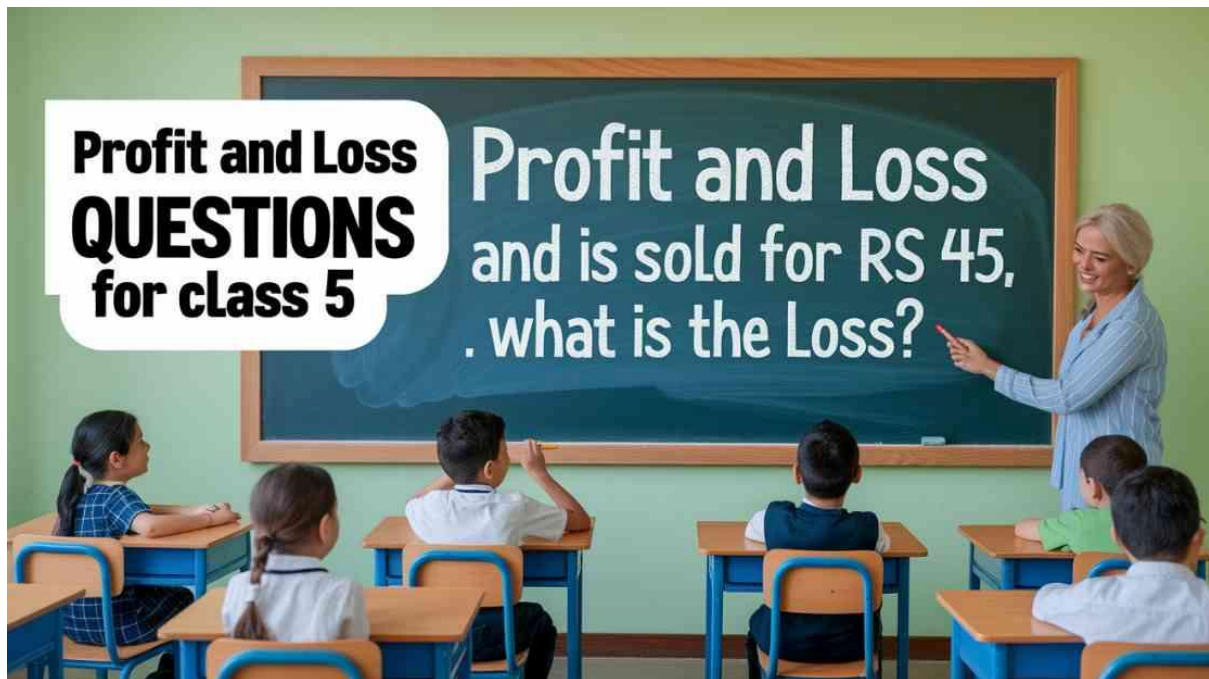


profit and loss questions for class 5 - Answer Sheet



Below are 50 examples for each type of question—with the problem statement followed by a brief solution. You can use these as practice exercises.

VERY SHORT ANSWER TYPE QUESTIONS

- 1. A pen costing Rs50 is sold for Rs45. Find the loss.**
Solution: Loss = $50 - 45 = \text{Rs}5$
- 2. A pencil costing Rs20 is sold for Rs25. Find the profit.**
Solution: Profit = $25 - 20 = \text{Rs}5$
- 3. A notebook costing Rs40 is sold for Rs48. Find the profit percentage.**
Solution: Profit = $48 - 40 = \text{Rs}8$; Profit% = $(8/40) \times 100 = 20\%$
- 4. An item marked at Rs200 is sold for Rs180. Find the discount percentage.**
Solution: Discount = $200 - 180 = \text{Rs}20$; Discount% = $(20/200) \times 100 = 10\%$
- 5. A book costing Rs150 is sold for Rs135. Find the loss.**
Solution: Loss = $150 - 135 = \text{Rs}15$
- 6. A calculator costing Rs500 is sold for Rs550. Find the profit.**
Solution: Profit = $550 - 500 = \text{Rs}50$
- 7. A bag costing Rs250 is sold for Rs300. Find the profit percentage.**
Solution: Profit = $300 - 250 = \text{Rs}50$; Profit% = $(50/250) \times 100 = 20\%$

