



Date : 10th Jan 2024

Quantitative Aptitude – Profit and Loss

English

Q:1 By selling 150 articles, a man gains a profit equal to the cost price of 30 articles. Find the profit percentage.

1. 18%
2. 27%
3. 20%
4. 25%

Q:2 A shopkeeper offers two plans of discount. In scheme A, two successive discounts of 25% and 16% are offered, and in scheme B, 38% of a one-time discount is offered. If the marked price is Rs 200, what is the difference between the discounted amount in Scheme I and Scheme II?

1. Rs 6, discount amount of scheme I being higher
2. Rs 6, discount amount of scheme II being higher
3. Rs 2, discount amount of scheme I being higher
4. Rs 2, discount amount of scheme II being higher

Q:3 Akash went to an electric shop and bought an inverter at a discount of 12%, and then he sold the inverter for Rs. 4590 and still made a profit of 20%. Find the discount.

1. Rs.221.50
2. Rs.400.52
3. Rs.521.59
4. Rs.520.50

Q:4 A shopkeeper sold a cellphone for Rs 12,500. If the ratio of cost price to selling price is 4 : 5, find his profit percentage.

1. 20%
2. 25%
3. 30%
4. 28%

Q:5 What is the selling price of the mangoes having a cost price of Rs 351 if 10% profit is earned after selling?

1. Rs 385.9
2. Rs 334.9
3. Rs 386.1
4. Rs 387.1

Q:6 By selling an article for Rs. 1984, the shopkeeper gets a profit of 28%. Find the cost price of an article.

1. Rs 1550
2. Rs 1720

3. Rs 1628

4. Rs 1116

Q:7 A dishonest shopkeeper uses a weight of 905 gm instead of 1 kg and sells rice at its cost price. What will be his profit percentage on selling 8 kg rice?

1. 10.5%
2. 12.3%
3. 14.5%
4. 21.3%

Q:8 A shopkeeper gives two types of discounts to the customer. One is a successive discount of 30% and 20%, and the other is 50%. What is the percent difference between the two types of discounts?

1. 4%
2. 6%
3. 8%
4. No percent difference

Q:9 Rahul went to a grocery store to buy some pulses. The shopkeeper had a reputation for being dishonest. Instead of weighing the pulses accurately, he used a faulty weighing scale. Rahul ordered 2 kg of lentils, but the shopkeeper cleverly manipulated the scale. The shopkeeper's scale showed 2 kg, but it was only 1.5 kg. If the actual price of lentils is Rs. 120 per kg, and the shopkeeper offers a 10% discount, calculate how much extra money Rahul paid due to the dishonest shopkeeper.

1. Rs. 40
2. Rs. 45
3. Rs. 37
4. Rs. 36

Q:10 A vendor marks up the price by 33.33% but still gets 20% profit after selling it at a specific discount. Find the discount percentage.

1. 10%
2. 15%
3. 16.16%
4. 18.18%



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Answer Key

1. (3)	2. (4)	3. (3)	4. (2)	5. (3)
6. (1)	7. (1)	8. (2)	9. (4)	10. (1)

Answers and Solutions

Q:1 The correct answer is **option 3** i.e. **20%**.

A man gets a profit of 30 articles after selling a total of 150 articles

Profit = Selling price - Cost Price

According to the question,

$$30 \text{ CP} = 150 \text{ SP} - 150 \text{ CP}$$

$$180 \text{ CP} = 150 \text{ SP}$$

$$\text{CP/SP} = 5/6$$

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

$$= (6 - 5)/5 \times 100$$

$$= 100/5 = 20\%$$

Q:2 The correct answer is **Option 4** i.e. **Rs 2, discount amount of scheme II being higher.**

In Scheme I:

Effective discount on two successive discounts = $(x + y - xy/100)$

$$\Rightarrow (25 + 16 - 25 \times 16/100)$$

$$\Rightarrow 25 + 16 - 4$$

$$\Rightarrow 37\%$$

Difference in the discount% in scheme I and II = 38 - 37 = 1%

$$1\% \text{ of M.P.} = 1/100 \times 200 = \text{Rs } 2$$

So, Scheme II offers more discounts.

