Percentage

Lecture sheet – 9

Creative Question

Profit & Loss

Formula

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

Exercise (Do yourself)

1. *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%?

2. *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?

3. *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%?

4. *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%?

5. *In a shop, an item of 1800 Taka was sold at a discount of 20%.*
    a. Express 20% of common fraction in to lowest term.
    b. How much Taka was the selling price?
    c. How much will the item be sold to profit 10%.

6. *Out of 60 students of a class, 35% are girls.*
    a. How many girl students are there in the class?
    b. If the total number of students of the class be 80, then how many boy students will be there in the class?
    c. If 15% students of the class fail in mathematics, how many students fail in mathematics?
    d. If 55% students remain absent in a rainy day, how many students are present?

7. *A seller laid a table in stock but sold it at 7040 Taka after 12% discount from the cost price.*
    a. What is the selling price at 12% percent discount from cost price?
    b. What was the cost price of the table?
    c. 5 chairs are bought by the price of the table. If selling price of each chair is 2215 Taka. What is the profit per chair?