8. **A mobile costing Rs8000 is sold for Rs7600. Find the loss percentage.**
Solution: Loss = 8000 – 7600 = Rs400; Loss% = $(400/8000) \times 100 = 5\%$
9. **A water bottle marked at Rs120 is sold for Rs108. Find the discount percentage.**
Solution: Discount = 120 – 108 = Rs12; Discount% = $(12/120) \times 100 = 10\%$
10. **A shirt costing Rs600 is sold for Rs660. Find the profit.**
Solution: Profit = 660 – 600 = Rs60
11. **A pair of shoes costing Rs700 is sold for Rs630. Find the loss.**
Solution: Loss = 700 – 630 = Rs70
12. **A watch costing Rs1000 is sold for Rs1150. Find the profit.**
Solution: Profit = 1150 – 1000 = Rs150
13. **A wallet costing Rs300 is sold for Rs330. Find the profit percentage.**
Solution: Profit = 330 – 300 = Rs30; Profit% = $(30/300) \times 100 = 10\%$
14. **A cap marked at Rs150 is sold for Rs135. Find the discount percentage.**
Solution: Discount = 150 – 135 = Rs15; Discount% = $(15/150) \times 100 = 10\%$
15. **A mobile cover costing Rs200 is sold for Rs180. Find the loss.**
Solution: Loss = 200 – 180 = Rs20
16. **A toy car costing Rs80 is sold for Rs96. Find the profit percentage.**
Solution: Profit = 96 – 80 = Rs16; Profit% = $(16/80) \times 100 = 20\%$
17. **A pen drive costing Rs400 is sold for Rs440. Find the profit percentage.**
Solution: Profit = 440 – 400 = Rs40; Profit% = $(40/400) \times 100 = 10\%$
18. **A charger marked at Rs350 is sold for Rs315. Find the discount percentage.**
Solution: Discount = 350 – 315 = Rs35; Discount% = $(35/350) \times 100 = 10\%$
19. **A keychain costing Rs50 is sold for Rs60. Find the profit.**
Solution: Profit = 60 – 50 = Rs10
20. **A mug costing Rs120 is sold for Rs108. Find the loss percentage.**
Solution: Loss = 120 – 108 = Rs12; Loss% = $(12/120) \times 100 = 10\%$
21. **A diary costing Rs90 is sold for Rs99. Find the profit percentage.**
Solution: Profit = 99 – 90 = Rs9; Profit% = $(9/90) \times 100 = 10\%$
22. **A scarf marked at Rs250 is sold for Rs225. Find the discount percentage.**
Solution: Discount = 250 – 225 = Rs25; Discount% = $(25/250) \times 100 = 10\%$
23. **A cap costing Rs180 is sold for Rs162. Find the loss.**
Solution: Loss = 180 – 162 = Rs18
24. **A pair of socks costing Rs80 is sold for Rs88. Find the profit percentage.**
Solution: Profit = 88 – 80 = Rs8; Profit% = $(8/80) \times 100 = 10\%$
25. **A wallet marked at Rs500 is sold for Rs450. Find the discount and discount percentage.**
Solution: Discount = 500 – 450 = Rs50; Discount% = $(50/500) \times 100 = 10\%$
26. **A belt costing Rs150 is sold for Rs165. Find the profit.**
Solution: Profit = 165 – 150 = Rs15

27. **A tie costing Rs200 is sold for Rs220. Find the profit percentage.**
Solution: Profit = 220 – 200 = Rs20; Profit% = $(20/200) \times 100 = 10\%$
28. **A jacket costing Rs1000 is sold for Rs900. Find the loss.**
Solution: Loss = 1000 – 900 = Rs100
29. **A pair of gloves costing Rs250 is sold for Rs275. Find the profit.**
Solution: Profit = 275 – 250 = Rs25
30. **A pair of earrings costing Rs300 is sold for Rs330. Find the profit percentage.**
Solution: Profit = 330 – 300 = Rs30; Profit% = $(30/300) \times 100 = 10\%$
31. **A handbag marked at Rs1200 is sold for Rs1080. Find the discount percentage.**
Solution: Discount = 1200 – 1080 = Rs120; Discount% = $(120/1200) \times 100 = 10\%$
32. **A pair of sunglasses costing Rs400 is sold for Rs360. Find the loss.**
Solution: Loss = 400 – 360 = Rs40
33. **A necklace costing Rs700 is sold for Rs770. Find the profit.**
Solution: Profit = 770 – 700 = Rs70
34. **A bracelet costing Rs250 is sold for Rs225. Find the loss percentage.**
Solution: Loss = 250 – 225 = Rs25; Loss% = $(25/250) \times 100 = 10\%$
35. **A ring costing Rs500 is sold for Rs550. Find the profit percentage.**
Solution: Profit = 550 – 500 = Rs50; Profit% = $(50/500) \times 100 = 10\%$
36. **A watch marked at Rs1500 is sold for Rs1350. Find the discount percentage.**
Solution: Discount = 1500 – 1350 = Rs150; Discount% = $(150/1500) \times 100 = 10\%$
37. **A smartphone costing Rs15000 is sold for Rs15750. Find the profit percentage.**
Solution: Profit = 15750 – 15000 = Rs750; Profit% = $(750/15000) \times 100 = 5\%$
38. **A tablet costing Rs12000 is sold for Rs10800. Find the loss percentage.**
Solution: Loss = 12000 – 10800 = Rs1200; Loss% = $(1200/12000) \times 100 = 10\%$
39. **A printer costing Rs8000 is sold for Rs8400. Find the profit.**
Solution: Profit = 8400 – 8000 = Rs400
40. **A scanner costing Rs5000 is sold for Rs4500. Find the loss.**
Solution: Loss = 5000 – 4500 = Rs500
41. **A monitor costing Rs7000 is sold for Rs7700. Find the profit.**
Solution: Profit = 7700 – 7000 = Rs700
42. **A keyboard costing Rs800 is sold for Rs720. Find the loss percentage.**
Solution: Loss = 800 – 720 = Rs80; Loss% = $(80/800) \times 100 = 10\%$
43. **A mouse costing Rs300 is sold for Rs330. Find the profit.**
Solution: Profit = 330 – 300 = Rs30
44. **A speaker costing Rs1500 is sold for Rs1350. Find the loss.**
Solution: Loss = 1500 – 1350 = Rs150
45. **A headphone costing Rs1200 is sold for Rs1320. Find the profit percentage.**
Solution: Profit = 1320 – 1200 = Rs120; Profit% = $(120/1200) \times 100 = 10\%$

