



## Average Questions with detailed solutions PDF

Average questions are a major type of questions asked in competitive exams. These questions carry a weightage of 1-2 questions (2-4 marks) in SSC exams and 1-2 questions in bank exams. To get a good rank in competitive exams, you should have a good hold on the concepts of Average.

Here are some tips for solving Average questions: Identify the key information in the question, Use the appropriate formula as there are many different formulas that can be used to calculate the average. Practice solving a variety of average questions, Use shortcuts and formulas.

So, we have attached 10 questions of Average for you to practice with. You should aim to solve these questions in less than half a minute for each.

## Practice Questions on Average

You can also download the Average questions and answers pdf. Just click on the **Download PDF** button. So let's start with the very first question.

**Q:1** The average score of Shreyas in 15 innings was 70. In the 16th innings, he scored 6 runs. Find the overall average score of Shreyas in all 16 innings.

1. 72
2. 66
3. 76
4. 68

(**Difficulty:** 4, **Estimated Time:** 25 Seconds) An easy one to start with!

**Q:2** There are 160 students in three classes VI, VII & VIII in a school. The average weight of 58 students of class VI is 39 kg, the average weight of 52 students of class VII is 36.5 kg and the average weight of 50 students of class VIII is 40 kg. Find the average weight of all the students together.

1. 34.5 kg
2. 38.5 kg
3. 39 kg
4. 37 kg

(**Difficulty:** 4, **Estimated Time:** 25 Seconds) It is not an easy one but I think now you're prepared for it. Did you guess it right?



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**Q:3** The average weight of 20 students in a class is increased by 0.50 kg when one of the students weighing 30 kg is replaced by a new student. Find the weight of the new student.

1. 25 kg
2. 35 kg
3. 40 kg
4. 45 kg

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) Another easy one, make sure to solve these with accuracy!

**Q:4** The average of 15 numbers is 18.5 and the average of the next 15 numbers is 21. What is the average of all numbers?

1. 19.75
2. 18.75
3. 22.25
4. 21

(**Difficulty:** 2, **Estimated Time:** 15 Seconds) This was quite easy!

**Q:5** In a company the average salary of 5 workers is 20,000, the average salary of 3 clerks is 30,000 and the average salary of 2 managers is 50,000. What is the average expenditure on the salary of the employees?

1. 22500
2. 25000
3. 35000
4. 29000

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) We're halfway through. Have you got all your questions correct so far?

**Q:6** The average weight of 22 girls is 46 kg, that of another 28 girls is 54 kg and that of another 20 girls is 30 kg. Find the average weight of all the girls.

1. 44.6 kg
2. 45.2 kg
3. 48.9 kg
4. 41.7 kg

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(**Difficulty: 4, Estimated Time: 30 Seconds**) These questions are quite common!

**Q:7** Ravi and 22 other students have an average weight of 37 Kg. When Manish replaced Ravi, the total weight of the class turns out to be 845 Kg. If the weight of Ravi is 36 Kg, find the weight of Manish.

1. 26 Kg
2. 30 Kg
3. 36 Kg
4. 42 Kg

(**Difficulty: 4, Estimated Time: 25 Seconds**) A Question of seconds!

**Q:8** In a class of 30 boys, the average age of them is 17.5 years. One boy leaves the class and in his place, a new boy is admitted. As a result, the average age of the class is increased by one month. The age of the boy who leaves the class is 17.5 years. What is the age of the new boy?

1. 15 years
2. 18 years
3. 20 years
4. 24 years

(**Difficulty: 4, Estimated Time: 25 Seconds**) Tough questions alert!

**Q:9** The average weight of a group of friends is 68 kg if the total weight of all the friends is 476 kg then, how many friends are there in the group?

1. 6
2. 8
3. 5
4. 7

(**Difficulty: 3, Estimated Time: 20 Seconds**) Practice and get fast with your calculations!

**Q:10** The average temperature of a city for first 3 weeks in a month is 35 degrees and for the last 3 weeks is 39 degrees. If the average temperatures for the first and fourth week are in the ratio 9 : 13. Find the average temperature of the month.

1. 36
2. 40

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3. 33

4. 35

(Difficulty: 2, Estimated Time: 15 Seconds) Did you guess them all correctly?

## Answer Key

Let's check out your score in this test.

1. (2)	2. (2)	3. (3)	4. (1)	5. (4)
6. (1)	7. (2)	8. (3)	9. (4)	10. (1)

Comment below your score, considering each question has 1 mark only. If you scored 8 to 10, congratulations! You are one step closer to selection. If you have scored 5 to 8 marks, then you are doing well, keep it up. If you have scored less than 5 marks then you need to work a little harder on this subject. But don't worry, we are here to help you master the subject.

Let's check the answers and solutions and try to find out what went wrong.

## Answers and Solutions

**Q:1** The correct answer is **Option 2** i.e. **66**.

The total score of 15 innings =  $70 \times 15 = 1050$

The total score of 16 innings =  $1050 + 6 = 1056$

$\therefore$  Average score of 16 innings =  $1056/16 = 66$

**Q:2** The correct answer is **option 2** i.e. **38.5 kg**.

Average weight = The sum of total weight/number of people

The sum of the weight of students of class VI =  $(58 \times 39) = 2262$  kg

The sum of the weight of students of class VII =  $52 \times 36.5 = 1898$  kg

The sum of the weight of students of class VIII =  $(50 \times 40) = 2000$  kg

The sum of the weight of total students of all the class =  $(2262 + 1898 + 2000) = 6160$  kg

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The total number of students =  $(58 + 52 + 50) = 160$  [given]

The average weight of 160 students =  $6160/160 = 38.5$  kg

**Q:3** The correct answer is **option 3** i.e. **40 kg**.

Given, Total students = 20

1 student of 30 kg is replaced and the average increased by 0.50 kg.

