



# T I C E

## The Institute of Career Excellence

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**Q1.**

A person buys 3 articles for ₹1200 and sells them for ₹500 each. What is the profit percentage?

- a) 20%    b) 25%    c) 30%    d) 50%

**Answer:** b) 25%

**Explanation:**

Total CP = ₹1200

Total SP =  $3 \times ₹500 = ₹1500$

Profit = ₹1500 - ₹1200 = ₹300

Profit % =  $(300 / 1200) \times 100 = 25\%$

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**Q2.**

By selling a bat for ₹690, a shopkeeper gains 15%. What would be the selling price to gain 25%?

- a) ₹720    b) ₹750    c) ₹770    d) ₹800

**Answer:** b) ₹750

**Explanation:**

15% gain  $\Rightarrow$  SP = ₹690 = 115% of CP

CP = ₹690 / 1.15 = ₹600

To gain 25%  $\Rightarrow$  SP = ₹600  $\times$  1.25 = **₹750**

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**Q3.**

A man gains 20% by selling a chair for ₹600. What is the cost price?

- a) ₹500    b) ₹520    c) ₹480    d) ₹550

**Answer:** a) ₹500

**Explanation:**

SP = ₹600 = 120% of CP

CP = ₹600 / 1.2 = **₹500**

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**Q4.**

An item is sold at ₹828 after two successive discounts of 10% and 8%. What is the marked price?

- a) ₹1000    b) ₹1050    c) ₹1025    d) ₹980

**Answer:** a) ₹1000

**Explanation:**

Let MP = x

$$x \times 0.9 \times 0.92 = ₹828$$

$$x \times 0.828 = ₹828 \Rightarrow x = ₹828 / 0.828 = \mathbf{₹1000}$$

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**Q5.**

A man marks a product 60% above its cost and gives a discount of 25%. What is his profit percentage?

- a) 20%    b) 25%    c) 30%    d) 35%

**Answer:** a) 20%

**Explanation:**

Let CP = ₹100  $\Rightarrow$  MP = ₹160

After 25% discount  $\Rightarrow$  SP = ₹160  $\times$  0.75 = ₹120

Profit = ₹120 - ₹100 = ₹20  $\Rightarrow$  Profit % = **20%**

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**Q6.**

By selling a product for ₹2400, a man incurs a 20% loss. At what price should he sell it to gain 25%?

- a) ₹3000    b) ₹3200    c) ₹3750    d) ₹4000

**Answer:** c) ₹3750

**Explanation:**

$$CP = 2400 / 0.8 = ₹3000$$

$$\text{For 25\% gain: SP} = 3000 \times 1.25 = ₹3750$$

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**Q7.**

If an article is sold at the loss of 34.8% instead of 17.8%, then the seller gets ₹19.50 less. The cost price of the product is:

**Options:**

- a) ₹300.7
- b) ₹330.5
- c) ₹331.5
- d) ₹114.7

**Answer:** d) ₹114.7

**Explanation:**

Difference in loss =  $34.8 - 17.8 = 17\%$

$17\%$  of CP = ₹19.50  $\Rightarrow$  CP =  $19.5 / 0.17 = ₹114.7$

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**Q8.**

A man sells an article at 20% profit. If he had sold it for ₹200 more, he would have gained 40%. What is the cost price?

- a) ₹800
- b) ₹1000
- c) ₹1200
- d) ₹1600

**Answer:** b) ₹1000

**Explanation:**

Let CP =  $x$

$1.4x - 1.2x = 0.2x = ₹200 \Rightarrow x = ₹1000$

**Q9.**

A shopkeeper bought 15 kg rice at ₹9.50/kg and 25 kg rice at ₹7.25/kg. He sold the mixture at ₹10.50/kg. His profit is:

**Options:**

- a) ₹105.2
- b) ₹96.25
- c) ₹108.45
- d) ₹95

**Answer:** b) ₹96.25

**Explanation:**

Total CP =  $15 \times 9.5 + 25 \times 7.25 = ₹323.75$

Total SP =  $40 \times 10.5 = ₹420$

Profit =  $420 - 323.75 = ₹96.25$

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**Q10.**

An article is marked 30% above cost and sold with two successive discounts of 10% and 5%. Find the profit percentage.

- a) 11.15%    b) 12.5%    c) 14%    d) 13.5%

**Answer:** a) 11.15%

**Explanation:**

$$CP = ₹100 \Rightarrow MP = ₹130$$

$$SP = 130 \times 0.9 \times 0.95 = ₹111.15$$

$$\text{Profit} = ₹11.15 \Rightarrow \text{Profit \%} = 11.15\%$$

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**Q11.**

A trader marks his goods 40% above cost and allows a discount of 10%. Find his profit percentage.