46. A microphone costing Rs2500 is sold for Rs2250. Find the loss percentage.

Solution: Loss = 2500 – 2250 = Rs250; Loss% = $(250/2500) \times 100 = 10\%$

47. A camera costing Rs10000 is sold for Rs11000. Find the profit.

Solution: Profit = 11000 – 10000 = Rs1000

48. A lens costing Rs5000 is sold for Rs4500. Find the loss.

Solution: Loss = 5000 – 4500 = Rs500

49. A tripod costing Rs1500 is sold for Rs1650. Find the profit percentage.

Solution: Profit = 1650 – 1500 = Rs150; Profit% = $(150/1500) \times 100 = 10\%$

50. A memory card costing Rs600 is sold for Rs540. Find the loss percentage.

Solution: Loss = 600 – 540 = Rs60; Loss% = $(60/600) \times 100 = 10\%$

SHORT ANSWER TYPE – I QUESTIONS

1. A shirt marked at Rs800 is given a discount of Rs120. Find the selling price.

Solution: SP = 800 – 120 = Rs680

2. A jacket marked at Rs1200 is given a discount of Rs180. Find the selling price.

Solution: SP = 1200 – 180 = Rs1020

3. A bag marked at Rs750 is offered at a discount of Rs75. Find the selling price.

Solution: SP = 750 – 75 = Rs675

4. A watch marked at Rs1500 is discounted by Rs300. Find the selling price.

Solution: SP = 1500 – 300 = Rs1200

5. A pair of shoes marked at Rs1000 is sold after a discount of Rs150. Find the selling price.

Solution: SP = 1000 – 150 = Rs850

6. A mobile phone marked at Rs8000 is discounted by Rs800. Find the selling price.

Solution: SP = 8000 – 800 = Rs7200

7. A laptop marked at Rs45000 is given a discount of Rs5000. Find the selling price.

Solution: SP = 45000 – 5000 = Rs40000

8. A television marked at Rs30000 is sold at a discount of Rs4500. Find the selling price.

Solution: SP = 30000 – 4500 = Rs25500

9. A refrigerator marked at Rs25000 is discounted by Rs2500. Find the selling price.

Solution: SP = 25000 – 2500 = Rs22500

10. A microwave marked at Rs5000 is sold after a discount of Rs750. Find the selling price.

Solution: SP = 5000 – 750 = Rs4250

11. A scooter marked at Rs60000 is offered at a discount of Rs6000. Find the selling price.

Solution: SP = 60000 – 6000 = Rs54000

12. A bicycle marked at Rs4000 is sold at a discount of Rs400. Find the selling price.

Solution: SP = 4000 – 400 = Rs3600

13. **A watch marked at Rs2000 is discounted by Rs200. Find the selling price.**
Solution: $SP = 2000 - 200 = \text{Rs}1800$
14. **A cap marked at Rs300 is sold after a discount of Rs30. Find the selling price.**
Solution: $SP = 300 - 30 = \text{Rs}270$
15. **A pair of sunglasses marked at Rs1200 is discounted by Rs180. Find the selling price.**
Solution: $SP = 1200 - 180 = \text{Rs}1020$
16. **A bracelet marked at Rs800 is offered at a discount of Rs80. Find the selling price.**
Solution: $SP = 800 - 80 = \text{Rs}720$
17. **A ring marked at Rs1500 is sold at a discount of Rs150. Find the selling price.**
Solution: $SP = 1500 - 150 = \text{Rs}1350$
18. **A handbag marked at Rs3500 is given a discount of Rs350. Find the selling price.**
Solution: $SP = 3500 - 350 = \text{Rs}3150$
19. **A wallet marked at Rs1000 is sold after a discount of Rs100. Find the selling price.**
Solution: $SP = 1000 - 100 = \text{Rs}900$
20. **A tie marked at Rs400 is discounted by Rs40. Find the selling price.**
Solution: $SP = 400 - 40 = \text{Rs}360$
21. **A jacket marked at Rs1800 is offered at a discount of Rs270. Find the selling price.**
Solution: $SP = 1800 - 270 = \text{Rs}1530$
22. **A pair of shoes marked at Rs2000 is given a discount of Rs300. Find the selling price.**
Solution: $SP = 2000 - 300 = \text{Rs}1700$
23. **A mobile cover marked at Rs500 is sold after a discount of Rs50. Find the selling price.**
Solution: $SP = 500 - 50 = \text{Rs}450$