Q:3 The correct answer is **Option 3** i.e. **Rs.521.59.**

Let the M.P. of inverter = Rs.x

C.P. in which Akash bought the inverter

$$\Rightarrow (4590 \times 100)/120 = \text{Rs. } 3825$$

Then,

$$\text{Marked price} \times (100 - \text{discount \%})/100 = \text{Cost price}$$

$$\Rightarrow x \times 88/100 = 3825$$

$$\Rightarrow x = (3825 \times 100)/88 = 4346.59$$

$$\text{Discount} = (4346.59 - 3825) = \text{Rs. } 521.59$$

Q:4 The correct answer is **option 2** i.e. **25%**.

Profit = Selling price - Cost price

$$\text{Profit\%} = (\text{profit} \times 100)/\text{Cost price}$$

$$\text{Selling price} = 5x$$

$$\text{Cost price} = 4x$$

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

$$\text{Profit\%} = (5x - 4x)/4x \times 100 = x/4x \times 100 = 25\%$$

Q:5 The correct answer is **option 3** i.e. **Rs 386.1.**

Cost price of the mango = Rs 350

Profit = 10%

$$\text{Selling price} = \text{Cost price} \times (100 + \text{profit \%})/100$$

$$= 350 \times (100 + 10\%)/100$$

$$= 350 \times 110/100$$

$$\text{The selling price of the mangoes} = \text{Rs } 386.1$$

Q:6 The correct answer is **Option 1** i.e. **Rs 1550.**

$$\text{C.P.} = (\text{SP} \times 100)/(100 + \text{P\%})$$

$$\text{S.P.} = 1984$$

$$\text{Profit \%} = 28\%$$

$$\text{C.P.} = (1984 \times 100)/(100 + 28\%)$$

$$\Rightarrow (1984/128)100 = 1550$$

$$\text{C.P.} = \text{Rs. } 1550$$

Q:7 The correct answer is **Option 1** i.e. **10.5%.**

Original weight of rice = 1 kg = 1000 gm

Let cost of 1 gm is Rs. 1

Cost price of 1000 gm = Rs. 1000

The selling price of 905 gm = Rs. 1000 (\because giving only 905 gm instead of 1000 gm)

$$\text{Profit} = [\text{error} / (\text{true weight})] \times 100$$

$$\text{Profit} = [(1000 - 905)/905] \times 100 = (95/905) \times 100 = 10.5\%$$

So, the profit percentage = 10.5%

Q:8 The correct answer is **option 2** i.e. **6%.**

$$\text{Successive discount} = x + y - xy/100 = 30 + 20 - 600/100 = 50 - 6 = 44\%$$

The other discount = 50%

$$\text{Hence, Difference} = 50 - 44 = 6\%$$

Q:9 The correct answer is **Option 4** i.e. **Rs. 36.**

Rahul ordered 2 kg, but the shopkeeper provided only 1.5 kg

The actual cost of 1.5 kg of lentils = Rs. 120 \times 1.5 = Rs.180

The shopkeeper offers a 10% discount on the actual cost.

After 10% discount, the cost price of the 2 kg lentils by Rahul = $2 \times 120 \times (100 - 10)/100 = 216$

So, the extra money Rahul paid was due to the



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dishonest shopkeeper = $216 - 180 = \text{Rs } 36$

Q:10 The correct answer is **option 1** i.e. **10%**.

Let the cost price is $300x$

After marking up the price by 33.33%,

$\Rightarrow 300x \times \left(\frac{4}{3}\right) = 400x$

The profit is 20%

Selling price = $1.2 \times 300x \Rightarrow 360x$

Discount = $400x - 360x \Rightarrow 40x$

Discount% = $40x/400x \times 100 \Rightarrow 10\%$