- a) 26%    b) 28%    c) 30%    d) 25%

**Answer:** a) 26%

**Explanation:**

$$CP = ₹100 \Rightarrow MP = ₹140$$

$$SP = 140 \times 0.9 = ₹126$$

$$\text{Profit} = ₹26 \Rightarrow \text{Profit \%} = 26\%$$

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**Q12.**

An article is sold at 20% profit. If it had been sold for ₹80 more, the profit would have been 30%. Find the cost price.

- a) ₹600    b) ₹700    c) ₹800    d) ₹900

**Answer:** c) ₹800

**Explanation:**

$$\text{Let } CP = x$$

$$1.2x + 80 = 1.3x \Rightarrow 0.1x = 80 \Rightarrow x = ₹800$$

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**Q13.**

A product is sold at a 25% discount and yet a 20% profit is made. Find the ratio of marked price to cost price.

- a) 8:5    b) 5:4    c) 4:3    d) 6:5

**Answer:** a) 8:5

**Explanation:**

$$CP = ₹100 \Rightarrow SP = ₹120$$

$$SP = 75\% \text{ of } MP \Rightarrow MP = ₹120 / 0.75 = ₹160$$

$$MP : CP = 160 : 100 = 8 : 5$$

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#### Q14.

A trader purchased an old bicycle for ₹480. He spent 20% of the cost on repairs. He wishes to earn a net profit of ₹144 on selling this bicycle. By what percent should he hike the original purchase price?

#### Options:

- a) 40
- b) 45
- c) 43
- d) 50

**Answer:** d) 50

#### Explanation:

$$\text{Cost of repairs} = 20\% \text{ of } ₹480 = ₹96$$

$$\text{Total cost} = ₹480 + ₹96 = ₹576$$

$$\text{He wants a profit of } ₹144 \rightarrow SP = ₹576 + ₹144 = ₹720$$

$$\text{Hike over original price} = ₹720 - ₹480 = ₹240$$

$$\text{Hike \%} = (240 \div 480) \times 100 = \mathbf{50\%}$$

#### Q15.

A trader sells an item at 10% profit. If he had bought it for 10% less and sold it for ₹20 more, his profit would have been 25%. What was the original cost price?

- a) ₹600
- b) ₹700
- c) ₹800
- d) ₹900

**Answer:** c) ₹800

#### Explanation:

$$\text{Let original CP} = ₹x$$

$$SP = 1.1x$$

$$\text{New CP} = 0.9x, \text{ New SP} = 1.1x + 20$$

$$\Rightarrow 1.1x + 20 = 1.125x \Rightarrow 0.025x = 20 \Rightarrow x = ₹800$$

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#### Q16.

A man bought an article for ₹1600. He sold it at 10% loss and then bought it back at 20% less than he sold it for. Finally, he sold it for ₹1800. What is the overall gain?

- a) ₹448
- b) ₹488
- c) ₹520
- d) ₹540

**Answer:** b) ₹488

**Explanation:**

First sale:  $SP = 1600 \times 0.9 = ₹1440$

Rebought at  $1440 \times 0.8 = ₹1152$

Final sale = ₹1800

Net gain =  $-160 + 648 = ₹488$

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**Q17.**

By selling an item for ₹720, a trader gains 20%. What is the cost price?

- a) ₹580    b) ₹600    c) ₹620    d) ₹640

**Answer:** b) ₹600

**Explanation:**

$SP = ₹720$ , Profit = 20%

$CP = 720 / 1.2 = ₹600$

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**Q18.**

A vendor sells bananas at ₹5 each and gains 25%. What is the cost price per banana?

- a) ₹4.00    b) ₹4.20    c) ₹4.25    d) ₹4.50

**Answer:** a) ₹4.00

**Explanation:**

$SP = ₹5$ , Profit = 25%  $\Rightarrow CP = 5 / 1.25 = ₹4.00$

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**Q19.**

A man sells two items at ₹500 each. On one, he gains 20%, and on the other, he loses 20%.

What is the net result?

- a) 2% loss    b) 3% loss    c) 4% loss    d) No loss or gain

**Answer:** c) 4% loss

**Explanation:**

Net loss % =  $(20^2 / 100) = 400 / 100 = 4\%$  loss

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**Q20.**

On selling a shirt at 80% of the marked price, a trader makes a 20% profit. How much percent above cost is the marked price?

- a) 40%    b) 50%    c) 60%    d) 70%

**Answer:** b) 50%

**Explanation:**

Let  $CP = ₹100 \Rightarrow SP = ₹120$

$0.8 \times MP = 120 \Rightarrow MP = 150 \Rightarrow 50\%$  above CP

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**Q21.**

A product is marked ₹1200. After successive discounts of 10% and 15%, what is the final selling price?