24. **A bag marked at Rs900 is discounted by Rs90. Find the selling price.**
Solution: $SP = 900 - 90 = \text{Rs}810$
25. **A T-shirt marked at Rs600 is offered at a discount of Rs60. Find the selling price.**
Solution: $SP = 600 - 60 = \text{Rs}540$
26. **A dress marked at Rs1200 is sold after a discount of Rs180. Find the selling price.**
Solution: $SP = 1200 - 180 = \text{Rs}1020$
27. **A skirt marked at Rs800 is discounted by Rs80. Find the selling price.**
Solution: $SP = 800 - 80 = \text{Rs}720$
28. **A pair of jeans marked at Rs1500 is offered at a discount of Rs150. Find the selling price.**
Solution: $SP = 1500 - 150 = \text{Rs}1350$
29. **A belt marked at Rs400 is sold after a discount of Rs40. Find the selling price.**
Solution: $SP = 400 - 40 = \text{Rs}360$
30. **A wallet marked at Rs700 is given a discount of Rs70. Find the selling price.**
Solution: $SP = 700 - 70 = \text{Rs}630$
31. **A cap marked at Rs250 is sold at a discount of Rs25. Find the selling price.**
Solution: $SP = 250 - 25 = \text{Rs}225$

32. **A pair of gloves marked at Rs350 is discounted by Rs35. Find the selling price.**
Solution: $SP = 350 - 35 = \text{Rs}315$
33. **A scarf marked at Rs500 is offered at a discount of Rs50. Find the selling price.**
Solution: $SP = 500 - 50 = \text{Rs}450$
34. **A watch marked at Rs2500 is sold after a discount of Rs500. Find the selling price.**
Solution: $SP = 2500 - 500 = \text{Rs}2000$
35. **A bracelet marked at Rs900 is discounted by Rs90. Find the selling price.**
Solution: $SP = 900 - 90 = \text{Rs}810$
36. **A necklace marked at Rs1200 is given a discount of Rs240. Find the selling price.**
Solution: $SP = 1200 - 240 = \text{Rs}960$
37. **A ring marked at Rs2000 is sold after a discount of Rs200. Find the selling price.**
Solution: $SP = 2000 - 200 = \text{Rs}1800$
38. **A smartphone marked at Rs20000 is offered at a discount of Rs2000. Find the selling price.**
Solution: $SP = 20000 - 2000 = \text{Rs}18000$
39. **A tablet marked at Rs15000 is sold after a discount of Rs1500. Find the selling price.**
Solution: $SP = 15000 - 1500 = \text{Rs}13500$
40. **A laptop marked at Rs40000 is given a discount of Rs4000. Find the selling price.**
Solution: $SP = 40000 - 4000 = \text{Rs}36000$
41. **A desktop marked at Rs35000 is sold after a discount of Rs3500. Find the selling price.**
Solution: $SP = 35000 - 3500 = \text{Rs}31500$
42. **A printer marked at Rs8000 is offered at a discount of Rs800. Find the selling price.**
Solution: $SP = 8000 - 800 = \text{Rs}7200$
43. **A scanner marked at Rs6000 is sold after a discount of Rs600. Find the selling price.**
Solution: $SP = 6000 - 600 = \text{Rs}5400$
44. **A projector marked at Rs25000 is given a discount of Rs5000. Find the selling price.**
Solution: $SP = 25000 - 5000 = \text{Rs}20000$
45. **A camera marked at Rs18000 is sold after a discount of Rs1800. Find the selling price.**
Solution: $SP = 18000 - 1800 = \text{Rs}16200$
46. **A lens marked at Rs8000 is offered at a discount of Rs800. Find the selling price.**
Solution: $SP = 8000 - 800 = \text{Rs}7200$
47. **A tripod marked at Rs3000 is sold after a discount of Rs300. Find the selling price.**
Solution: $SP = 3000 - 300 = \text{Rs}2700$
48. **A microphone marked at Rs3500 is given a discount of Rs350. Find the selling price.**
Solution: $SP = 3500 - 350 = \text{Rs}3150$
49. **A speaker marked at Rs4500 is sold after a discount of Rs450. Find the selling price.**
Solution: $SP = 4500 - 450 = \text{Rs}4050$
50. **An earphone marked at Rs1500 is offered at a discount of Rs150. Find the selling price.**
Solution: $SP = 1500 - 150 = \text{Rs}1350$

