



PROFIT AND LOSS

Profit(P) :

The amount gained by selling a product for more than its cost price.

Loss(L) :

The amount the seller incurs after selling the product less than its cost price is mentioned as a loss.

Cost Price (CP) :

The amount paid for a product or commodity to purchase is called a cost price. Also, denoted as CP. This cost price is further classified into two different categories:

- **Fixed Cost:** The fixed cost is constant, it doesn't vary under any circumstances
- **Variable Cost:** It could vary depending on the number of units and other factors

Selling Price (SP) :

The amount for which the product is sold is called the Selling Price. It is usually denoted as SP. Also, sometimes called a sale price.

Marked Price Formula (MP) :

This is basically labelled by shopkeepers to offer a discount to the customers in such a way that,

- **Discount = Marked Price – Selling Price**
- **And Discount Percentage = (Discount/Marked price) x 100**

Profit and Loss Formulas :

Now let us find the profit formula and loss formula.

- The profit or gain is equal to the selling price minus the cost price.
- Loss is equal to the cost price minus the selling price.

Profit or Gain = Selling price – Cost Price

Loss = Cost Price – Selling Price

Profit percentage (P%) = (Profit / Cost Price) x 100

Loss percentage (L%) = (Loss / Cost price) x 100

Profit, $P = SP - CP$; $SP > CP$

Loss, $L = CP - SP$; $CP > SP$

$P\% = (P/CP) \times 100$

$L\% = (L/CP) \times 100$

$SP = \{(100 + P\%)/100\} \times CP$

$SP = \{(100 - L\%)/100\} \times CP$

$CP = \{100/(100 + P\%)\} \times SP$

$CP = \{100/(100 - L\%)\} \times SP$

Discount = $MP - SP$

$SP = MP - \text{Discount}$

PROFIT AND LOSS

Q.1: A shopkeeper purchased a radio for 600. He sold the radio for 720.
What is the per cent profit he earned in the transaction?

- (1) 20% (2) 25% (3) 30% (4) 35% (5) None of these

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PROFIT AND LOSS

Q.1: A shopkeeper purchased a radio for 600. He sold the radio for 720.
What is the per cent profit he earned in the transaction?

- (1) 20% (2) 25% (3) 30% (4) 35% (5) None of these

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PROFIT AND LOSS

Q.2: Ramesh purchased a scooter for 20000. He sold the scooter and earned 12% profit in the transaction. At what price did Ramesh sell the scooter?

- (1) 22200 (2) 22300 (3) 22400 (4) 22500 (5) None of these

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PROFIT AND LOSS

Q.2: Ramesh purchased a scooter for 20000. He sold the scooter and earned 12% profit in the transaction. At what price did Ramesh sell the scooter?

- (1) 22200 (2) 22300 **(3) 22400** (4) 22500 (5) None of these

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PROFIT AND LOSS

Q.3: Rita sold her watch for 700 and got 40% profit. At what price did Rita purchase the watch?

- (1) 600 (2) 640 (3) 540 (4) 500 (5) None of these

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PROFIT AND LOSS

Q.3: Rita sold her watch for 700 and got 40% profit. At what price did Rita purchase the watch?

- (1) 600 (2) 640 (3) 540 **(4) 500** (5) None of these

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PROFIT AND LOSS

Q.4: Sita sold her watch for 900 and incurred 40% loss. At what price did Sita purchase the watch?

- (1) 1600 (2) 1640 (3) 1540 (4) 1500 (5) None of these

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PROFIT AND LOSS

Q.4: Sita sold her watch for 900 and incurred 40% loss. At what price did Sita purchase the watch?

- (1) 1600 (2) 1640 (3) 1540 **(4) 1500** (5) None of these

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PROFIT AND LOSS

Q.5: Alka sold her watch for 480 and incurred 40% loss. In order to obtain a profit of 30%, what should be the selling price?

- (1) 1140 (2) 940 (3) 1040 (4) 1060 (5) None of these

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PROFIT AND LOSS

Q.5: Alka sold her watch for 480 and incurred 40% loss. In order to obtain a profit of 30%, what should be the selling price?

- (1) 1140 (2) 940 **(3) 1040** (4) 1060 (5) None of these

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PROFIT AND LOSS

Q.6: Renu sold her watch for 960 and earned 20% profit. In order to obtain a profit of 60%, what should be the selling price?

