Averages and Weighted Averages Day-2

1. 20 litres of a mixture has milk and water in the ratio of 4 : 3. How many litres of water needs to be added to the mixture so that the proportion of milk and water gets reversed.
   1. 10 litres   2. 15 litres   3. 20/3 litres   4. 25 litres

2. When each number of a set is increased by 12, the average of the set becomes 1.5 times the earlier average. Find the average of the original set.
   1. 8   2. 10   3. 18   4. 24

3. 12 litres of a solution having 60% milk is mixed with 15 litres of another solution of milk and water. If the resultant mixture has 45% milk, find the percentage of milk in the second solution.
   1. 30%   2. 33%   3. 36%   4. 39%

4. The average of 5 consecutive numbers is 16. The highest of these numbers is:
   1. 21   2. 20   3. 19   4. 18

5. How many kg of salt at 42 paise per kg must a man mix with 25 kg of salt at 24 paise per kg so that he may, on selling mixture at 40 paise per kg gain 25% on the day?
   1. 20   2. 30   3. 40   4. 50

6. One litre of water is added to 5 litres of a solution of alcohol and water having 20% alcohol. What is the final strength of alcohol?
   1. 16.66%   2. 16.25%   3. 15%   4. 14%

7. The average weight of 3 men, A, B and C is 84 kg. The fourth man D joins them and the average weight of these 4 men becomes 80 kg. What is the weight of D?
   1. 68 kg   2. 80 kg   3. 75 kg   4. 72 kg

8. The average earnings per day of a sales boy for Monday, Tuesday and Wednesday is Rs 600 and average for Tuesday, Wednesday and Thursday is Rs 650. If his income for Thursday is Rs 700, then find his earnings on Monday.
   1. Rs 550   2. Rs 600   3. Rs 650   4. Rs 640

9. The average age of 8 boys increases by 2 months, if a boy of 12 years of age is replaced by a new boy. Find the age of the new boy.
   1. 9 years   2. $8\frac{1}{2}$ years 3. $9\frac{1}{3}$ years 4. None of these

10. Ten years ago, the average age of a family of 4 members was 24 years. In these 10 years, two children were born and the average age of the family is the same today. What are the present ages of these two children assuming that the difference in their ages is 2 years?
    1. 4, 6   2. 5, 3   3. 7, 9   4. 10, 8

11. A class of students attended a charity show with entrance ticket of Rs 3.70 per girl and Rs 4.50 per boy. If the strength of the class and the amount collected from the class are 160 and Rs 640 respectively, find the number of boys and girls from the class who attended the show.
    1. 80, 80   2. 40, 120   3. 70, 90   4. 60, 100

12. The average of 5 consecutive numbers is 18. The highest of these numbers is increased by 2, the new average will be
    1. 18.5   2. 18.4   3. 21   4. 19

13. The ratio of copper and gold in two alloys is 3:6 and 5:4. How many kilograms of the first alloy and the second alloy respectively should be melted together to get 64 Kg of a new alloy with equal quantities of copper and gold?
    1. 40 kg, 24 kg   2. 32 kg, 32 kg   3. 16 kg, 48 kg
    4. 30 kg, 34 kg

14. A man possessing Rs. 6800 lent a part of it at 10% simple interest and the remaining at 7.5% simple interest. His total income after 2 years was Rs. 1088. Find the sum lent at 10% rates.
    1. Rs. 1260   2. Rs. 1700   3. Rs. 1360   4. none of these

15. The average weight of 12 boys in a class in 60 kg. If 2 of them leave, the average of remaining students drops to 50 kg. What is the average weighted of the 2 boys who left the group?
    1. 100   2. 200   3. 110   4. 220

AVERAGES & WEIGHTED AVERAGES

Answer key:
  1. 3
  2. 4
  3. 2
  4. 4
  5. 1
  6. 1
  7. 1
  8. 1
  9. 4
  10. 2
  11. 4
  12. 2
  13. 3
  14. 3
  15. 3