SHORT ANSWER TYPE – II QUESTIONS

- 1. A watch is sold at a profit of 10% and its selling price is Rs1100. Find its cost price.**
Solution: Let CP = x ; $1.10x = 1100$, so $x = 1100/1.10 = \text{Rs}1000$
- 2. A mobile is sold at a profit of 20% and its selling price is Rs1200. Find its cost price.**
Solution: $1.20x = 1200$, so $x = 1200/1.20 = \text{Rs}1000$
- 3. A calculator is sold at a profit of 25% and its selling price is Rs1250. Find its cost price.**
Solution: $1.25x = 1250$, so $x = 1250/1.25 = \text{Rs}1000$
- 4. A radio is sold at a profit of 15% and its selling price is Rs1150. Find its cost price.**
Solution: $1.15x = 1150$, so $x = 1150/1.15 = \text{Rs}1000$
- 5. A fridge is sold at a profit of 10% and its selling price is Rs5500. Find its cost price.**
Solution: $1.10x = 5500$, so $x = 5500/1.10 = \text{Rs}5000$
- 6. A TV is sold at a profit of 20% and its selling price is Rs14400. Find its cost price.**
Solution: $1.20x = 14400$, so $x = 14400/1.20 = \text{Rs}12000$
- 7. A laptop is sold at a profit of 15% and its selling price is Rs11500. Find its cost price.**
Solution: $1.15x = 11500$, so $x = 11500/1.15 = \text{Rs}10000$
- 8. A printer is sold at a profit of 25% and its selling price is Rs2500. Find its cost price.**
Solution: $1.25x = 2500$, so $x = 2500/1.25 = \text{Rs}2000$
- 9. A speaker is sold at a profit of 10% and its selling price is Rs1100. Find its cost price.**
Solution: $1.10x = 1100$, so $x = 1100/1.10 = \text{Rs}1000$
- 10. A smartwatch is sold at a profit of 20% and its selling price is Rs1200. Find its cost price.**
Solution: $1.20x = 1200$, so $x = 1200/1.20 = \text{Rs}1000$
- 11. A bag is marked at Rs750 and a discount of 12% is given. Find the discount amount and selling price.**
Solution: Discount = 12% of 750 = 90; SP = 750 – 90 = Rs660
- 12. A pair of shoes is marked at Rs1000 and a discount of 15% is offered. Find the discount amount and selling price.**
Solution: Discount = 15% of 1000 = 150; SP = 1000 – 150 = Rs850
- 13. A jacket is marked at Rs2000 and a discount of 10% is given. Find the discount amount and selling price.**
Solution: Discount = 10% of 2000 = 200; SP = 2000 – 200 = Rs1800
- 14. A cap is marked at Rs300 and a discount of 20% is offered. Find the discount amount and selling price.**
Solution: Discount = 20% of 300 = 60; SP = 300 – 60 = Rs240
- 15. A watch is marked at Rs1500 and a discount of 15% is given. Find the discount amount and selling price.**
Solution: Discount = 15% of 1500 = 225; SP = 1500 – 225 = Rs1275

16. **A smartphone is marked at Rs8000 and a discount of 10% is offered. Find the discount amount and selling price.**
Solution: Discount = 10% of 8000 = 800; SP = 8000 – 800 = Rs7200
17. **A tablet is marked at Rs6000 and a discount of 12% is given. Find the discount amount and selling price.**
Solution: Discount = 12% of 6000 = 720; SP = 6000 – 720 = Rs5280
18. **A refrigerator is marked at Rs25000 and a discount of 8% is offered. Find the discount amount and selling price.**
Solution: Discount = 8% of 25000 = 2000; SP = 25000 – 2000 = Rs23000
19. **A microwave is marked at Rs5000 and a discount of 10% is given. Find the discount amount and selling price.**
Solution: Discount = 10% of 5000 = 500; SP = 5000 – 500 = Rs4500
20. **A fan is marked at Rs2000 and a discount of 5% is offered. Find the discount amount and selling price.**
Solution: Discount = 5% of 2000 = 100; SP = 2000 – 100 = Rs1900
21. **A bicycle is marked at Rs4000 and a discount of 8% is given. Find the discount amount and selling price.**
Solution: Discount = 8% of 4000 = 320; SP = 4000 – 320 = Rs3680
22. **A scooter is marked at Rs15000 and a discount of 12% is offered. Find the discount amount and selling price.**
Solution: Discount = 12% of 15000 = 1800; SP = 15000 – 1800 = Rs13200
23. **A car is marked at Rs500000 and a discount of 5% is given. Find the discount amount and selling price.**
Solution: Discount = 5% of 500000 = 25000; SP = 500000 – 25000 = Rs475000
24. **A computer is marked at Rs30000 and a discount of 20% is offered. Find the discount amount and selling price.**
Solution: Discount = 20% of 30000 = 6000; SP = 30000 – 6000 = Rs24000
25. **A printer is marked at Rs8000 and a discount of 15% is given. Find the discount amount and selling price.**
Solution: Discount = 15% of 8000 = 1200; SP = 8000 – 1200 = Rs6800
26. **A fan is sold at a profit of 12% and its selling price is Rs1120. Find its cost price.**
Solution: $1.12x = 1120$, so $x = 1120/1.12 = \text{Rs}1000$
27. **A kettle is sold at a profit of 18% and its selling price is Rs1180. Find its cost price.**
Solution: $1.18x = 1180$, so $x = 1180/1.18 = \text{Rs}1000$
28. **A mixer is sold at a profit of 22% and its selling price is Rs1220. Find its cost price.**
Solution: $1.22x = 1220$, so $x = 1220/1.22 = \text{Rs}1000$
29. **A toaster is sold at a profit of 15% and its selling price is Rs1150. Find its cost price.**
Solution: $1.15x = 1150$, so $x = 1150/1.15 = \text{Rs}1000$
30. **A blender is sold at a profit of 10% and its selling price is Rs1100. Find its cost price.**
Solution: $1.10x = 1100$, so $x = 1100/1.10 = \text{Rs}1000$

