

### **Type 1**

1. A student was asked to find the arithmetic mean of the following 12 numbers: 3, 11, 7, 9, 15, 13, 8, 19, 17, 21, 14 and x. He found the mean to be 12. The value of x will be:

(1) 3 (2) 7 (3) 17 (4) 31 (SSC CGL Prelim Exam. 04.07.1999 (First Sitting))

2. The average of the marks obtained in an examination by 8 students was 51 and by 9 other students was 68. The average marks of all 17 students was:

(1) 59 (2) 59.5 (3) 60 (4) 60.5 (SSC CGL Prelim Exam. 04.07.1999 (First Sitting))

3. If the average marks of three batches of 55, 60 and 45 students respectively is 50, 55 and 60, then the average marks of all the students is

(1) 54.68 (2) 53.33 (3) 55 (4) None of these (SSC CPO S.I. Exam. 12.01.2003)

4. The average of 30 results is 20 and the average of other 20 results is 30. What is the average of all the results?

(1) 24 (2) 48 (3) 25 (4) 50 (SSC CGL Prelim Exam. 11.05.2003)

5. If the average weight of 6 students is 50 kg; that of 2 students is 51 kg; and that of other 2 students is 55 kg; then the average weight of all students is

(1) 61 kg (2) 51.5 kg (3) 52 kg (4) 51.2 kg (SSC CGL Prelim Exam. 04.02.2007 (Second Sitting))

## **Type 2**

1. The average of 9 numbers is 30. The average of first 5 numbers is 25 and that of the last 3 numbers is 35. What is the 6th number?

(1) 20 (2) 30 (3) 40 (4) 50 (SSC CGL Prelim Exam.  
27.02.2000 (Second Sitting))

2. The average of 15 numbers is 7. If the average of the first 8 numbers be 6.5 and the average of last 8 numbers be 9.5, then the middle number is  
(1) 20 (2) 21 (3) 23 (4) 18 (SSC CGL Prelim Exam.  
11.05.2003 (Second Sitting))

3. The average of 8 numbers is 20. The average of first two numbers is  $15\frac{1}{2}$  and that of the next three is  $21\frac{1}{3}$ . If the sixth number be less than the seventh and eighth numbers by 4 and 7 respectively, then the eighth number is:  
(1) 18 (2) 22 (3) 25 (4) 27 (SSC CGL Prelim Exam.  
08.02.2004 (First Sitting))

4. The average of 20 numbers is 12. The average of the first 12 numbers is 11 and that of the next 7 numbers is 10. The last number is:  
(1) 40 (2) 38 (3) 48 (4) 50 (SSC CGL Prelim Exam.  
08.02.2004 (Second Sitting))

5. Out of seven given numbers, the average of the first four numbers is 4 and that of the last four numbers is also 4. If the average of all the seven numbers is 3, fourth number is  
(1) 3 (2) 4 (3) 7 (4) 11 (SSC CGL Prelim Exam.  
04.02.2007 (First Sitting))

### **Type 3**

1. The average of 7 consecutive numbers is 20. The largest of these numbers is:

(1) 24 (2) 23 (3) 22 (4) 20 (SSC CGL Prelim Exam. 27.02.2000 (Ist Sitting) and SSC Constable (GD) & Rifleman (GD) Exam. 24.04.2012 (Ist Sitting))

2. The average of first nine prime numbers is

(1) 9 (2) 11 (3) 112 (4) 111 (SSC CPO S.I. Exam. 12.01.2003)

3. The average of 5 consecutive natural numbers is  $m$ . If the next three natural numbers are also included, how much more than  $m$  will the average of these 8 numbers be?

(1) 2 (2) 1 (3) 1.4 (4) 1.5 (SSC CPO S.I. Exam. 03.09.2006)

4. The average of the first 100 positive integers is

(1) 100 (2) 51 (3) 50.5 (4) 49.5 (SSC CGL Tier-I Exam. 16.05.2010 (First Sitting))

5. The average of odd numbers up to 100 is

(1) 50.5 (2) 50 (3) 49.5 (4) 49 (SSC Data Entry Operator Exam. 02.08.2009 & SSC CGL Tier-I Exam. 16.05.2010 (IInd Sitting))

### **Type 4**

1. The average monthly income of A and B is 14000, that of B and C is 15600 and A and C is 14400. The monthly income of C is

(1) 16000 (2) 15000 (3) 14000 (4) 15500 (SSC CGL Prelim Exam. 24.02.2002 (Middle Zone))

2. The average monthly income of X and Y is 5050.  
The average monthly income of Y and Z is 6250 and  
the average monthly income of X and Z is 5200.  
The monthly income of X is:

(1) 4050 (2) 3500 (3) 4000 (4) 5000 (SSC CGL Prelim  
Exam. 08.02.2004 (Second Sitting) and SSC SAS  
Exam 26.06.2010 (Paper-1))

3. The average expenditure of a man for the first  
five months is 1200 and for the next seven months  
is 1300. If he saves 2900 in that year, his monthly  
average income is:

