

ATOMIC ENERGY EDUCATION SOCIETY, MUMBAI

CLASS -8 SUBJECT:- MATHEMATICS

CHAPTER 8 :- COMPAIRING QUANTITIES

MODULE 2/3(HANDOUT)

In this module we will discuss about the the **Cost price, Selling price MRP**. Find how to to find **discount profit and loss and percentage profit and loss percentage discount**



In the above figure you see that 3 things are: one is company, second is shopkeeper, and third is customer. Company produces any material and shopkeeper purchases that material and the price at which that purchased any product is known as **cost price**.

Second shopkeeper sells that object to the customer and the price at which the shopkeeper sells that product is known as selling price and this is a three-step process.

NOTE:- For definition of cost price, selling price, MRP we can refer to the PPT of this module.

Cost Price :- Cost at which we purchased any object.

Selling Price :- Cost at which we purchased any object

M.R.P :- Price which is printed on the object and we can't sell any object more than this price according to norms of government of India.

For the basic understanding of this all this concept I will tell you a story.

Suppose a girl purchases a toy of an Iron Man for rupees 450 but after some time she sells it to her friend for rupees 470 because the price printed on that toy is rupees 500.

In this story you can observe that the cost price of the toy is rupees 450 and the selling price of the toy is rupees 470 while the MRP of this device is 500.

Now we observe that what is the profit and loss in this story.

So here Cost price (CP) = ₹450

$$\text{Selling Price(SP)} = ₹470$$

$$\text{MRP} = ₹ 500$$

so basically we try to understand when we get a profit and when we get the us there is a two chances

(i) CP is greater than SP ($CP > SP$)

(ii) CP is less than to SP ($CP < SP$)

These two conditions decided the profit and loss. Basically profit and loss is difference of CP and SP. If CP is less than SP then this condition is known as profit.

$$\text{profit} = \text{SP} - \text{CP}$$

condition number 2 if CP is greater than SP then this condition is known as loss .

$$\text{loss} = \text{CP} - \text{SP}$$

Note loss and profit always calculated at CP it means base quantity is CP and the percentile quantities profit or loss.

In the above story we get a turning point because her friend get to know the actual price of that toy so her friend agreed to purchase only ₹ 400 in this case loss is equal to

$$\text{Loss} = \text{CP} - \text{SP} = ₹ 450 - ₹ 400 = ₹ 50.$$