31. **A fan is marked at Rs1800 and a discount of 10% is given. Find the discount amount and selling price.**
Solution: Discount = 10% of 1800 = 180; SP = 1800 – 180 = Rs1620
32. **A fridge is marked at Rs30000 and a discount of 8% is offered. Find the discount amount and selling price.**
Solution: Discount = 8% of 30000 = 2400; SP = 30000 – 2400 = Rs27600
33. **A washing machine is marked at Rs25000 and a discount of 12% is given. Find the discount amount and selling price.**
Solution: Discount = 12% of 25000 = 3000; SP = 25000 – 3000 = Rs22000
34. **A cooler is marked at Rs5000 and a discount of 15% is offered. Find the discount amount and selling price.**
Solution: Discount = 15% of 5000 = 750; SP = 5000 – 750 = Rs4250
35. **A heater is marked at Rs4000 and a discount of 10% is given. Find the discount amount and selling price.**
Solution: Discount = 10% of 4000 = 400; SP = 4000 – 400 = Rs3600
36. **A fan is sold at a profit of 8% and its selling price is Rs1080. Find its cost price.**
Solution: $1.08x = 1080$, so $x = 1080/1.08 = Rs1000$
37. **A refrigerator is sold at a profit of 12% and its selling price is Rs1120. Find its cost price.**
Solution: $1.12x = 1120$, so $x = 1120/1.12 = Rs1000$
38. **A microwave is sold at a profit of 18% and its selling price is Rs1180. Find its cost price.**
Solution: $1.18x = 1180$, so $x = 1180/1.18 = Rs1000$
39. **A blender is sold at a profit of 20% and its selling price is Rs1200. Find its cost price.**
Solution: $1.20x = 1200$, so $x = 1200/1.20 = Rs1000$
40. **A vacuum cleaner is sold at a profit of 15% and its selling price is Rs1150. Find its cost price.**
Solution: $1.15x = 1150$, so $x = 1150/1.15 = Rs1000$
41. **A fan is marked at Rs2200 and a discount of 10% is given. Find the discount amount and selling price.**
Solution: Discount = 10% of 2200 = 220; SP = 2200 – 220 = Rs1980
42. **A mixer grinder is marked at Rs2500 and a discount of 12% is offered. Find the discount amount and selling price.**
Solution: Discount = 12% of 2500 = 300; SP = 2500 – 300 = Rs2200
43. **A pressure cooker is marked at Rs1500 and a discount of 8% is given. Find the discount amount and selling price.**
Solution: Discount = 8% of 1500 = 120; SP = 1500 – 120 = Rs1380
44. **A sandwich maker is marked at Rs2000 and a discount of 10% is offered. Find the discount amount and selling price.**
Solution: Discount = 10% of 2000 = 200; SP = 2000 – 200 = Rs1800

45. **A coffee maker is marked at Rs3000 and a discount of 15% is given. Find the discount amount and selling price.**
Solution: Discount = 15% of 3000 = 450; SP = 3000 – 450 = Rs2550
46. **A juicer is marked at Rs2500 and a discount of 20% is offered. Find the discount amount and selling price.**
Solution: Discount = 20% of 2500 = 500; SP = 2500 – 500 = Rs2000
47. **A sandwich toaster is marked at Rs1800 and a discount of 10% is given. Find the discount amount and selling price.**
Solution: Discount = 10% of 1800 = 180; SP = 1800 – 180 = Rs1620
48. **A rice cooker is marked at Rs2200 and a discount of 12% is offered. Find the discount amount and selling price.**
Solution: Discount = 12% of 2200 = 264; SP = 2200 – 264 = Rs1936
49. **A bread maker is marked at Rs2800 and a discount of 15% is given. Find the discount amount and selling price.**
Solution: Discount = 15% of 2800 = 420; SP = 2800 – 420 = Rs2380
50. **A deep fryer is marked at Rs3200 and a discount of 10% is offered. Find the discount amount and selling price.**
Solution: Discount = 10% of 3200 = 320; SP = 3200 – 320 = Rs2880
-

