Profit and Loss

Sanjay's father has a fruits shop. One day his father was writing some calculations on a piece of paper. Sanjay was watching it. The calculations were as shown below.

Item	Bought (in Rs.)	Sold at (in Rs.)
Apples	650	730
Bananas	300	380
Grapes	250	200
Oranges	300	300

His father said -	Today, a profit was made on apples and Bananas and a loss on grapes.
Sanjay asked -	How?
Father -	I sold the apples and bananas at a price which was more than the price at which I bought them so there was a profit on those. But the grapes were sold at a price lower than the price at which I bought them. So there was a loss on those.
Sanjay -	Why did you get less price for the grapes?
Father -	Because some of the grapes were rotten.
Sanjay -	You bought orange for Rs. 300 and sold them for the same price.
Father -	Yes, so there was neither a profit nor a loss on the sale of oranges.

Now you know-

If a shopkeeper sells at a price higher than the buying price a profit is made and if he sells at a price lower than the buying price, a loss is made.

The price at which items are bought is known as cost price and the price at which it is sold is known as selling price.

In the table below, are given the cost price and selling price of certain items. Understand and complete the table.

Cost price	Selling price	Profit, or Loss, ...	Amount in Rs.
145	165		
525	540		
330	330		
480	510		
640	635		

Profit = selling price - cost price

Loss = cost price - selling price

So if we have the cost price and selling price, we can get the profit or the loss incurred.

Example 1 : One shopkeeper bought a fan for Rs. 525 and sold it for Rs. 575, what is his profit or loss?

Solution :

Cost price of the fan = Rs. 525
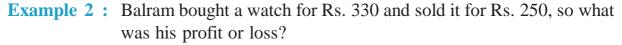
Selling price of the fan = Rs. 575

The selling price is more than the cost price so there was a profit.

As profit = selling price - cost price

= 575 - 525

= Rs. 50

So the shopkeeper made a profit of Rs. 50

Example 2 : Balram bought a watch for Rs. 330 and sold it for Rs. 250, so what was his profit or loss?

Solution : The cost price of the watch = 330

The selling price of the watch = Rs. 250

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Here the cost price is more than the selling price, So Balram incurred a loss.

and as loss = cost price - selling price

= 330 - 250

= Rs. 80

Hence Balram had a loss of Rs. 80.

If we know the cost price of an item and its profit or loss, then could we calculate its selling price? Let us see how-

Example 3 : If the cost price of an item is Rs. 700 and the shopkeeper made a profit of Rs. 50 on selling it, what would be its selling price?

Solution : The cost price is Rs. 700.

Profit made Rs. 50.

Since a profit of Rs. 50 has been made, the selling price should be more than the cost price and we will get it by adding the cost price and profit-

Selling price = cost price + profit

= 700 + 50

= Rs. 750

So the selling price is Rs. 750.

Example 4 : If an item was bought for Rs. 900 and on selling it a loss of Rs. 70 was incurred then find the selling price.

Solution : Cost price - Rs. 900

Loss - Rs. 70

Since an item of Rs. 900 was sold at a loss of Rs. 70 the selling price would be less than the cost price and we shall get it by subtracting the loss from the cost price.

Selling price = Cost price - Loss

= 900 - 70

= Rs. 830

Thus, the selling price of the item would be Rs. 830

Now let us see how can we get the cost price if we are given the selling price along with the profit or loss.

Example 5 : On selling an item for Rs. 560, a shopkeeper makes a profit of Rs. 70, what would be its cost price?

Solution :

Here the selling price   =   Rs. 560

profit   =   Rs. 70

By selling at Rs. 560, a profit of Rs. 70 is made and the cost price will be lesser than the selling price which we would get by subtracting the profit from the selling price.

Hence, cost price   =   selling price - profit

   =   560 - 70

   =   Rs. 490

So the cost price of the item would be Rs. 490

Example 6 : If the selling price of an item is Rs. 480 and a loss of Rs. 56 is incurred, what would be its cost price be?

Solution :

By selling at Rs. 480, a loss of Rs. 56 is made which means the cost price would be more than the selling price.

To find the cost price we have to add the selling price and the loss.

Hence, cost price   =   Selling price + loss

   =   480 + 56

   =   Rs. 536

The cost price of the item is Rs. 536

Exercise

1. **The amount of loss or profit :**

1. Cost price Rs. 136, selling price Rs. 143, profit Rs. 7

2. Cost price Rs. 452, selling price Rs. 430, _____ _____

3. Cost price Rs. 512, selling price Rs. 580, _____ _____

4. Cost price Rs. 750, selling price Rs. 775, _____ _____

5. Cost price Rs. 645, selling price Rs. 650, _____ _____

2. **Fill in the blanks :**

1. Selling price Rs. 725, cost price Rs. 650, so profit or loss _____

2. Cost price Rs. 980, loss Rs. 250, so selling price _____

3. Selling price Rs. 830, profit Rs. 125, so cost price _____

4. Selling price Rs. 675, loss Rs. 50, then cost price _____

5. Cost price Rs. 565, profit Rs. 35, so selling price _____

Statement Sums

1. A trader bought 100 kg. of wheat for Rs. 850 and sold it at the rate of Rs. 95 for 10 kg. so how much profit or loss did he make?

2. Raju bought 20 litre milk for Rs. 200 and sold it for Rs. 12 per litre. What was his profit or loss?

3. Jamuna bought a fan and sold it for Rs. 690 at a loss of Rs. 180. Find the cost price of the fan.

4. Mona bought a clock for Rs. 435 and he wants sell it at a profit of Rs. 55, so what would its selling price be?

5. Sunil sold 5 chairs for Rs. 850. He made a profit of Rs. 100, so what was the cost price of the chairs.

6. Bharti bought a cow for Rs. 3750 and sold it after a few days at a profit of Rs. 150, so what was its selling price?

7. Suresh sold a fan for Rs. 895 at a loss of Rs. 52. What was the cost price of the fan?

8. Geeta bought 5 watches for Rs. 805 and sold three of them for Rs. 182 and two of them for Rs. 138. Did Gopal make profit or did he incur a loss?

9. Deepak bought 5 kg. sugar at the rate of Rs. 20.25 per kg. He sold 3 kg sugar at the rate of Rs. 20 per kg and 2 kg sugar at the rate Rs. 21.30 per kg. Did he make a profit or loss?

10. A shopkeeper bought a sack of rice for Rs. 1250 and sold it at a profit of Rs. 75. What was its selling price?

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