

BHARAT SCHOOL OF BANKING

AVERAGE

Question 1

The average score of 5 student's increases by 3 marks when a new pupil comes in place of one of them has scored 65 marks. What might be the score of the new pupil?

a)80 b)95 c)90 d)83

Answer : a)80

Solution :

Given that the average score of 5 students increases by 3 marks.

Then the total score increased = $(5 \times 3) = 15$ marks.

Among the 5 one has scored 65 marks and it's replaced by the score of the new pupil.

Then the score of the new pupil = $(65 + 15) = 80$ marks.

Question 2

The average weight of P and Q is 50kg. The average weight of Q and R is 62kg and the average weight of P and R is 52kg. Then the weight of P is:

a)80 b)40 c)50 d)63

Answer : b)40

Solution :

Let P, Q and R represent their respective weights. Then, we have:

$$P + Q = (50 \times 2) = 100 \dots (i)$$

$$Q + R = (62 \times 2) = 124 \dots (ii)$$

$$P + R = (52 \times 2) = 104 \dots (iii)$$

Adding (i), (ii) and (iii), we get: $2(P + Q + R) = 328$ or $P + Q + R = 164 \dots (iv)$

Subtracting (ii) from (iv), we get $P = 40$.

P's weight = 40kg.

Question 3

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A beach in Chennai has an average of 650 visitors on Sundays and 300 on other days. If a month of 29 days begins with Sunday, then the average number of visitors per day in the month is

a)310 b)450 c)440 d)360

Answer : d)360

Solution :

Since the month begins with a Sunday, so there will be five Sundays in the month.

Then the number of visitors on 5 Sundays = 650×5

The number of visitors on remaining 24 days = 300×24

Required average = $[650 \times 5 + 300 \times 24] / 29$

= $[3250 + 7200] / 29$

= $360.34 = 360$ (approximately)

Hence the answer is 360.

Question 4

What will be the average mark of all the students if 80,90,70 are the average marks of the 3 groups of 40,50 and 60 students respectively?

a)80 b)79 c)90 d)89

Answer : b)79

Solution :

From the given data

If 80 is the average marks of 40 students then $80 \times 40 = 3200$ is the total marks of 40 students.

If 90 is the average marks of 50 students then $90 \times 50 = 4500$ is the total marks of 50 students.

If 70 is the average marks of 60 students then $70 \times 60 = 4200$ is the total marks of 60 students.

Now, the total number of students = $(40+50+60) = 150$

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Required average = $[3200+4500+4200]/150 = 11900/150 = 79.33 = 79$ (approximately)

Question 5

Find the average of 5 consecutive integers when a is the smallest of these numbers.

a) a b) a+1 c) a+2 d) a+4

Answer : c) a+2

Solution :

Given that a is the least of 5 consecutive numbers.

Then a, a+1, a+2, a+3 and a+4 are that consecutive numbers.

The average of that numbers = $(a + a+1 + a+2 + a+3 + a+4) / 5$

$$= (5a + 10) / 5$$

$$= 5(a + 2) / 5$$

$$= a+2$$

Hence, the required answer is a+2.

Question 6

If the average of 5 consecutive odd integers is 11 then the average of last 3 of them is:

a) 11 b) 13 c) 19 d) 9

Answer : b) 13

Solution :

Let x, x+2, x+4, x+6 and x+8 be given 5 consecutive odd integers.

It is given that, their average is 11.

$$\text{i.e., } (x + x+2 + x+4 + x+6 + x+8) / 5 = 11$$

$$(5x + 20) / 5 = 11$$

$$(5x + 20) = 11 \times 5$$

$$5x = 55-20$$

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$$x = 35/5 = 7$$

Therefore $x = 7$.

We have to find the average of $x+4=11$, $x+6=13$ and $x+8=15$.

$$\text{i.e, } 11 + 13 + 15 / 3 = 39 / 3 = 13$$

Hence, the answer is 13.

Question 7

The average of four consecutive odd integers is 24 less than the sum of these integers. Then which will be the largest of them?

a) 27 b) 22 c) 24 d) 20

Answer : a) 27

Solution :

Let the x , $x+2$, $x+4$ and $x+6$ be the 4 consecutive odd integers.

We have to find the largest integer $x+6$.

It is given that the average of these numbers is 24.

$$\text{i.e., } (x + x+2 + x+4 + x+6) / 4 = 24$$

$$4x + 12 = 24 \times 4$$

$$4x = 84$$

$$x = 84 / 4 = 21$$

$$\text{Then } x + 6 = 21 + 6 = 27$$

Hence, the answer is 27.

Question 8

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The arithmetic mean of the five consecutive numbers a , $a+1$, $a+2$, $a+3$ and $a+4$ is A , then the value of the median of these numbers is equal to:

- a) $a+2$ b) $a+3$ c) a d) $a+4$

Answer : a) $a+2$

Solution :

Let a , $a+1$, $a+2$, $a+3$ and $a+4$ be the given 5 consecutive numbers.

We have to find value of their median.

i.e, middle number of them = $a+2$

It is given that, their average = arithmetic mean = $A = (a + a+1 + a+2 + a+3 + a+4) / 5$

$$A = (5a+10) / 5 = 5(a+2) / 5 = a+2$$

$$a+2 = A.$$

Question 9

There are 36 boys and 44 girls in a class. The average score of boys is 40 points and girls is 35 points. Then what will be the average score of the class?

- a) 37.25 points b) 28.95 points c) 35.5 points d) 40.04 points

Answer : a) 37.25 points

Solution:

Average score of 36 boys = 40 points

Total score of 36 boys = $36 \times 40 = 1440$

Average score of 44 girls = 35 points

Total score of 44 girls = $35 \times 44 = 1540$

Total score of $(36+44)80$ Students = $1440 + 1540 = 2980$ points

Average score of the whole class = $(2980 / 80) = 37.25$

Hence the required answer is 37.25 points.

Question 10

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The average weight of kids in a home is 16 kg and adults is 35 kg. Find the average weight of all the person in home.

a) 25.5 kg b) 25 kg c) none of these d) cannot be determined

Answer : d) cannot be determined

Solution :

From the question, we can say that the data given is inadequate because the number of adults or kids is not mentioned in the question.

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