New student's weight = Weight of replaced student + (average increase  $\times$  Total number of students)

Hence, Weight of new student =  $30 + (0.50 \times 20) = 30 + 10 = 40$  kg

**Q:4** The correct answer is **option 1** i.e. **19.75**

Average = Sum of total numbers/total numbers

The sum of the first 15 numbers =  $15 \times 18.5 = 277.5$

The sum of the next 15 numbers =  $15 \times 21 = 315$

The sum of total 30 numbers =  $277.5 + 315 = 592.5$

The average of 30 numbers =  $592.5/30 = 19.75$

**Q:5** The correct answer is **option 4** i.e. **29000**

Total expenditure on workers =  $5 \times 20,000$

$\Rightarrow 1,00,000$

Total expenditure on clerks =  $3 \times 30,000$

$\Rightarrow 90,000$

Total expenditure on managers =  $2 \times 50,000$

$\Rightarrow 1,00,000$

Total expenditure =  $1,00,000 + 1,00,000 + 90,000$

$\Rightarrow 2,90,000$

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$$\text{Average} = 2,90,000 / (5 + 3 + 2)$$

$$\Rightarrow 29000$$

**Q:6** The correct answer is **Option 1** i.e. **44.6 kg**

The average weight of 22 girls is 46 kg,

$$\text{Sum of weight of 22 girls} = 46 \times 22 = 1012 \text{ kg}$$

The average weight of 28 girls is 54 kg

$$\text{Sum of weight of 28 girls} = 54 \times 28 = 1512 \text{ kg}$$

The average weight of the other 20 girls is 30 kg

$$\text{Sum of weight of 20 girls} = 30 \times 20 = 600 \text{ kg}$$

$$\text{Sum of weight of all girls} = 1012 + 1512 + 600 = 3124 \text{ kg}$$

$$\text{Total number of girls} = 22 + 28 + 20 = 70$$

$$\text{Average weight of all the girls} = 3124 / 70 = 44.6 \text{ kg}$$

**Q:7** The correct option is **option 2** i.e. **30 Kg**

$$\text{Total weight of 23 students} = 23(37) = 851 \text{ Kg}$$

After, Manish replaced Ravi the total weight becomes 845 Kg

There is a reduction of 6 Kg,

Thus, Manish's weight is;

$$\Rightarrow 36 - 6 = 30 \text{ Kg}$$

**Q:8** The correct answer is **option 3** i.e. **20 years.**

Average = Sum of total age/number of boys

$$\text{The average age of 30 boys} = 17.5 \text{ years} = 210 \text{ months}$$

$$\text{The age of the boy who leaves} = 17.5 \text{ years} = 210 \text{ months}$$

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If one boy replaces with the new one average becomes

$$\Rightarrow 17.5 \text{ years} + 1 \text{ month} = 211 \text{ months}$$

Let the age of the new boy =  $x$  years

A/Q,

$$30 \times 210 - 210 + x = 211 \times 30$$

$$\Rightarrow 6300 - 210 + x = 6330$$

$$\Rightarrow x = 240 \text{ months} = 20 \text{ years}$$

The age of new boy = 20 years

**Q:9** The correct answer is **Option 4** i.e. **7**.

Let there be 'n' friends in the group

The sum of all observations = Average  $\times$  Number of observations

$$\Rightarrow 476 = 68 \times n$$

$$\Rightarrow n = 476/68 = 7$$

**Q:10** The correct answer is **Option 1** i.e. **36**.

Let the average temperature for the first week and the following weeks be  $x_1, x_2, x_3,$  and  $x_4$ . Therefore, we get

$(x_1 + x_2 + x_3)/3 = 35$	$(x_2 + x_3 + x_4)/3 = 39$
$x_1 + x_2 + x_3 = 35 \times 3$	$x_2 + x_3 + x_4 = 39 \times 3$
$x_1 + x_2 + x_3 = 105$	$x_2 + x_3 + x_4 = 117$

Now, from this, we can get:

$$\Rightarrow (x_2 + x_3 + x_4) - (x_1 + x_2 + x_3) = 117 - 105$$

$$\Rightarrow x_4 - x_1 = 12$$

$$\Rightarrow x_1 : x_4 = 9 : 13 \text{ (Given)}$$

Therefore,

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$$\Rightarrow 13x - 9x = 12$$

$$\Rightarrow x = 12/4$$

$$\Rightarrow x = 3$$

$$x_1 = 9 \times 3 = 27 \text{ and } x_4 = 13 \times 3 = 39$$

And we get:

$$\Rightarrow x_2 + x_3 = 105 - 27$$

$$\Rightarrow x_2 + x_3 = 78$$

$$\text{Final answer} = (x_1 + x_2 + x_3 + x_4)/4 = (27 + 78 + 39)/4 = 144/4 = 36$$

So, this is it for today. We will meet again with another new topic. Till then, you can practice the questions again by downloading the PDF of Average.

