

National Institute of Open Schooling
Secondary Course: Mathematics
Lesson 8: Percentage and its Application
Worksheet-8

1. A mixture of 50 litres of milk and water contains 10% water. How much water should be added to this mixture, so that the new mixture contains 25% water?
2. A number is first increased by 20% and then decreased by 20%. Find the net increase or decrease percent.
3. Find the compound interest on Rs. 50,000 for 5 years at the rate of 10% per annum, when the interest is compounded semi-annually.
4. A student purchases a book for Rs. 200 at 20% discount. Find the list price of the book.
5. Cost price of 23 articles is equal to the selling price of 20 articles. Find the loss or gain percent.
6. The present population of a village is 15,400. In the first year the population increases at the rate of 5% but in the 2nd year it depreciates at the rate of 5% per annum. Find the population of the village at the end of two years.
7. A businessman bought oranges at 20 for Rs. 100 and sold them at 25 for Rs. 100. Find his gain or loss percent.
8. The present value of a car is Rs.5,00,000. If its value depreciates at the rate of 10% per annum, then find the value of the car at the end of three years.
9. A retailer buys shirts from a manufacturer at the rate of Rs. 200 per shirt and marked them at Rs. 300 each. He allows some discount and earns a profit of 35% on the cost price. Find the percentage of discount.
10. A sum of Rs. 8000 amounts to Rs. 9261 in 3 years at compound interest. If the interest is compounded annually, then find the rate of interest annum.