Simple Average Applications:

1. A, B and C have Rs.10, Rs.20, and Rs.30 respectively.   Find the average when a new person 'D' who has Rs. 40 is added to the group.

2. The average weight of 10 members is 75 kgs. Find the new average when a person who is weight is 86 kgs is added to the group.

3. Average age of a group of 5 members is 20 years. Find the new average when a person whose age is 32 years is added to the group.

4. Preet, Rohan and Shreyas have Rs.100, Rs.120 and Rs.80 respectively. Find the new average when Ritwike who has Rs.200 joins the group.

5. Average weight of 9 members of group is 80kgs. Find the new average when a person whose weight is 90kgs is added to the group.

6. Sachin's average score of 15 matches is 90 runs. By how much will the average increase if he scores 154 runs in his next match.

7. The average weight of 11 members is 61kgs. Find the average when a person who weighs 71kgs leaves the group.

8. Average weight that each student has is 80 Kg. When a new student of weight 100 kg joins the group, then the average weight of each student becomes 82 kg. Find the number of students originally in the group.

9. Average age of 15 students and teacher is 20 years. If the age of teacher is not considered, average age of the students is 19 years. Find the age of teacher.

10. Average of Dhoni after 30 one day matches is 50. If Dhoni's target is to increase his average to 53 after next match, how much should Dhoni score in the next match?

11. When a student of height 70 inches joins a group of 10 students, the average height of the group decreases by 2 inches. Find the average height of the original group.

12. When a student of height 58 inches joins a group of 8 students, the average height of the group increases by 3 inches, find the average height of the original group.

13. From a group of 10 students with average weight being 54.5 kg, two students leave. Because of those two students leaving, average of the group falls to 53 kg. Find the average weight of the two students who left the group.

14. From a group of 15 students with average height being 66 inches, three students leave. Because of those three students leaving, average of the group increases to 67.25 inches. Find the average height of the three students who left the group.

15. The average age of a group of 6 friends' increases by 3 years when the youngest of them is not considered and decreases by 4 years when the oldest of them is not considered. Find the difference between the ages of oldest and youngest of them.

16. The average of a batsman after 25 innings was 56 runs per innings. If after the 26th innings his average increased by 2 runs, then what was his score in the 26th inning?

17. The average age of a class of 30 students and a teacher reduces by 0.5 years if we exclude the teacher. Find the age of the class teacher if the previous average age of class including the teacher was 20.

18. The average marks of a group of 20 students on a test is reduced by 4 when the topper who scored 90 marks is replaced by a new student. How many marks did the new student score?

19. Ajit Sehwag has a certain average for 9 innings. In the tenth innings, he scores 100 runs thereby increasing his average by 8 runs. His new average is

20. The average age of 8 persons in a committee is increased by 2 years when two men aged 35 years and 45 years are substituted by two women. Find the average age of the two women.

21. The average score of a class of 40 students is 52. What will be the average score of the rest of students if the average score of 10 of the students is 61?

22. The average height of 30 girls out of a class of 40 is 160 cm and that of the remaining girls is 156 cm. The average height of the whole class is

23. A, B, C and D have Rs.10, Rs.20, Rs.30 and Rs.40 respectively. Find the average of the group when D leaves.

24. The average amount that each student has is Rs 167.75. When a student having Rs 183.45 joins the group, the new average that each student has is now Rs 170.89. Find the number of people originally in the group.

25. A set contains the first 20 natural numbers, except one of them. If the average of the set is $10\frac{13}{19}$, then find the number which is absent.

Answer key

1. 25   2. 76   3. 22   4. 125   5. 81   6. 94

7. 60   8. 9   9. 35   10. 143   11. 92   12. 31

13. 60.5   14. 61   15. 35   16. 108   17. 35   18. 10

19. 28   20. 48   21. 49   22. 159   23. 20   24. 4   25. 7