(1) 1500 (2) 1600 (3) 1700 (4) 1400 (SSC CHSL  
(10+2) LDC, DEO)

4. The average per day income of A, B and C is 450.  
If the average per day income of A and B be 400  
and that of B and C be 430, the per day income of B  
is

(1) 300 (2) 310 (3) 415 (4) 425 (SSC Data Entry  
Operator Exam. 31.08.2008)

5. The average salary, per head, of all the workers  
of an institution is 60. The average salary of 12  
officers is 400; the average salary, per head, of the  
rest is 56. The total number of workers in the  
institution is

(1) 1030 (2) 1035 (3) 1020 (4) 1032 (SSC CGL Tier-I  
Exam. 26.10.2014)

### **Type 5**

1. Of the three numbers whose average is 60, the  
first is one fourth of the sum of the others. The  
first number is:

(1) 30 (2) 36 (3) 42 (4) 45 (SSC CGL Prelim Exam.  
04.07.1999 (Second Sitting))

2. Of the three numbers, second is twice the first and also thrice the third. If the average of the three numbers is 44, the largest number is:

(1) 24 (2) 72 (3) 36 (4) 108 (SSC CGL Prelim Exam.  
24.02.2002 (IInd Sitting) & (SSC CGL Prelim Exam.  
27.07.2008 (IInd Sitting))

3. The average of first three numbers is thrice the fourth number. If the average of all the four numbers is 5, then find the fourth number.

(1) 4.5 (2) 5 (3) 2 (4) 4 (SSC CGL Prelim Exam.  
24.02.2002 (Middle Zone) and SSC CGL Prelim  
Exam. 13.11.2005 (Ist Sitting))

4. Of the three numbers, first is twice the second and second is twice the third. The average of three numbers is 21. The smallest of the three numbers is

(1) 9 (2) 6 (3) 12 (4) 18 (SSC CPO S.I. Exam.  
12.01.2003)

5. Of the three numbers, the first is 3 times the second and the third is 5 times the first. If the average of the three numbers is 57, the difference between the largest and the smallest number is

(1) 9 (2) 18 (3) 126 (4) 135 (SSC CPO S.I. Exam.  
12.01.2003)

### **Type 6**

1. The average of marks of 14 students was calculated as 71. But it was later found that the marks of one student had been wrongly entered as 42 instead of 56 and of another as 74 instead of 32. The correct average is:

(1) 67 (2) 68 (3) 69 (4) 71 (SSC CGL Prelim Exam.  
27.02.2000 (Second Sitting))

2. The average weight of three men A, B and C is 84 kg. D joins them and the average weight of the four becomes 80 kg. If E whose weight is 3 kg more than that of D, replaces A, the average weight of B, C, D and E becomes 79 kg. The weight of A is

(1) 65 kg. (2) 70 kg. (3) 75 kg. (4) 80 kg. (SSC CGL Prelim Exam. 11.05.2003 (Second Sitting))

3. The average of a collection of 20 measurements was calculated to be 56 cm. But later it was found that a mistake had occurred in one of the measurements which was recorded as 64 cm., but should have been 61 cm. The correct average must be

(1) 53 cm (2) 54.5 cm (3) 55.85 cm (4) 56.15 cm (SSC CPO S.I. Exam. 07.09.2003)

4. The average of marks in Mathematics for 5 students was found to be 50. Later, it was discovered that in the case of one student the marks 48 were misread as 84. The correct average is:

(1) 40.2 (2) 40.8 (3) 42.8 (4) 48.2 (SSC CPO S.I. Exam. 26.05.2005)

5. The average weight of 15 students in a class increases by 1.5kg when one of the students weighing 40 kg is replaced by a new student. What is the weight (in kg) of the new student?

(1) 64.5 kg. (2) 56 kg. (3) 60 kg. (4) 62.5 kg. (SSC CPO S.I. Exam. 06.09.2009)

## **Type 7**

1. A cricketer whose bowling average is 24.85, runs per wicket, takes 5 wickets for 52 runs and thereby decreases his average by 0.85. The number of wickets taken by him till the last match was:

(1) 64 (2) 72 (3) 80 (4) 96 (SSC CGL Prelim Exam. 27.02.2000 (First Sitting))

2. The average of runs of a cricket player of 10 innings was 32. How many runs must he make in his next inning so as to increase his average of runs by 4?

(1) 76 (2) 70 (3) 4 (4) 2 (SSC CGL Prelim Exam. 08.02.2004 (First Sitting))

3. The bowling average of a cricketer was 12.4. He improves his bowling average by 0.2 points when he takes 5 wickets for 26 runs in his last match. The number of wickets taken by him before the last match was

(1) 125 (2) 150 (3) 175 (4) 200 (SSC CGL Prelim Exam. 27.07.2008 (First Sitting))

4. A cricketer had a certain average of runs for his 64 innings. In his 65th innings, he is bowled out for no score on his part. This brings down his average by 2 runs. His new average of runs is

(1) 130 (2) 128 (3) 70 (4) 68 (SSC CGL Prelim Exam. 27.07.2008 (Second Sitting))

5. A cricketer has a certain average of runs for his 8 innings. In the ninth innings, he scores 100 runs, thereby increases his average by 9 runs. His new average of runs is

(1) 20 (2) 24 (3) 28 (4) 32 (SSC CPO S.I. Exam. 09.11.2008)

### **Type 8**

1. The average of five numbers is 27. If one number is excluded, the average becomes 25. The excluded number is:

(1) 25 (2) 27 (3) 30 (4) 35 (SSC CGL Prelim Exam. 04.07.1999 (1st Sitting) & (SSC SO (Commercial Audit) Exam. 16.11.2003))

2. The average of marks of 28 students in Mathematics was 50; 8 students left the school, then this average increased by 5. What is the average of marks obtained by the students who left the school?

