1. **The average weight of 40 students in a class is 75 kg. By mistake the weights of two students are read as 74 kg and 66 kg respectively instead of 66 kg and 54 kg. Find the corrected average weight of the class**
   a) 73.50 kg
   b) 74.50 kg
   c) 75.50 kg
   d) 76.50 kg
   e) None of these
2. **The average weight of 40 balls is 5 grams. When the weight of the basket is added to the weight of balls, the average increased by 0.5 grams. Find the weight of the basket.**
   a) 20.5 gm
   b) 22.5 gm
   c) 25.5 gm
   d) 28.5 gm
   e) None of these
3. **There are 50 students in a hostel. Now the number of students got increased by 8. Due to this the expenses of the mess increased by 30 rupees per day while the average expenditure is decreased by 2 rupees. Find the original expenditure.**
   a) 812.5 rupees
   b) 912.5 rupees
   c) 1012.5 rupees
   d) 1112.5 rupees
   e) None of these
4. **The average age of the class is 15 years. The average age of boys and girls is 13 and 16 years respectively. If the number of girls in the class is 18 then find the number of boys in the class.**
   a) 6
   b) 8
   c) 9
   d) 12
   e) None of these
5. **A cricketer has an average of 55 after playing 20 innings. How much runs should he scores in the next inning so as to increase the average to 57.**
   a) 95
   b) 96
   c) 97
   d) 98
   e) None of these
6. **The average marks obtained by 100 candidates in an examination are 45. If the average marks of the passed students are 50 while the average marks of the failed students is 40. Then find the number of students who passed the examination.**
   a) 30

b) 40
c) 50
d) 60
e) None of these

7. **The average age of 30 students is 16 years. If the age of the teacher is also included then the average age increased by 1 year, find the age of the teacher.**
   a) 45 year
   b) 46 year
   c) 47 year
   d) 49 year
   e) None of these
8. **The present average age of a family of 5 members is 40 years. If the youngest member of the family is 12 years old, then find the average age of the family at the time of birth of the youngest member.**
   a) 32
   b) 33
   c) 34
   d) 35
   e) None of these
9. **The average age of a husband and wife at the time of marriage is 22 years. After 3 years, they have a one year old child. Find the average age of the family of three at the time of birth of the child.**
   a) 14 years
   b) 15 years
   c) 16 years
   d) 17 years
   e) None of these
10. **In a certain year the average monthly salary of a person is 5000 rupees. If for the first 7 months the average salary is 5300 and for the last 6 months, the average salary is 4600 rupees. Find the income of the person in 7th month.**
    a) 3700
    b) 4700
    c) 5700
    d) can't be determined
    e) None of these

ANSWER :

1. **b) 74.50 kg**
   Explanation :

Weight of 40 students = 40*75
new weight = 40*75 – 74 – 66 + 66 + 54 = 40*75 – 20
so new average =(40*75 – 20)/40 = 74.50 kg

2. **c) 25.5 gm**
   Explanation :
   (40*5 + B)/41 = 5.5 (B is the weight of basket)
3. **b) 912.5 rupees**
   Explanation :
   Let initial expenditure is E per day. Now it is increased by 30 rupees per day,
   Initial students = 50 and now they are 58,
   E/50 – (E + 30)/58 = 2
   Solve for E, We will get E = 912.5 rupee.
4. **c) 9**
   Explanation :
   B*13 + 18*16 = 15*(18 + B)
5. **c) 97**
   Explanation :
   Runs after 20 innings = 55*20, so (1100 + X)/21 = 57, after solving we will get X = 97
6. **c) 50**
   Explanation :
   Let P = passed students and failed students = F. So
   45*100 = 50*P + 40*F and P + F = 100. Solve for F and P, we will get P = 50.
7. **c) 47 year**
   Explanation :
   Teacher age is T years. So, 30*16 + T = 31*17
8. **d) 35**
   Explanation :
   Present age of the family = 5*40 = 200 years.
   12 years ago at the time of the birth of youngest member, age of family = 200 – 12*5 = 140.
   So average age = 140/4 = 35 year
9. **c) 16 years**
   Explanation :
   At the time of marriage sum of the age of husband and wife = 44 years.
   After three years, total age of the family = 44 + 3+ 3+ 1 = 51 years.
   At the time of child birth, age of family = 51 -1-1-1 = 48 years.
   So average age = 48/3 = 16 years
10. **b) 4700**
    Explanation :
    Let the income of seventh month is A, then
    12*5000 = 5300*7 + 5300*6 – A