- (1) 1280 (2) 1380 (3) 1080 (4) 1180 (5) None of these

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PROFIT AND LOSS

Q.6: Renu sold her watch for 960 and earned 20% profit. In order to obtain a profit of 60%, what should be the selling price?

- (1) 1280 (2) 1380 (3) 1080 (4) 1180 (5) None of these

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PROFIT AND LOSS

Q.7: Dinesh purchased some lemons. He purchased 3 lemons for 2. He sold all the lemons and earned 25% profit. At what rate did he sell all the lemons?

- (1) 4 for 3 (2) 5 for 4 (3) 6 for 5 (4) 7 for 8 (5) None of these

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PROFIT AND LOSS

Q.7: Dinesh purchased some lemons. He purchased 3 lemons for 2. He sold all the lemons and earned 25% profit. At what rate did he sell all the lemons?

- (1) 4 for 3 (2) 5 for 4 **(3) 6 for 5** (4) 7 for 8 (5) None of these

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PROFIT AND LOSS

Q.8: Ritesh purchased some lemons. He purchased 7 lemons for 10. He sold all the lemons and incurred 20% loss. At what rate did he sell all the lemons?

- (1) 35 for 3 (2) 35 for 4 (3) 35 for 6 (4) 35 for 8 (5) None of these

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PROFIT AND LOSS

Q.8: Ritesh purchased some lemons. He purchased 7 lemons for 10. He sold all the lemons and incurred 20% loss. At what rate did he sell all the lemons?

- (1) 35 for 3 (2) 35 for 4 (3) 35 for 6 (4) 35 for 8 (5) None of these

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PROFIT AND LOSS

Q.9: Deepak purchased some lemons. He purchased 5 lemons for 7. He sold all the lemons. If he sold 2 lemons for 3. What is the per cent profit in the whole transaction?

- (1) 5% (2) 6% (3) 7% (4) 8% (5) None of these

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PROFIT AND LOSS

Q.9: Deepak purchased some lemons. He purchased 5 lemons for 7. He sold all the lemons. If he sold 2 lemons for 3. What is the per cent profit in the whole transaction?

- (1) 5% (2) 6% (3) 7% (4) 8% (5) None of these

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PROFIT AND LOSS

Q.10: A person buys 100 toffees at 10 a rupee and 200 toffees at 5 a rupee. He mixes them together and sells at 4 a rupee. Find his per cent profit.

- (1) 20% (2) 25% (3) 40% (4) 50% (5) None of these

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PROFIT AND LOSS

Q.10: A person buys 100 toffees at 10 a rupee and 200 toffees at 5 a rupee. He mixes them together and sells at 4 a rupee. Find his per cent profit.

- (1) 20% (2) 25% (3) 40% **(4) 50%** (5) None of these

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PROFIT AND LOSS

Q.11: The profit earned by selling an article for 832 is equal to the loss incurred when the same article is sold for 448. What should be the sale price of the article for making 50 per cent profit?

- (1) 960 (2) 1060 (3) 1200 (4) 920 (5) None of these

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PROFIT AND LOSS

Q.11: The profit earned by selling an article for 832 is equal to the loss incurred when the same article is sold for 448. What should be the sale price of the article for making 50 per cent profit?

- (1) 960 (2) 1060 (3) 1200 (4) 920 (5) None of these

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PROFIT AND LOSS

Q.12: The profit earned by selling an article for 900 is double the loss incurred when the same article is sold for 600. What should be the sale price of the article for making 40 per cent profit?

- (1) 980 (2) 1080 (3) 1200 (4) 700 (5) None of these

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PROFIT AND LOSS

Q.12: The profit earned by selling an article for 900 is double the loss incurred when the same article is sold for 600. What should be the sale price of the article for making 40 per cent profit?

- (1) 980 (2) 1080 (3) 1200 (4) 700 (5) None of these

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PROFIT AND LOSS

Q.13: A dishonest fruit vendor professes to sell his goods at cost price but he uses a weight of 800 g. for the kg. weight. Find his gain per cent.

- (1) 20% (2) 40% (3) 25% (4) 50% (5) None of these

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PROFIT AND LOSS

Q.13: A dishonest fruit vendor professes to sell his goods at cost price but he uses a weight of 800 g. for the kg. weight. Find his gain per cent.

