



Octahedral classes, kharadi
2nd floor, yashwant plaza, near bank of India,

Class 08 - Mathematics
Interest and percentage

Maximum Marks: 100

Time Allowed: 1 hour and 30 minutes

Section A

1. Answer the following

- Convert 3 : 4 to percentage.
- Rani can paint a picture in 6 hours. What part of the painting she can complete in 4 hours?
- Find the time period and rate for a sum taken for $1\frac{1}{2}$ years at 8% per annum is compounded half-yearly.
- Two numbers are in the ratio 8:3 and their sum is 132. Find the numbers.
- A player won 70% of the cricket matches whenever he was in the team. In his total career, he lost 45 matches. How many matches he played overall?
- 72% of 25 students are good in mathematics. How many students are not good in Mathematics ?
- Find the time period and rate for a sum taken for 2 years at 4% per annum compounded half yearly.
- Two times a number is a 100% increase of the number. If we take half the number what would be the decrease in percent ?
- If 8.5% of a number is 51, then find the number.
- What percent is 3% of 5% of 40 ?

2. Answer the following

- Sohan bought a second hand refrigerator for ₹2,500. Then spent ₹500 on its repairs and sold it for ₹3,300. Find his loss or gain percent?
- A machinery worth Rs. 10500 depreciated by 5%. Find its value after one year.
- If the C.P. of 10 articles is equal to the S.P. of 12 articles. Find the gain or loss%.
- The cost of a pair of roller skates at a shop was ₹ 450. The sales tax charged was 5%. Find the bill amount.
- A TV was bought at a price of ₹21,000. After one year the value of the TV was depreciated by 5% (Depreciation means reduction of value due to use and age of the item). Find the value of the TV after one year.
- What amount is to be repaid on a loan of ₹12000 for $1\frac{1}{2}$ years at 10% per annum compounded half yearly?
- A watch is marked at ₹480. To clear the stock, the shopkeeper offers a discount of 20%. What is the selling price of the watch?
- A shopkeeper purchased 200 bulbs for ₹10 each. However, 5 bulbs were fused and had to be thrown away. The remaining were sold at ₹ 12 each. Find the gain or loss percent.
- Salim bought an article for ₹784 which included GST of 12%. What is the price of the article before GST was added?
- Two numbers are in the ratio 4:1. If 5 is added to both the numbers, the smaller number exactly divides larger number, which gives quotient 3. Find the numbers.

3. Answer the following

- Find the Simple Interest and amount on ₹ 5000 for 6 months at the rate of 5% per annum.
- The cost of a water cooler in a shop is ₹3, 500. If 8% sales tax is charged, find the bill amount.
- Ramu bought an almirah for ₹ 12, 000 and sold it for ₹ 15, 000. Find his profit or loss percent.
- By selling an air cooler for ₹6800, Mahesh lost 15%. For what price should he sell it to get a profit of 10 % ?

- e) Mounica took a loan of ₹ 1,00,000 at 12% per annum compounded half yearly. If she paid ₹1,12,360, find the time period for which she took the loan.
- f) The cost price of an article is ₹375. Find the marked price of the article so as to gain 8%, after allowing a discount of 25%?
- g) A man gives 40% of his money to his children and 20% of the remaining to a trust. If he is still left with ₹ 9600, what is the amount did he originally have?
- h) The population of a place increased to 54000 in 2003 at a rate of 5% per annum. Find the population in 2001.
- i) An article was purchased for ₹1239 including GST of 18%. Find the price of the article before GST was added.
- j) The cost of an article was ₹15,500. ₹450 were spent on its repairs. If it is sold for a profit of 15%, find the selling price of the article.

4. Answer the following

- a) Arif took a loan of Rs. 80000 from a bank. If the rate of interest is 10% per annum, find the difference in amounts he would be paying after $1\frac{1}{2}$ years if the interest is.
 - (i) Compounded annually
 - (ii) Compounded half yearly.
- b) Kamala borrowed Rs. 26400 from a bank to buy a scooter at a rate of 15% p.a. compounded yearly. What amount will she pay at the end of 2 years and 4 months to clear the loan ?
- c) The difference between compound Interest on a certain sum of money at 10% per annum for 2 years is ₹ 500. Find the sum, if the interest is compounded annually.
- d) Vasudevan invested Rs. 60000 at an interest rate of 12% per annum compounded half yearly. What amount would he get (i) after 6 months (ii) after 1 year
- e) A man sells an article at 5% above its cost price. If he had bought it at 5% less, and sold it at Rs. 2 less, He would have gained 10%. Find the cost price of the article.
- f) Determine the rate percent per annum if ₹ 25, 000 amounts to ₹ 26, 010 in 6 months, interest being compounded quarterly.
- g) A milkman sold two of his buffaloes for Rs. 20000 each. On one he made a gain of 5% and on the other a loss of 10%. Find his overall gain or loss.
- h) A dealer buys 70 chairs for ₹56,000. But 20 of them were damaged so were sold at three-fourth their C.P. At what price per chair should he sell the remaining so as to get an overall profit of 20%.
- i) The simple interest on a sum of money for 3 years at $\frac{25}{4}\%$ per annum is ₹. 2,400. What will be the compound interest on that sum at the same rate for the same period?
- j) Calculate the amount and compound interest by using compound interest formula on Rs. 10000 for 1 year at 8% per annum compounded half yearly.