

Answer on Question #42946, Math, Other

Find the profit % and loss % made in each of the following cases;

1) the S.P of 15 articles =C.P of 20 articles

2) S.P of 20 articles= C.P of 15 articles

3)BY selling 20 articles a shopkeeper gains =c.p of 5 articles

Solution:

If the selling price of an article is more than cost price, there is a gain or profit.

Thus, Profit=S.P-C.P

If the cost price of an article is greater than the selling price, the seller suffers a loss.

Thus, Loss=C.P-S.P

Profit and Loss are always calculated with respect to the cost price of the item.

1) the S.P of 15 articles =C.P of 20 articles

CP<SP ,so we have Profit:

15S.P=20C.P : Profit =25%. If an article is sold at a gain 25%, then S.P = 125% of C.P.

2) S.P of 20 articles= C.P of 15 articles

CP>SP, so we have loss.

15C.P=20S.P : loss=25%. If an article is sold at a loss 25%, then S.P = 75% of C.P

3)BY selling 20 articles a shopkeeper gains =c.p of 5 articles

CP>SP, so we have loss.

5C.P=20S.P : loss=75%. If an article is sold at a loss 25%, then S.P = 25% of C.P

Answer: 1) Profit =25%; 2)loss=25%; 3)loss=75%.