Profit and Loss Formula and Tricks: Complete Guide with Examples & Practice

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Whether you're preparing for competitive exams or want to understand basic business calculations, profit and loss formula and tricks are must-know concepts. These topics appear regularly in exams like SSC, banking, railways, and even in real-life situations like shopping, sales, and investments. In this post, we'll cover all important profit and loss formulas, shortcut tricks, solved examples, and practice questions with answers. Everything is explained in easy English with tables and charts for better understanding.

01) What is Profit and Loss?

Profit and Loss refer to the gain or loss made in a transaction. It is based on the **Cost Price (CP)** and **Selling Price (SP)** of an item.

- **Profit**: When Selling Price > Cost Price
- **Loss**: When Cost Price > Selling Price

These terms are very useful for calculating margins, discounts, and total revenue.

02) Key Terms You Should Know:

Term	Meaning
Cost Price (CP)	The price at which an item is bought
Selling Price (SP)	The price at which the item is sold
Profit	SP – CP
Loss	CP – SP
Profit %	(Profit / CP) × 100
Loss %	(Loss / CP) × 100
Marked Price (MP)	Price tagged on the product before discount
Discount	MP – SP

Term	Meaning
Discount %	(Discount / MP) × 100

03) Profit and Loss Formula and Tricks:

Here are all the important **Profit and Loss Formula and Tricks** in one place:

🔹 Basic Formulas

1. **Profit = SP – CP**
2. **Loss = CP – SP**
3. **Profit % = (Profit / CP) × 100**
4. **Loss % = (Loss / CP) × 100**
5. **SP = CP × (1 + Profit% / 100)**
6. **SP = CP × (1 – Loss% / 100)**
7. **CP = SP / (1 + Profit% / 100)**
8. **CP = SP / (1 – Loss% / 100)**

🔹 Trick for Finding % Profit or Loss When CP and SP Are Given

- If SP > CP:
  Profit % = [(SP – CP) / CP] × 100
- If CP > SP:
  Loss % = [(CP – SP) / CP] × 100

04) Profit and Loss Tricks for Exams:

Here are some **Profit and Loss Formula and Tricks** you can use to solve profit-loss questions quickly:

Trick 1: When two articles are sold at the same price, one at a profit and the other at a loss, and profit % = loss %

Net Loss % = (Common %)^2 / 100

👉 Example: Profit = Loss = 20%
Net Loss % = (20×20)/100 = 4%

Trick 2: When profit is made on CP but discount is on MP:

Use:
SP = MP × (100 – Discount %) / 100
Then calculate profit % using CP and SP.

Trick 3: If an article is sold at x% profit and y% loss, then overall profit/loss % is:

Net % = (x – y) ± (xy / 100)
(Use + when profit, – when loss)

👉 This is used for successive profits or losses.

05) Solved Examples on Profit and Loss:

Let's understand the formulas better with real-life-style examples.

Example 1:

A man buys a watch for ₹800 and sells it for ₹1000. What is the profit and profit percentage?

Solution:

- CP = ₹800
- SP = ₹1000
- Profit = 1000 – 800 = ₹200
- Profit % = (200 / 800) × 100 = **25%**

Example 2:

A person buys an item for ₹500 and sells it for ₹450. What is the loss and loss %?

Solution:

- Loss = 500 – 450 = ₹50
- Loss % = (50 / 500) × 100 = **10%**

Example 3:

Find SP to get 20% profit on CP ₹600.

Solution:

- SP = CP × (1 + Profit% / 100)
  = 600 × (1 + 20/100) = 600 × 1.20 = ₹720

Example 4:

A trader marks his goods 40% above the cost price and gives a discount of 10%. Find his profit %.

Solution:

- Let CP = ₹100
- Marked Price = ₹140
- SP = 140 – 10% of 140 = 140 – 14 = ₹126
- Profit = 126 – 100 = ₹26
- Profit % = 26%

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06) Practice Questions on Profit and Loss Formula and Tricks:

Try these questions to test your understanding.

Question 1:

A man bought a table for ₹1500 and sold it at a loss of 20%. What is the selling price?

A. ₹1200
B. ₹1250
C. ₹1300
D. ₹1350

Answer:
SP = CP × (1 – Loss%) = 1500 × (1 – 20/100) = 1500 × 0.80 = **₹1200**

✅ Correct Option: **A**

Question 2:

If the cost price of an article is ₹250 and profit is 15%, find the selling price.

A. ₹280
B. ₹287.50
C. ₹290
D. ₹295

Answer:
SP = CP × (1 + Profit%) = 250 × 1.15 = **₹287.50**

✅ Correct Option: **B**

Question 3:

A shopkeeper marks up the price of an item by 50% and offers a discount of 20%. Find his profit %.

A. 20%
B. 25%
C. 30%
D. 40%

Answer:
Let CP = ₹100
Marked Price = 100 + 50% of 100 = ₹150
SP = 150 – 20% = 150 – 30 = ₹120
Profit = 120 – 100 = ₹20
Profit % = 20%

✅ Correct Option: **A**

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07) Summary Table: Quick Reference On Profit and Loss Formula and Tricks:

Situation	Formula
Profit	SP – CP
Loss	CP – SP
Profit %	(Profit / CP) × 100
Loss %	(Loss / CP) × 100
SP when profit	CP × (1 + Profit% / 100)
SP when loss	CP × (1 – Loss% / 100)
CP from SP and profit	SP / (1 + Profit% / 100)
CP from SP and loss	SP / (1 – Loss% / 100)

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08) Tips to Master Profit and Loss Problems:

1. **Always identify CP and SP clearly** before solving.
2. **Understand percentage calculation** basics.
3. Use **smart tricks and formulas** to avoid lengthy calculations.
4. Practice questions regularly to improve speed and accuracy.
5. Understand how **discounts and markup** affect profit/loss.

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09) More Practice Questions (With Answers):

Question 4:

A shopkeeper sells an item at 10% loss. If he had sold it for ₹40 more, he would have gained 5%. What is the cost price?

Answer:
Let CP = x
SP at 10% loss = 0.90x
SP at 5% gain = 1.05x
1.05x – 0.90x = ₹40
0.15x = 40 → x = ₹266.67

✅ Cost Price = **₹266.67**

Question 5:

Profit earned by selling an article for ₹750 is same as loss incurred when sold for ₹650. What is the cost price?

Answer:
Let CP = x
Profit = 750 – x
Loss = x – 650
750 – x = x – 650 → 2x = 1400 → x = ₹700

✅ Cost Price = **₹700**

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10) Why Learn Profit and Loss Formula and Tricks?

- Profit and Loss Formula and Tricks save time in exams.
- You'll avoid confusion while calculating percentages.
- Helps in real-life shopping and business scenarios.
- Essential for SSC CGL, Banking, Railways, and UPSC exams.

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11) Final Thoughts:

Understanding the **profit and loss formula and tricks** can turn a confusing topic into one of your strongest areas in competitive exams. With regular practice, smart shortcuts, and a good grasp of formulas, you'll be solving questions in under 30 seconds!

Keep this blog post bookmarked as your quick revision guide.