Work Sheet Solution

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1.Try yourself

2.Cost of 1 quintal of rice = Tk. 250
Cost of 600 quintals of rice = 600 × 250

= Tk. 150000
Overhead expenses = Tk. 1000
Total CP = Tk. (150000 + 1000)

= Tk. 151000
Profit % = (Profit/CP) × 100
or,7 = (P/151000) × 100
or, P = 1510 × 7

= Tk. 10570
Profit = Tk. 10570
So, SP = CP + profit = Tk. (151000 + 10570) = Tk. 161570

3.Try yourself

4. Cost of 1 dozen roses = Tk. 2
Number of roses bought by the florist = 100 dozens
Thus, cost price of 100 dozen roses = 2 × 100 = Tk. 200

Roses left after discarding the mutilated ones = 80 dozens

Calculating the price at which the florist should sell the 80 dozen roses in order to make a profit of 20%, we have

$$\frac{\text{Profit }\%}{100} = \frac{\text{SP}-\text{CP}}{\text{CP}}$$
$$\frac{20}{100} = \frac{\text{SP}-200}{200}$$
$$\text{SP} = \text{Rs. } 240$$

Therefore, the SP of the roses should be Tk. $\frac{240}{80}$= Tk. 3 per dozen

5. Cost price of an almirah = Tk. 13600
Transportation cost = Tk. 400
Total cost price = Tk. (13600 + 400) = Tk. 14000
Selling price = Tk. 16800
Now, SP > CP
Gain = SP − CP

= (16800 - 14000) = Tk. 2800

$$\text{Gain}\,\% = \left(\frac{\text{Gain}}{\text{CP}} \times 100\right)\%$$

$$= \left(\frac{2800}{14000} \times 100\right)\%$$

$$= \frac{2800}{140}\%$$

$$= 20\%$$

6.Let the CP of 1 orange be Tk. *x*.
∴ CP of 36 oranges = Tk. 36*x*
Let SP of orange be Tk. *y*.
∴ SP of 36 oranges = Tk. 36*y*

Loss = SP of 4 oranges = 4y (given)

We know:
Loss = CP - SP
⇒ 4y = 36x − 36y
⇒ 4y + 36y = 36x
⇒ 40y = 36x
⇒ 10y = 9x
⇒ y = $\frac{9}{10}x$

$$\text{Loss}\,\% = \left(\frac{\text{Loss}}{\text{CP}} \times 100\right)\%$$

$$= \left(\frac{4y}{36x} \times 100\right)\%$$

$$= \left(\frac{4 \times 9x}{36x \times 10} \times 100\right)\%$$

$$= 10\%$$

Loss% = 10%