

WJ  
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Profit, Loss and Discount  
EXERCISE 8(A)

Date \_\_\_\_\_  
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Q1) Megha bought 10 note-books for Rs. 40 and sold them at 4.75 per note-book. Find her gain percent.

Ans → C.P of 10 note-books = Rs. 40

S.P of 10 note-books Rs. 4.75 per note-book  
 $= 4.75 \times 10 = \text{Rs. } 47.50$

Gain = S.P - C.P

$= \text{Rs. } 47.50 - \text{Rs. } 40 = \text{Rs. } 7.50$

Gain% =  $\frac{\text{Gain}}{\text{C.P}} \times 100$

$= \frac{7.50}{40} \times 100 = \frac{750}{40} \%$

$= \frac{75}{4} \% = 18 \frac{3}{4} \%$

Q2) A fruit-seller buys oranges at 4 for Rs. 3 and sells them at 3 for Rs. 4. Find his percent.

Ans → Let number of oranges bought = 12

L.C.M. of 4 and 3 = 12

∴ C.P of oranges =  $\text{Rs. } \frac{3}{4} \times 12 = \text{Rs. } 9$

S.P of oranges =  $\text{Rs. } \frac{4}{3} \times 12 = \text{Rs. } 16$

Profit =  $16 - 9 = \text{Rs. } 7$

Profit% =  $\frac{\text{Profit}}{\text{C.P}} \times 100$

$= \frac{7}{9} \times 100 = \frac{700}{9} \% = 77 \frac{7}{9} \%$

Q3) A man buys a certain number of articles at 15 for Rs. 112.50 and sells them at 12 for Rs. 108. Find

(i) his gain as percent

(ii) the number of article sold to make a profit of Rs. 75.

Ans → Let number of articles bought = 60

L.C.M of 15 and 12 = 60

∴ C.P of the article =  $\text{Rs. } \frac{112.50}{15} \times 60$

$$= \text{RS. } \frac{112.50}{15} \times 60 = 112.50 \times 4 = \text{RS. } 450.00$$

and S.P of the articles =  $\text{RS. } \frac{108}{12} \times 60$

$$= \text{RS. } 108 \times 5 = \text{RS. } 540$$

(i) Gain = S.P - C.P =  $\text{RS. } 540 - \text{RS. } 450$   
=  $\text{RS. } 90$

$$\text{Gain}\% = \frac{\text{Gain}}{\text{C.P}} \times 100$$

$$= \frac{90}{450} \times 100 = \frac{100}{5} = 20\%$$

(ii) to make a profit of  $\text{RS. } 90$ , the number of articles needed to be sold = 60

To make a profit of  $\text{Re. } 1$  the number of be sold =  $\frac{60}{90}$

To make a profit of  $\text{RS. } 75$  the number of articles needed to be sold =  $\frac{60}{90} \times 75 = \frac{4500}{90} = 50$