frac{12}{10}x$$

Average is increased by **12%**