

CLASS 9 · HOTS · OLYMPIAD PREPARATION · DPP SHEET

Chapter 10: HOTS: Understanding Data, Weighted Mean (Class 9)

Daily practice problems: 8 questions with an answer key

Try every question on your own first. The answer key is on the last page.

1. Marks of 60 and 80 have weights 1 and 3. Find the weighted mean.
2. 10 kg of sugar at Rs 30 per kg is mixed with 15 kg at Rs 40 per kg. Find the cost per kg of the mixture.
3. 40 students have an average mark of 55 and another 10 students have an average mark of 80. Find the average of all 50 students.
4. A student's average in 3 tests is 80. What mark is needed in the fourth test to raise the average to 82?
5. In a survey of 150 people, 45 prefer tea. What percentage prefer tea?
6. 5 kg of tea at Rs 60 per kg is mixed with some tea at Rs 80 per kg so that the mixture costs Rs 70 per kg. How much of the Rs 80 tea is used?
7. A cyclist rides 20 km at 10 km/h and then 20 km at 20 km/h. Find the average speed for the whole ride.
8. Two groups of 10 students each have means 12 and 18. Find the mean of all 20 students.

Answer Key

1. 75.
2. Rs 36 per kg.
3. 60.
4. 88.
5. 30%.
6. 5 kg.
7. $\frac{40}{3}$ km/h, about 13.3 km/h (the total time is 3 hours).
8. 15.

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