



Test Preparation > UPSC CSE > Basic Numeracy > Crash Course



Examples on profit and loss - part 3 (Marathi)

LESSON 12 OF 12



Download the Unacademy Learning App to watch this and over 200k more lessons in UPSC, SSC CGL, GATE, CAT and many more categories.



Ex. 6.

A person allows a 10% discount for cash payment from the marked price of a toy and still he makes 20% gain. What is the cost price of the toy which is marked Rs. 800?

- 1) ₹ 650 2) ₹ 600 3) ₹ 625 4) ₹ 700

Ans.

$$\text{Discount} = \frac{10}{100} \times 800 = 80$$

$$\text{So, SP} = 800 - 80 = 720$$

$$\% \text{ Profit} = \frac{\text{SP} - \text{CP}}{\text{CP}} \times 100$$

$$20 = \frac{\text{SP} - \text{CP}}{\text{CP}} \times 100$$

$$\frac{2}{10} = \frac{720 - \text{CP}}{\text{CP}}$$

$$2\text{CP} = 7200 - 10\text{CP}$$

$$12\text{CP} = 7200$$

$$\text{CP} = 600$$

OR

$$\text{Discount} = 80$$

$$\text{SP} = 720$$

20% Profit \Rightarrow ₹ 120 SP for ₹ 100 CP

| | |
|-----|-----|
| SP | CP |
| 120 | 100 |

| | |
|-----|---|
| 720 | ? |
|-----|---|

$$\text{CP} = \frac{720 \times 100}{120} = 600$$

Ex. 7.

If Soham , while selling his 2 cycles at the same price , makes profit of 10% on one cycle & suffers a loss of 10% on the other , then , his overall gain or loss in percent is -

- 1) No profit or No loss \Rightarrow ~~1%~~ 1% profit
- 3) 1 % Loss 4) 5% loss

Ans.

$$x = +10, y = -10$$

$$\begin{aligned} \text{Overall change} &= 10 - 10 - \frac{100}{100} \\ &= -1\% \end{aligned}$$

\Rightarrow 1% Loss

OR

Let $C_1 = 100$ for 10% Profit

$$\Rightarrow S_1 = 110$$

Now $S_2 = 110$ for 10% loss

$$\Rightarrow C_2 = \frac{1100}{9}$$

| | |
|-----|-----|
| 90 | 100 |
| 110 | ? |
| SP | CP |

$$\therefore CP = 100 + \frac{1100}{9} = \frac{2000}{9}$$

$$SP = 110 + 110 = 220$$

$$\text{Now use \% Loss} = \frac{CP - SP}{CP} \times 100 \quad !!$$

Thank You!!