(1) 50.5 (2) 37.5 (3) 42.5 (4) 45 (SSC CGL Prelim Exam. 13.11.2005 (Second Sitting))

3. The average weight of 12 parcels is 1.8 kg. Addition of another new parcel reduces the average weight by 50 g. What is the weight of the new parcel?

(1) 1.50 kg (2) 1.10 kg (3) 1.15 kg (4) 1.01 kg (SSC CPO S.I. Exam. 07.09.2003)

4. The average of 50 numbers is 38. If two numbers namely 45 and 55 are discarded, the average of the remaining numbers is:

(1) 35 (2) 32.5 (3) 37.5 (4) 36 (SSC Graduate Level Tier-I Exam. 21.04.2013 (1st Sitting))

5. There are 50 students in a class. Their average weight is 45 kg. When one student leaves the class the average weight reduces by 100g. What is the weight of the student who left the class?

(1) 45 kg (2) 47.9 kg (3) 49.9 kg (4) 50.1 kg (SSC CPO S.I. Exam 12.12.2010 (Paper-I))

## **Type 9**

1. The average age of 14 girls and their teacher's age is 15 years. If the teacher's age is excluded, the average reduces by 1. What is the teacher's age?

(1) 35 years (2) 32 years (3) 30 years (4) 29 years (SSC CGL Prelim Exam. 27.02.2000 (1st Sitting))



2. The average age of four brothers is 12 years. If the age of their mother is also included, the average is increased by 5 years. The age of the mother (in years) is:

(1) 37 years (2) 43 years (3) 48 years (4) 53 years  
(SSC CGL Prelim Exam. 27.02.2000 (First Sitting))

3. The average age of 8 persons is increased by 2 years, when one of them, whose age is 24 years is replaced by a new person. The age of the new person is:

(1) 42 years (2) 40 years (3) 38 years (4) 45 years  
(SSC CGL Prelim Exam. 24.02.2002 (First Sitting))

4. The average age of 8 men is increased by 2 years when two of them whose age are 21 and 23 years replaced by two new men. The average age of the two new men is

(1) 22 years (2) 24 years (3) 28 years (4) 30 years  
(SSC CGL Prelim Exam. 24.02.2002 (Second Sitting))

5. The average age of eleven players of a cricket team decreases by 2 months when two new players are included in the team replacing two players of age 17 years and 20 years. The average age of new player is

(1) 17 years 1 month (2) 17 years 7 months (3) 17 years 11 months (4) 18 years 3 months (SSC CGL Prelim Exam. 24.02.2002 (Middle Zone) & SSC CGL Exam. 13.11.2005 (IInd sitting))

### **Type 10**

1. A company produces an average of 4000 items per month for the first 3 months. How much items, it must produce on an average per month over the next 9 months to average 4375 items per month over the whole year?

(1) 4500 (2) 4600 (3) 4680 (4) 4710 (SSC CGL Prelim Exam. 04.07.1999 (First Sitting))

2. There are in all, 10 balls; some of them are red and the others white. The average cost of all balls is 28. If the average cost of red balls is 25 and that of white balls is 30, the number of white balls is:

(1) 3 (2) 5 (3) 6 (4) 7 (SSC CHSL DEO & LDC Exam. 11.12.2011 (IInd Sitting (Delhi Zone))

3. The arithmetic mean of the scores of a group of students in a test was 52. The brightest 20% of them secured a mean score of 80 and the duller 25% a mean score of 31. The mean score of remaining 55% is:

(1) 45% (2) 50% (3) 51.4% approx. (4) 54.6% approx. (SSC CGL Prelim Exam. 27.02.2000 (First Sitting))

4. The average of marks obtained by 120 candidates in a certain examination is 35. If the average marks obtained by passed candidates are 39 and those of the failed candidates are 15, what is the number of candidates who passed the examination?

(1) 100 (2) 120 (3) 150 (4) 140 (SSC CGL Prelim Exam. 24.02.2002 (Second Sitting))

5. A man's pension on retirement from service is equal to half the average salary during last 3 years of his service. His salary from 1-1-1983 is 380 per month with increment of 40 due on 1-10-83, 1-10-84 and 1-10-85, If he retires on 1-1-86, what pension does he draw per month?

(1) 205 (2) 215 (3) 225 (4) 230 (SSC Graduate Level Tier-I Exam. 21.04.2013 IInd Sitting)