LONG ANSWER TYPE QUESTIONS

1. **A bicycle was sold for Rs3450 after allowing a discount of 8%. Find its marked price.**
Solution: Let marked price = x . Then, SP = 92% of $x = (92/100)x = 3450$, so $x = (3450 \times 100)/92 = \text{Rs}3750$
2. **Rajesh bought two fans for a total cost of Rs3200. He sold one at a gain of 10% and the other at a loss of 10%, receiving the same selling price for both. Find the cost price of each fan.**
Solution: Let CPs be x and $(3200 - x)$. Equate selling prices: $1.10x = 0.90(3200 - x) \rightarrow 1.10x = 2880 - 0.90x \rightarrow 2x = 2880 \rightarrow x = \text{Rs}1440$ and the other CP = $3200 - 1440 = \text{Rs}1760$
3. **A trader marks his goods so that after giving a 20% discount, he earns a profit of 25%. If the cost price is Rs16000, find the marked price.**
Solution: Required SP = $16000 \times 1.25 = \text{Rs}20000$; since SP is 80% of marked price, marked price = $20000/0.80 = \text{Rs}25000$
4. **A shopkeeper sells a mobile at a profit of 15% after giving a 10% discount on the marked price. If the cost price is Rs8000, find the marked price.**
Solution: Desired SP = $8000 \times 1.15 = \text{Rs}9200$; since SP = 90% of marked price, marked price = $9200/0.90 \approx \text{Rs}10222.22$
5. **A trader sells an article at a 20% profit after a 25% discount on the marked price. If the cost price is Rs960, find the marked price.**
Solution: SP = $960 \times 1.20 = \text{Rs}1152$; since SP = 75% of marked price, marked price = $1152/0.75 = \text{Rs}1536$

6. **A merchant buys an article for Rs5000 and marks it to yield a 30% profit after a 15% discount. Find the marked price.**
Solution: Desired SP = $5000 \times 1.30 = \text{Rs}6500$; SP = 85% of marked price, so marked price = $6500/0.85 \approx \text{Rs}7647.06$
7. **A trader offers a 10% discount on the marked price yet earns a 20% profit on the cost price of Rs2500. Find the marked price.**
Solution: SP = $2500 \times 1.20 = \text{Rs}3000$; since SP = 90% of marked price, marked price = $3000/0.90 \approx \text{Rs}3333.33$
8. **A shopkeeper marks an article 40% above cost. If he offers a 20% discount, what is his profit percentage?**
Solution: Marked price = $1.40 \times \text{CP}$; SP = $0.80 \times (1.40 \times \text{CP}) = 1.12 \times \text{CP}$; Profit% = 12%
9. **A trader buys goods for Rs24000 and marks them 50% above cost. After a 20% discount, what is his profit percentage?**
Solution: Marked price = $24000 \times 1.50 = \text{Rs}36000$; SP = $36000 \times 0.80 = \text{Rs}28800$; Profit = $28800 - 24000 = \text{Rs}4800$; Profit% = $(4800/24000) \times 100 = 20\%$
10. **A retailer buys a product for Rs1250 and marks it at Rs1500. If he sells it with a 10% discount, what is his profit percentage?**
Solution: SP = $1500 - 150 = \text{Rs}1350$; Profit = $1350 - 1250 = \text{Rs}100$; Profit% = $(100/1250) \times 100 = 8\%$
11. **A trader buys an article for Rs2000 and marks it 40% above cost. After a 20% discount, what is his profit percentage?**
Solution: Marked price = $2000 \times 1.40 = \text{Rs}2800$; SP = $2800 \times 0.80 = \text{Rs}2240$; Profit = $2240 - 2000 = \text{Rs}240$; Profit% = $(240/2000) \times 100 = 12\%$
12. **A shopkeeper wishes to earn an 18% profit. He marks the article 30% above cost and offers a 10% discount. What is his actual profit percentage?**
Solution: Marked price = $1.30 \times \text{CP}$; SP = $0.90 \times (1.30 \times \text{CP}) = 1.17 \times \text{CP}$; Profit% $\approx 17\%$
13. **A trader marks an article at Rs8000 and sells it at a 15% discount to earn a 10% profit. Find the cost price.**
Solution: SP = $8000 \times 0.85 = \text{Rs}6800$; $6800 = 1.10 \times \text{CP}$ so CP = $6800/1.10 \approx \text{Rs}6181.82$
14. **A mobile is sold at a 12% profit after a 10% discount on the marked price. If the cost price is Rs5000, find the marked price.**
Solution: SP = $5000 \times 1.12 = \text{Rs}5600$; SP = $0.90 \times (\text{Marked Price})$, so Marked Price = $5600/0.90 \approx \text{Rs}6222.22$
15. **A trader marks his goods 50% above cost and gives a 25% discount. What is his profit percentage?**
Solution: SP = $\text{CP} \times 1.50 \times 0.75 = 1.125 \times \text{CP}$; Profit% = 12.5%
16. **An article marked at Rs10000 is sold at a 30% discount and yields a 20% profit. Find the cost price.**
Solution: SP = $10000 \times 0.70 = \text{Rs}7000$; $7000 = 1.20 \times \text{CP}$ so CP = $7000/1.20 \approx \text{Rs}5833.33$
17. **A retailer buys a product for Rs800 and marks it 60% above cost. After a 20% discount, find his profit percentage.**

