



GRADE -8

Work sheet - MATHEMATICS

2024-'25

CHAPTER -11

SIMPLE AND COMPOUND INTEREST

Name :

Date:.....

Multiple Choice Questions :

1. If the selling price of an item is Rs 300 and the cost price is Rs 250, what is the profit?
a) Rs 50 b) Rs 150 c) Rs 450 d) Rs 350
2. If the profit percentage is 20% and the cost price of an item is Rs 400, what is the selling price?
a) Rs 480 b) Rs 550 c) Rs 320 d) Rs 500
3. The marked price of a product is Rs 250. If a discount of 30% is given, what is the selling price?
a) Rs 175 b) Rs 200 c) Rs 225 d) Rs 150
4. Convert a 20% discount into a decimal. a) 0.2 b) 0.25 c) 0.15 d) 0.325. 5. If the principal amount is Rs 1000 and the simple interest is calculated at 5% per annum for 2 years, what is the total amount after 2 years?
a) Rs 1100 b) Rs 1080 c) Rs 1200 d) Rs 1050
5. Which is generally higher, simple interest or compound interest for the same initial investment and the same interest rate?
a) Simple interest b) Compound interest c) Both are equal d) Cannot be determined
6. The percentage of profit or loss is calculated on which of the following?
a) Selling Price b) Marked Price c) Cost Price d) Discount
7. If a discount of 20% is given on an article, what fraction is equal to the discount percentage?
a) $\frac{1}{5}$ b) $\frac{1}{4}$ c) $\frac{1}{3}$ d) $\frac{1}{6}$

8. If the cost price (CP) of an item is Rs 80 and the selling price (SP) is Rs 100, what is the profit?

- a. Rs 10 b. Rs 20 c. Rs 30 d. Rs 40

9. Calculate the profit percentage when the cost price (CP) is Rs 400 and the selling price (SP) is Rs 500.

- a. 20% b. 25% c. 30% d. 35%

10. If the marked price (MP) of an item is Rs 150, and a 20% discount is offered, calculate the selling price (SP).

- a. Rs 100 b. Rs 110 c. Rs 120 d. Rs 130

11. The simple interest on a principal amount of Rs 500 at a rate of 5% per annum for 2 years is:

- a. Rs 25 b. Rs 50 c. Rs 75 d. Rs 100

12. A customer has to pay 7% sales tax on an item worth Rs 100. Calculate the total amount the customer needs to pay, including the sales tax.

- a. Rs 93 b. Rs 100 c. Rs 107 d. Rs 120

11. The formula for simple interest is:

- a) $P \times R \times T$ b) $P \times R \times T / 100$ c) $P \times T / 100$ d) $P \times R / 100$

12. In compound interest, the interest for each period is calculated on:

- a) Principal b) Principal + Accumulated Interest c) Principal – Interest d) Principal \times Interest

13. Which of the following is the formula to find the amount under compound interest?

- a) $A = \left(1 + \frac{R}{100}\right)^T$ b) $A = P + \frac{PRT}{100}$ c) $A = P \times (1 + R \times T)$ d) $A = P - \frac{PRT}{100}$

FILL IN THE BLANKS:

- i) The money we deposit in a bank is called the _____
ii) The amount is the sum of the principal and _____
iii) The interest is calculated at a specific _____

ANSWER THE FOLLOWING QUESTIONS:

1. What is the profit obtained when an item with a cost price of Rs 100 is sold at a selling price of Rs 150?
2. Calculate the loss incurred if an item with a cost price of Rs 80 is sold for Rs 60.

3. If the cost price of an item is Rs 200 and the profit is calculated as 25%, what is the selling price?
4. A shopkeeper offers a 10% discount on a product with a marked price (Sales price) of Rs 300. What is the selling price after discount?
5. Calculate the discount percentage if a product with a marked price of Rs 500 was sold for Rs 400.
6. Express a 25% discount as a fraction and a decimal.
7. If you invest Rs 1000 at a 5% annual interest rate, how much simple interest will you receive after 2 years?
8. Calculate the compound interest earned on an investment of Rs 5000 at a 6% annual interest rate, compounded annually for 3 years.
9. Compare the simple and compound interest for an investment of Rs 2000 at a 4% annual interest rate over 4 years.
10. If a sales tax of 5% is levied on an item with a cost price of Rs 350, what is the final price including sales tax?
11. Which of the following is the formula to find the amount under compound interest?
12. What is the difference between simple interest and compound interest in terms of calculation? 33
13. If an item costs \$500 and is sold for \$600, how much is the profit percentage? Question 8: Convert 25% of discount into a decimal.

Long-Answer Question

- 14: Explain the impact of applying GST and compound interest on the price of an item.

Section D: Case Study Based Question - 2 marks each (4 marks)

15. Case Study: A business owner purchased an article for Rs 2000 and marked its price 20% above the cost price. The owner offered a discount of 10% during a sale. Calculate the selling price and profit percentage after the discount