AILET

Quantitative Aptitude Practice Paper: Averages

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Quantitative Aptitude Practice Paper

Note: The questions are a mix of easy and moderate level. The paper may not be as tough as the questions given below.

1. The average of 4 consecutive numbers is 22. Find the largest number among these.

(a) 20 (b) 22 (c) 24 (d) 23

1. The average age of a father and his six children is 15 years. The average reduces by 5 years if the age of the father is excluded. What is the age of the father?

(a) 42 (b) 45 (c) 35 (d) 38

1. Average Salary of all workers in a factory is Rs. 9000. Average Salary of 8 technicians is Rs. 15000. The average salary of the rest of the workers is Rs. 7000. Find the total number of workers in the factory.

(a) 34 (b) 32 (c) 33 (d) 28

1. The average of temperatures on Monday, Tuesday and Thursday is 28 degrees. The average temperature on Monday, Tuesday and Wednesday is 26.5 degrees. The temperature on Wednesday was 27 degrees. Find the temperature on Thursday.

(a) 25 (b) 29.2 (c) 31.5 (d) 3

1. A student left the class whose weight was 49 kgs, the average weight went up by 200 gms. Find the average weight of the remaining 74 students.

(a) 61 kg (b) 64 kg (c) 65 kg (d) 59 kg

1. The average of a family of 4 members is 21 years. The age of the youngest member of the family is 9 years. What was the average age of the family when the youngest member was born?

(a) 16 (b) 15 (c) 19 (d) 17

1. The difference between the two angles of a triangle is 24°. Average of those angles is 54°. Find the largest angle of the triangle.

(a) 54° (b) 66° (c) 42° (d) 72°

1. Consider a set of three numbers a, b and c; Average of a and b is 2, Average of b and c is 3 and average of a and c is 4. Find the average of a, b and c.

(a) 5 (b) 3.3 (c) 3.5 (d) 3

1. Ram calculated the average of 10 two-digit integers. He by mistake interchanged the digits of one number. The average decreased by 1.8 because of his mistake. Find the difference between the two digits of the mistaken number.

(a) 2 (b) 3 (c) 4 (d) 1

1. Directions for the question: There is a question/statement followed by two statements (I and II). You have to check whether the data given in these statements are sufficient to answer the question or not. You will select one option from a, b, c, d, e :

- I alone is sufficient to answer the question.
- II alone is sufficient to answer the question.
- Either I or II alone is sufficient to answer the question
- Both statement together are needed to answer the question
- Both the statement together are not sufficient to answer the question.

Q: How many students gave viva every day to teacher P out of P, Q, R?

Statement I: All three teachers took viva of 15 students on an average everyday

Statement II: Teacher P took viva of 2 more students than Q every day.

Answers and Solutions to Quantitative Aptitude Practice Paper

1. Ans: (c) 24

Solution: Four consecutive numbers mean a, a+1, a+2, a+3, a+4 OR an AP series with common difference 1.

Average of series with even number of terms is equal to middle term,

a+2 =22 => a = 20

The largest number of the series would the last number, i.e., a+4 = 20+4 = 24

1. Ans: (b) 45

Solution: Sum of ages of the father with his children = 7*15 = 105

The average reduces by 5 if the father is removed from calculation i.e., 10

Sum of ages of children = 10*6 = 60

Age of father = 105-60 = 45

1. Ans: (b) 32

Solution: Let the number of workers be n

Salary to all the workers = 9000*n = 9000n

Salary of 8 technicians = 15000*8 = 120000

Salary of rest of the workers = 7000*(n-8) = 7000n – 56000

Salary to all the workers = Salary of 8 technicians+ Salary of rest of the workers

9000n = 7000n – 56000 + 120000

On solving the above equation we get, **n = 32**

1. Ans: (c) 31.5

Solution: Let temperature on Thursday be T

Sum of temperatures of Monday, Tuesday and Wednesday = 26.5* 3

Sum of temperatures on Monday, Tuesday and Thursday = 28*3

We have Monday and Tuesday common in both the equations, therefore,

Sum of temperatures of Monday, Tuesday and Wednesday – Temperature on Wednesday = Sum of temperatures on Monday, Tuesday and Thursday – Temperature of Thursday

*i.e., 26.5 * 3 – 27 = 28 * 3 – T*

52.5= 84 – T

T= 31.5

1. Ans: (b) 64 kg

Solution: Deduce the question logically, first you will get confused there isn't given data about how many students were earlier in the class but read carefully, in the last line it has been said that you have to find the average weight of remaining 74 students.

Thus earlier there were 74+1= 75 students in the class. Let the average weight of the remaining 74 students be A

The second point to be taken care of is an increase in weight by 200gm and the data given for the weight of students is in kgs. So, convert the data in standard unit i.e., kg for weight.

Thus, the average weight of 75 students before one left the class would be A-0.3

As given in the question,

74A + 49 = (A-0.2)75

A = 64 kg

1. Ans: (a) 16

Solution: Total age of the family = 21*4 = 84

Age of youngest member = 9

Age of other members 9 years ago when the youngest member was not born = current age of other members(84-9) – 9*3 =

The average age of other members = ((84-9) – 9*3)/3

= (75 – 27)/3 = 48/3 = 16

Hence, Average age of members when the youngest member of the family was born is 16.

1. Ans: (d) 72°

Solution: Let the two angles be aa and b

Sum of two angles of the triangle = a+b = 54*2 = 108

Difference Between the two angles = a-b = 24

Solving the above equations we get a = 66 and b= 42

Third angle:

Use the property " sum of all angles of a triangle is 180°

Therefore, third angle = 180° – 108° = 72°

Alternative method: Using the property, sum of all angles =180°

Sum of two angles = 108°

Third angle = 180-108 = 72°

In option you find 72°, therefore you don't need to solve any further.

1. Ans: (d) 3

Solution: a+b = 2*2 = 4

b+c = 3*2 = 6

a+c = 4*2 = 8

Adding above equations: a+b+b+c+a+c = 4+6+8 = 18

2(a+b+c) = 18

a+b+c = 9

Average of a,b and c = (a+b+c)/3 = 9/3 =3

1. Ans: (a) 2

Solution: Let the digits of mistaken number be p and q

Original number = 10p+q

New number because of interchange digits = 10q+p

As per the question, the average was 1.8 less than what it should have been, therefore sum 10 integers should have been 1.8*10 times more than the sum of 10 numbers after the interchange. (we add 18 to the new interchanged number because the original number would be 18 more than interchanged one and this way we balance the numbers)

10p+q = 10q+p +18

9(p-q) = 18

p-q = 2 (the difference between the digits was asked in question)

1. Ans: (e) Both the statements together are not sufficient to answer the question.

Solution: Statement I says there were 15 students interviewed by 3 teachers that mean 45 students gave viva every day. This doesn't give any information about how many students gave viva to P, so this statement alone cannot answer the question.

Statement II says P took viva of 2 more students than Q but that doesn't make it clear anything about how many students gave viva to P because there is no data or relation between the number of students giving viva to R. Thus this statement alone is also not sufficient to answer the question.

Since both the statements do not contain all the data, they together cannot answer the question.

Some people can argue that we can assume the number of students giving viva to R (that would be an odd number) and calculate the rest but that would give us too many possibilities, not a certain answer.

Solved the Quantitative Aptitude Practice Paper?

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What was your score in the Quantitative Aptitude Practice Paper? Comment below.