- a) ₹900    b) ₹918    c) ₹960    d) ₹980

**Answer:** b) ₹918

**Explanation:**

$$SP = 1200 \times 0.9 \times 0.85 = ₹918$$

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**Q22.**

A fruit seller sells 30 apples at the cost price of 25 apples. What is his profit percentage?

- a) 16.66%    b) 20%    c) 25%    d) 30%

**Answer:** b) 20%

**Explanation:**

$$CP = ₹25, SP = ₹30 \Rightarrow \text{Profit \%} = (5 / 25) \times 100 = 20\%$$

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**Q23.**

A man sells two articles for ₹1200 each. On one, he gains 20% and on the other, he loses 20%. What is the overall result?

- a) ₹80 loss    b) ₹100 loss    c) ₹120 loss    d) No loss, no gain

**Answer:** b) ₹100 loss

**Explanation:**

$$CP_1 = ₹1200 / 1.2 = ₹1000$$

$$CP_2 = ₹1200 / 0.8 = ₹1500$$

$$\text{Total CP} = ₹1000 + ₹1500 = ₹2500$$

$$\text{Total SP} = ₹1200 + ₹1200 = ₹2400$$

$$\text{Loss} = ₹100$$

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**Q24.**

A trader gains 20% on selling a product. Had he sold it for ₹100 more, his gain would have been 30%. What is the cost price?

- a) ₹800    b) ₹900    c) ₹1000    d) ₹1100

**Answer:** c) ₹1000

**Explanation:**

$$\text{Let CP} = ₹x$$

$$1.3x - 1.2x = ₹100 \Rightarrow 0.1x = ₹100 \Rightarrow x = ₹1000$$

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**Q25.**

A dishonest dealer sells goods at cost price but uses a false weight of 960 g instead of 1 kg. What is his profit percentage?

- a) 4.16%    b) 5.26%    c) 6.25%    d) 7.5%

**Answer:** a) 4.16%

**Explanation:**

CP of 960 g = ₹96

SP = ₹100

Profit = ₹4  $\Rightarrow$  Profit % =  $(4 / 96) \times 100 = 4.16\%$

**Q26.**

A dealer marks goods at 100% above cost and gives two successive discounts of 15% and 50%. What is the overall loss percentage?

a) 10%    b) 15%    c) 20%    d) 25%

**Answer:** b) 15%

**Explanation:**

CP = ₹100  $\Rightarrow$  MP = ₹200

SP = ₹200  $\times$  0.85  $\times$  0.50 = ₹85

Loss = ₹15  $\Rightarrow$  Loss % =  $(15 / 100) \times 100 = 15\%$

**Q27.**

A man sells two items, one at 25% gain and the other at 25% loss. If both are sold at the same price, what is the net result?

a) No gain, no loss    b) 6.25% gain    c) 6.25% loss    d) 12.5% loss

**Answer:** c) 6.25% loss

**Explanation:**

Use formula: Loss % =  $(x^2 / 100) = (25^2 / 100) = 6.25\%$

**Q28.**

A trader sells a product for ₹750, making a 25% profit on the cost price. What is the cost price?

a) ₹600    b) ₹625    c) ₹650    d) ₹700

**Answer:** a) ₹600

**Explanation:**

SP = 1.25  $\times$  CP  $\Rightarrow$  750 = 1.25x  $\Rightarrow$  x = ₹600

**Q29.**

A person marks his goods 60% above cost and gives two successive discounts of 25% and 20%. What is the net profit or loss percentage?

a) 4% loss    b) 5% loss    c) 6% loss    d) 3% loss

**Answer:** a) 4% loss

**Explanation:**

CP = ₹100  $\Rightarrow$  MP = ₹160

SP = 160  $\times$  0.75  $\times$  0.8 = ₹96

Loss = ₹4  $\Rightarrow$  Loss % = 4%

**Q30.**

A man sold one-third of his stock at a profit of 25%, another third at a loss of 10%, and the remaining at no gain or loss. Find the overall profit or loss percentage.

- a) 2.5% gain    b) 3% profit    c) 5% profit    d) 1% loss

**Answer:** c) 5% profit

**Explanation:**

Let total stock worth = ₹300

1/3 at 25% profit → ₹100 → Gain = ₹25

1/3 at 10% loss → ₹100 → Loss = ₹10

1/3 at 0% gain/loss → ₹100 → Gain = ₹0

Net Gain = ₹15 ⇒ % =  $(15 / 300) \times 100 = 5\%$