- (1) 20% (2) 40% (3) 25% (4) 50% (5) None of these

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PROFIT AND LOSS

Q.14: A dishonest fruit vendor professes to sell his goods at a profit of 10% but he uses a weight of 16 gram for 20 gram. Find his gain per cent.

- (1) 14% (2) 24% (3) 35% (4) 37.5% (5) None of these

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PROFIT AND LOSS

Q.14: A dishonest fruit vendor professes to sell his goods at a profit of 10% but he uses a weight of 16 gram for 20 gram. Find his gain per cent.

- (1) 14% (2) 24% (3) 35% **(4) 37.5%** (5) None of these

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PROFIT AND LOSS

Q.15: A grocer sells rice at a profit of 20% and uses a weight which is 25% less. Find his total percentage gain.

- (1) 50% (2) 55% (3) 60% (4) 65% (5) None of these

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PROFIT AND LOSS

Q.15: A grocer sells rice at a profit of 20% and uses a weight which is 25% less. Find his total percentage gain.

- (1) 50% (2) 55% (3) 60% (4) 65% (5) None of these

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PROFIT AND LOSS

Q.16: A cloth dealer professes to lose 20% on a certain garments, but he uses a metre having a length of 90 cm only and charges for the metre. Find his gain or loss per cent.

- (1) $11\frac{1}{9}\%$ gain (2) $11\frac{1}{9}\%$ loss (3) 12.5% loss (4) 12.5% gain
(5) None of these

PROFIT AND LOSS

Q.16: A cloth dealer professes to lose 20% on a certain garments, but he uses a metre having a length of 90 cm only and charges for the metre. Find his gain or loss per cent.

- (1) $11\frac{1}{9}\%$ gain (2) $11\frac{1}{9}\%$ loss (3) 12.5% loss (4) 12.5% gain
(5) None of these

PROFIT AND LOSS

Q.17: A tradesman defrauds to the extent of 10% in buying goods and also defrauds to the extent of 10% in selling. His gain per cent is—

- (1) 21% gain (2) 19% gain (3) 20% gain (4) $22\frac{2}{9}\%$ gain
(5) None of these

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PROFIT AND LOSS

Q.17: A tradesman defrauds to the extent of 10% in buying goods and also defrauds to the extent of 10% in selling. His gain per cent is—

- (1) 21% gain (2) 19% gain (3) 20% gain (4) $22\frac{2}{9}\%$ gain
(5) None of these

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PROFIT AND LOSS

Q.18: Rishav marks his goods 30% above the cost price but allows 30% discount for cash payment. If he sells the article for 2730, find his cost price.
(1) 3500 (2) 2800 (3) 2950 (4) 3000 (5) None of these

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PROFIT AND LOSS

Q.18: Rishav marks his goods 30% above the cost price but allows 30% discount for cash payment. If he sells the article for 2730, find his cost price.
(1) 3500 (2) 2800 (3) 2950 **(4) 3000** (5) None of these

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PROFIT AND LOSS

Q.19: A dealer wants to earn 20% profit on an article after offering 25% discount to the customer. If the cost price of an item is 300, then the mark price (label price) of the article would be—

- (1) 480 (2) 435 (3) 580 (4) 600 (5) None of these

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PROFIT AND LOSS

Q.19: A dealer wants to earn 20% profit on an article after offering 25% discount to the customer. If the cost price of an item is 300, then the mark price (label price) of the article would be—

- (1) 480 (2) 435 (3) 580 (4) 600 (5) None of these

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PROFIT AND LOSS

Q.20: If a discount of 20% is given on the marked price of an article, the shopkeeper gets a profit of 60%. Find his per cent profit if he offers a discount of 25% on the same article.

- (1) 20% (2) 30% (3) 50% (4) 75% (5) None of these

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PROFIT AND LOSS

Q.20: If a discount of 20% is given on the marked price of an article, the shopkeeper gets a profit of 60%. Find his per cent profit if he offers a discount of 25% on the same article.

- (1) 20% (2) 30% (3) 50% (4) 75% (5) None of these

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PROFIT AND LOSS

Q.21: What will be the percentage profit after selling an article at label price if there is a loss of 20% when the article is sold at one third of the label price?

