



Date : 21st Jan 2024

Quantitative Aptitude - Average

English

Q:1 Samantha has been tracking her daily tablet consumption over the past week. Find the average number of tablets Samantha consumed per day over the week.

Here's a summary of the number of tablets she took each day: Monday = 3 tablets, Tuesday = 5 tablets, Wednesday = 4 tablets, Thursday = 7 tablets, Friday = 6 tablets, Saturday = 8 tablets, and Sunday = 2 tablets

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

Q:2 There are 100 boxes in a room, all are filled with mangoes, and each has 25 kg weight. If 3 boxes are replaced by 2 empty boxes, then what is the average weight of the whole boxes?

1. 22.53 kg
2. 69.35 kg
3. 24.49 kg
4. 25.25 kg

Q:3 The average weight of 6 students increased by 5 kg when one of them, whose weight is 100 kg, was replaced by another student. What is the weight of the new student?

1. 130 kg
2. 125 kg
3. 120 kg
4. 135 kg

Q:4 A club consists of 31 males and 19 females. The average ages of males and females in the club are 32 and 28. What is the average age of members of the club?

1. 28.36
2. 29.84
3. 30.48
4. 31.22

Q:5 The average weight of a group of 24 people is 63 kg. Four persons whose weights are 56 kg, 58.5 kg, 65.5 kg, and 60 kg are included. Find the new average weight of the group.

1. 63.5 kg
2. 63 kg
3. 62.5 kg
4. 62 kg

Q:6 The average marks of class IX students are 73 and the average marks of class X students are 72. The ratio of the number of students in classes IX and X is 2 : 3. Find the average marks of students in both classes together.

1. 72.6
2. 72.4
3. 71.4
4. 71.2

Q:7 In a birthday party of 20 people, everyone ordered pizza, if the average expenditure came out to be Rs 68. After that, another person joined the party and ordered pizza, now the average expenditure on food increased by Rs 3. Find the price of the pizza ordered by the new person.

1. Rs 130
2. Rs 131
3. Rs 111
4. Rs 121

Q:8 The average age of 7 people in a group of friends is 25 years. If the ages of two friends are excluded, the average age becomes 20 years. Determine the average age of the two friends.

1. 37.5 years
2. 37 years
3. 35 years
4. 30 years

Q:9 Find the average number of bananas eaten by a monkey in all six months.

The quantity of bananas eaten by monkeys (in dozens) in a zoo is given below.

January- 6, February - 12.5, March - 5, June - 15.5, August - 10, October - 8.5

1. 155
2. 105
3. 115
4. 120

Q:10 The average age of 27 professors in a college is 42 years. 3 professors retire from the college at the age of 60 years and 4 new joined whose average age is 31 years. Calculate the average age of the professors now.

1. 32.5 years
2. 36.5 years
3. 37.5 years
4. 38.5 years



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Answer Key

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

Answers and Solutions

Q:1 The correct answer is **Option 2** i.e. **5**.

We know that,

Average = Sum of all tablets/Number of tablets

Average = $(3 + 5 + 4 + 7 + 6 + 8 + 2)/7 = 35/7 = 5$ tablets/per day

Q:2 The correct answer is **option 3** i.e. **24.49 kg**.

Average = Sum of the weight of boxes/total boxes

Given: Weight of 1 box = 25 kg

So, Total weight = $25 \times 100 = 2500$ kg

Now, 3 boxes are replaced with 2 empty boxes:

So, Final weight = $2500 - 75 = 2425$ kg

Hence, Average weight = $2425/99 = 24.49$ kg

Q:3 The correct answer is **Option 1** i.e. **130 kg**.

Average = Sum of the weight of the students/total students

Let the initial average of the students = z

So, the total weight of the 6 students = $6z$

Let the weight of the new student is y kg and the new average = $z + 5$.

According to the question,

$$6z - 100 + y = 6 \times (z + 5)$$

$$6z - 100 + y = 6z + 30$$

$$y = 100 + 30 = 130 \text{ kg}$$

Or we can also use the formula:

Weight of new person added = weight of the person removed + (no. of students \times increase in average)

Weight of new student added = $100 + 6 \times 5 = 100 + 30 = 130$ kg

Q:4 The correct answer is **Option 3** i.e. **30.48**.

The total number of male and females in the club = 31 and 19

The average ages of males and females = 32 and 28

Sum of age of all members = Sum of age of males + Sum of age of females

Sum = Average \times Number of observations

$$\Rightarrow 31 \times 32 + 19 \times 28$$

$$\Rightarrow 992 + 532$$

$$\Rightarrow 1524$$

$$\text{Average age of all members} = \text{Sum}/(31 + 19)$$

$$\Rightarrow 1524/50$$

$$\Rightarrow 30.48 \text{ years}$$

Q:5 The correct answer is **option 3** i.e. **62.5 kg**.

The sum of the weight of 24 persons = 24×63

$$= 1512 \text{ kg}$$

The sum of the weight of four people added

$$= 56 + 58.5 + 63.5 + 60 = 238 \text{ kg}$$

If the weight four people is included, then the sum of the weight of 28 people = $1512 + 238 = 1750$ kg

The average weight of 28 people = $1750/28$

$$= 62.5 \text{ kg}$$

Q:6 The correct answer is **option 2** i.e. **72.4**.

Average = (The sum of marks of students)/(total number of students)

Let the number of students in Class IX = $2x$

And the number of students in class X = $3x$

The sum of the total number of students in both classes = $(2x + 3x) = 5x$

The sum of marks of students in class IX = $(73 \times 2x) = 146x$

The sum of marks of students in class X = $(72 \times 3x) = 216x$

The total sum of marks of students in class IX and X together is $(146x + 216x) = 362x$

The average marks of students in both classes together = $362x/5x = 72.4$

Q:7 The correct answer is **option 2** i.e. **Rs 131**.

Calculations:

Average expenditure of 20 people = Rs 68

Total expenditure = $20 \times 68 = 1360$

Now, one more person joined and the average expenditure increases by 3 = $68 + 3 = 71$

New total expenditure = $71 \times 21 = 1491$

Required price of the pizza = $1491 - 1360 = 131$

Q:8 The correct answer is **Option 1** i.e. **37.5 years**.

We know that,

Average = Sum of observations/Number of observations

The average age of 7 people in a group of friends is 25 years



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Sum = $25 \times 7 = 175$ years

If the ages of two friends are excluded, the average age becomes 20 years

Sum = $20 \times 5 = 100$

The age of two friends = $175 - 100 = 75$ years

The average age of two friends = $75/2 = 37.5$ years

Q:9 The correct answer is **Option 3** i.e. **115**.

The quantity of bananas is given in Dozens

Average = Sum of observations/Number of observations

Average = $(6 \times 12 + 12.5 \times 12 + 5 \times 12 + 15.5 \times 12 + 10 \times 12 + 8.5 \times 12)$

$(72 + 150 + 60 + 186 + 120 + 102)/6 = 115$

Q:10 The correct answer is **option 4** i.e. **38.5 years**.

The average age of 27 professors in a college is 42 years

So,

Total age of 27 professors = $27 \times 42 = 1134$ years

3 professors retire from the college at the age of 60 years and 4 new joined whose average age is 31 years

So,

New sum of age of 28 professors = $1134 - 60 \times 3 + 31 \times 4 = 1134 - 180 + 124 = 1078$

Hence,

New average = $1078/28 = 38.5$ years

