

Chapter – 9

Percentage

Revision Worksheet – 1

Date - 15/08/2020

Simple Interest

- **1.** Interest = $\frac{Principal \times Rate of Interest \times Time}{100}$
- **2.** Principal = $\frac{Interest \times 100}{Rate of Interest \times Time}$
- **3.** Rate of interest = $\frac{Interest \times 100}{Principal \times Time}$ %
- **4.** Time = $\frac{Interest \times 100}{Principal \times Rate of Interest}$
- 5. Amount = Principal + interest
- 6. Principal = Amount Interest
- 7. Interest = Amount Principal.

Profit & Loss

- 1. Profit = Selling price Cost price
- 2. Loss = Cost price Selling price
- 3. Profit% = $\frac{Profit}{Cost Price} \times 100\%$ 4. Loss% = $\frac{Loss}{Cost Price} \times 100\%$ 5. For Profit, Selling Price = $\left[\frac{(100+Profit\%)}{100} \times Cost price\right]$ 6. For Loss, Selling Price = $\left[\frac{(100-Loss\%)}{100} \times Cost price\right]$

7. For Profit, Cost price = $\left[\frac{100}{(100+Profit\%)} \times selling \ price\right]$ 8. For Loss, Cost price = $\left[\frac{100}{(100-Loss\%)} \times selling \ price\right]$

Creative Question

1. Shamol Chakma borrowed 4500 Taka from a bank and an annual interest of 8% were always charged on the principal.

- a) How much Taka would he pay back in 10 years?
- **b)** Several years later, the annual interest summed up to 2520 Taka. How many years did he borrow?

2. Shiratul borrowed 3000 Taka from a bank and paid back 3300 Taka after a year.

a. What was the annual interest rate of the bank?

b. How much Taka would he pay back after 2 years if he borrowed 10000 Taka?

3. Some money was borrowed from a bank with an annual interest of 20% and paid the total annual interest 2000 taka.

- a. How much was the principal?
- b. How much was the principal and interest total?
- **c.** How much interest would be paid if the annual interest rate was 15%?

4. Rony borrowed 4500 Taka from a bank and an annual interest of 8% were always charged on the principal.

- a. Write down the formula of "Annual interest".
- b. How much taka would he pay back as interest in 8 years?
- c. How much money would he pay back after 8 years?

5. The total population of Modhupur village is 1620 and 60% of them are educated.

a. How many educated people are there in that village?

b. If the educated people are 75%, how many educated people are there in that village?

6.50000 taka was borrowed from a bank and 98000 taka was paid back 8 years later.

- a. What is called the annual interest?
- b. What is the annual interest of 1 year?
- c. How much annual interest rate was charged on the principal?

7. A loan of 50000 Taka is taken from a bank. After 8 years an amount of 98000 Taka is being paid.

- a. What is the interest in 8 years?
- b. What is rate of annual interest?
- c. In how many years the interest would become 30000 Taka?

8. A seller sold an item of 1600 taka at a discount of 20%.

- **a.** What was the selling price of the item?
- **b.** What will the selling price be if the item is sold with the profit of 20%?

9. A fan is sold at 1280 taka at a discount of 20%.

- **a.** What is the cost price of the fan?
- **b.** If the fan sold at 1520 taka, what is the percentage of profit or loss?

10. A seller brought a pen at 20 taka and sold at 25 taka.

- a. What was the percentage of his profit?
- **b.** What will the selling price be with the profit of 10%?

11. A seller bought a basket full of mangoes at 1200 taka and sold them with profit of 10%.

- a. What was the selling price of the mangoes?
- **b.** How much taka more would the selling price be if he wanted to sell the mangoes with profit of 15%?

Short Question

1. A book is sold at 90 tk with the loss of 10 %. What is the cost price of the book?

2. Convert 33% into decimal fraction.

3. The cost of the book is 100 tk, what will the selling price be if it is sold at profit 8%?

- 4. Convert $\frac{3}{5}$ into percentage.
- 5. What is the basis of calculating profit and loss?

6. What is made if selling price is more than the cost price?

7. What is made if cost price is more than the selling price?

8. Write the formula to find annual interest.

9. 1 Kg mango is brought for 100 tk and sold for 95 tk. What is the percentage of profit or loss?

10. The cost price of a book is tk 150 and the selling price is tk 180. What is the percentage of profit%?

11. 15% of 300 Taka =?

- 12. What does a profit of 5% imply?
- 13. Profit or loss depends on what?
- 14. What is the invested money called?
- 15. 56% of what gram is 42 grams?
- 16. Common fraction of 5% is what?
- 17. How much is 4% of 75 Taka?
- 18. How many Kilograms are 20% of 120 Kilograms?
- 19. How much is 30% of 50 grams?
- 20. Express 35% as a fraction.