- (1) 20% (2) 80% (3) 75% (4) 60% (5) None of these

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PROFIT AND LOSS

Q.21: What will be the percentage profit after selling an article at label price if there is a loss of 20% when the article is sold at one third of the label price?

- (1) 20% (2) 80% (3) 75% (4) 60% (5) None of these

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PROFIT AND LOSS

Q.22: I sell 12 articles for the same money as I paid for 10. What is my loss in per cent?

- (1) 20% (2) 25% (3) 30% (4) 35% (5) None of these

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PROFIT AND LOSS

Q.22: I sell 12 articles for the same money as I paid for 10. What is my loss in per cent?

- (1) 20% (2) 25% (3) 30% (4) 35% (5) None of these

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PROFIT AND LOSS

Q.23: By selling 75 meters of cloth, I gain the selling price of 25 meters. Find the gain per cent.

- (1) $33\frac{1}{3}\%$ (2) 50% (3) 25% (4) 45% (5) None of these

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PROFIT AND LOSS

Q.23: By selling 75 meters of cloth, I gain the selling price of 25 meters. Find the gain per cent.

- (1) $33\frac{1}{3}\%$ (2) **50%** (3) 25% (4) 45% (5) None of these

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PROFIT AND LOSS

Q.24: A chair was sold at a loss of 10 per cent. If it was sold for 84 more, there would have been a gain of 4 per cent. For how much was the chair sold?

- (1) 600 (2) 640 (3) 540 (4) 500 (5) None of these

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PROFIT AND LOSS

Q.24: A chair was sold at a loss of 10 per cent. If it was sold for 84 more, there would have been a gain of 4 per cent. For how much was the chair sold?

- (1) 600 (2) 640 (3) 540 (4) 500 (5) None of these

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PROFIT AND LOSS

Q.25: An article is sold at 50% profit. If its CP and SP are increased by 32 and 12 respectively, the percentage of profit becomes 10%. Find the cost price.

- (1) 58 (2) 60 (3) 68 (4) 54 (5)
None of these

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PROFIT AND LOSS

Q.25: An article is sold at 50% profit. If its CP and SP are increased by 32 and 12 respectively, the percentage of profit becomes 10%. Find the cost price.

- (1) 58 (2) 60 (3) 68 (4) 54 (5)
None of these

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PROFIT AND LOSS

Q.26: Two chairs and three tables cost 1025 and three chairs and two tables cost 1100. What is the difference between the cost of one table and that of one chair?

- (1) 75 (2) 35 (3) 125 (4) 100 (5) None of these

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PROFIT AND LOSS

Q.26: Two chairs and three tables cost 1025 and three chairs and two tables cost 1100. What is the difference between the cost of one table and that of one chair?

- (1) 75 (2) 35 (3) 125 (4) 100 (5) None of these

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PROFIT AND LOSS

Q.27: A man buys two horses for 1550. He sells one so as to lose 23% and the other so as to gain 27%. On the whole he neither gains nor loses. What does each horse cost?

- (1) 807, 743 (2) 817, 733 (3) 827, 723 (4) 837, 713
(5) None of these

PROFIT AND LOSS

Q.27: A man buys two horses for 1550. He sells one so as to lose 23% and the other so as to gain 27%. On the whole he neither gains nor loses. What does each horse cost?

- (1) 807, 743 (2) 817, 733 (3) 827, 723 **(4) 837, 713**
(5) None of these

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PROFIT AND LOSS

Q.28: A person bought two watches for 960. He sold one at a loss of 20% and the other at a gain of 60% and he found that each watch was sold at the same price. Find the cost price of two watches.

- (1) 640, 320 (2) 540, 420 (3) 440, 520 (4) 650, 310
(5) None of these

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PROFIT AND LOSS

Q.28: A person bought two watches for 960. He sold one at a loss of 20% and the other at a gain of 60% and he found that each watch was sold at the same price. Find the cost price of two watches.

- (1) 640, 320 (2) 540, 420 (3) 440, 520 (4) 650, 310
(5) None of these

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PROFIT AND LOSS

Q.29: A man sells two articles, each for the same price 550. He earns 20% profit on the first and incurs 20% loss on the second. What would be his approximate overall per cent profit or percent loss?

- (1) 4% gain (2) 4% loss (3) 4.4% gain (4) 4.4% loss
- (5) None of these

PROFIT AND LOSS

Q.29: A man sells two articles, each for the same price 550. He earns 20% profit on the first and incurs 20% loss on the second. What would be his approximate overall per cent profit or percent loss?

- (1) 4% gain **(2) 4% loss** (3) 4.4% gain (4) 4.4% loss
- (5) None of these

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PROFIT AND LOSS

Q.30: A man purchases two articles, each for the same price 600. He earns 20% profit on the first and incurs 20% loss on the second. What would be his approximate overall per cent profit or percent loss?

- (1) 4% gain (2) 4% loss (3) 4.4% gain (4) 4.4% loss
(5) None of these

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PROFIT AND LOSS

Q.30: A man purchases two articles, each for the same price 600. He earns 20% profit on the first and incurs 20% loss on the second. What would be his approximate overall per cent profit or percent loss?

- (1) 4% gain (2) 4% loss (3) 4.4% gain (4) 4.4% loss
- (5) None of these

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PROFIT AND LOSS

Q.31: A man sells two horses for 11900. The cost price of the first is equal to the selling price of the second. If the first is sold at 30% loss and the second at 25% gain, what is his total gain or loss (in rupees)?

- (1) 600 loss (2) 700 loss (3) 750 gain (4) 700 gain
(5) None of these

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PROFIT AND LOSS

Q.31: A man sells two horses for 11900. The cost price of the first is equal to the selling price of the second. If the first is sold at 30% loss and the second at 25% gain, what is his total gain or loss (in rupees)?

- (1) 600 loss (2) 700 loss (3) 750 gain (4) 700 gain
(5) None of these

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PROFIT AND LOSS

Q.32: A man bought a chair and sold it at a gain of 10%. If he had bought it at 20% less and sold it for 10 more, he would have gained 40%. Find the cost price of the chair.

- (1) 500 (2) 600 (3) 550 (4) 650 (5) None of these

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PROFIT AND LOSS

Q.32: A man bought a chair and sold it at a gain of 10%. If he had bought it at 20% less and sold it for 10 more, he would have gained 40%. Find the cost price of the chair.

- (1) 500 (2) 600 (3) 550 (4) 650 (5) None of these

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PROFIT AND LOSS

Q.33: 20 kg of potato costs as much as 5 kg of tomato, 12 kg tomato costs as much as 30 kg of onion, 15 kg of onion costs as much as 18 kg of cabbage. If 10 kg of cabbage costs 50. What would be the cost of 24 kg of potato?

- (1) 90 (2) 72 (3) 108 (4) 96 (5) None of these

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PROFIT AND LOSS

Q.33: 20 kg of potato costs as much as 5 kg of tomato, 12 kg tomato costs as much as 30 kg of onion, 15 kg of onion costs as much as 18 kg of cabbage. If 10 kg of cabbage costs 50. What would be the cost of 24 kg of potato?

- (1) 90 (2) 72 (3) 108 (4) 96 (5) None of these

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PROFIT AND LOSS

Q.34: A horse worth 8000 is sold by A to B at 20% loss. B sells the horse back to A at 20% gain. Find the value of loss amount.

- (1) 1380 (2) 2880 (3) 1180 (4) 1280 (5) None of these

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PROFIT AND LOSS

Q.34: A horse worth 8000 is sold by A to B at 20% loss. B sells the horse back to A at 20% gain. Find the value of loss amount.

- (1) 1380 (2) 2880 (3) 1180 **(4) 1280** (5) None of these

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PROFIT AND LOSS

Q.35: A person sells his table at a profit of 25% and the chair at a loss of 20% but on the whole, he gains 18. On the other hand, if he sells the table at a loss of 20% and the chair at a profit of 25% then he neither gains nor loses. Find the cost price of the table and the chair.

- (1) 200, 160 (2) 160, 200 (3) 250, 180 (4) 210, 170
(5) None of these

PROFIT AND LOSS

Q.35: A person sells his table at a profit of 25% and the chair at a loss of 20% but on the whole, he gains 18. On the other hand, if he sells the table at a loss of 20% and the chair at a profit of 25% then he neither gains nor loses. Find the cost price of the table and the chair.

- (1) 200, 160 (2) 160, 200 (3) 250, 180 (4) 210, 170
(5) None of these

THANK YOU



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