Solution: Marked price = $800 \times 1.60 = \text{Rs}1280$; SP = $1280 \times 0.80 = \text{Rs}1024$; Profit = $1024 - 800 = \text{Rs}224$; Profit% = $(224/800) \times 100 = 28\%$

18. **A trader buys an article for Rs4500 and marks it at Rs6000. After a 10% discount, what is his profit percentage?**

Solution: SP = $6000 - 600 = \text{Rs}5400$; Profit = $5400 - 4500 = \text{Rs}900$; Profit% = $(900/4500) \times 100 = 20\%$

19. **A merchant buys a gadget for Rs1500. To earn a 5% profit after a 15% discount, what should be the marked price?**

Solution: Desired SP = $1500 \times 1.05 = \text{Rs}1575$; SP = 85% of marked price, so marked price = $1575/0.85 \approx \text{Rs}1852.94$

20. **A trader marks his goods 30% above cost. After a 10% discount, he makes a 15% profit. If the marked price is Rs1320, find the cost price.**

Solution: SP = $1320 - 132 = \text{Rs}1188$; $1188 = 1.15 \times \text{CP}$, so CP = $1188/1.15 \approx \text{Rs}1033.91$

21. **A product bought for Rs2700 is marked 40% above cost. After a 25% discount, what is the profit percentage?**

Solution: Marked price = $2700 \times 1.40 = \text{Rs}3780$; SP = $3780 \times 0.75 = \text{Rs}2835$; Profit = $2835 - 2700 = \text{Rs}135$; Profit% = $(135/2700) \times 100 = 5\%$

22. **A trader buys a product for Rs3200 and marks it 50% above cost. After a 20% discount, find the profit percentage.**

Solution: Marked price = $3200 \times 1.50 = \text{Rs}4800$; SP = $4800 \times 0.80 = \text{Rs}3840$; Profit = $3840 - 3200 = \text{Rs}640$; Profit% = $(640/3200) \times 100 = 20\%$

23. **A merchant buys an item for Rs9000 and marks it 60% above cost. With a 25% discount, what is his profit percentage?**

Solution: Marked price = $9000 \times 1.60 = \text{Rs}14400$; SP = $14400 \times 0.75 = \text{Rs}10800$; Profit = $10800 - 9000 = \text{Rs}1800$; Profit% = $(1800/9000) \times 100 = 20\%$

24. **A retailer marks an article 70% above cost and offers a 30% discount. If the cost price is Rs2000, what is the profit percentage?**

Solution: Marked price = $2000 \times 1.70 = \text{Rs}3400$; SP = $3400 \times 0.70 = \text{Rs}2380$; Profit = $2380 - 2000 = \text{Rs}380$; Profit% = $(380/2000) \times 100 = 19\%$

25. **A trader marks his product 80% above cost and sells it after a 50% discount. If the cost price is Rs500, find the profit or loss percentage.**

Solution: Marked price = $500 \times 1.80 = \text{Rs}900$; SP = $900 \times 0.50 = \text{Rs}450$; Loss = $500 - 450 = \text{Rs}50$; Loss% = $(50/500) \times 100 = 10\%$

26. **A dealer buys a vehicle for Rs300000 and marks it 20% above cost. After a 15% discount, what is his profit percentage?**

Solution: Marked price = $300000 \times 1.20 = \text{Rs}360000$; SP = $360000 \times 0.85 = \text{Rs}306000$; Profit = $306000 - 300000 = \text{Rs}6000$; Profit% = $(6000/300000) \times 100 = 2\%$

27. **A merchant buys a watch for Rs2000 and marks it at Rs2400. If he sells it with a 25% discount, what is his profit or loss percentage?**

Solution: SP = $2400 - (0.25 \times 2400) = 2400 - 600 = \text{Rs}1800$; Loss = $2000 - 1800 = \text{Rs}200$; Loss% = $(200/2000) \times 100 = 10\%$

28. **A trader buys an item for Rs750 and marks it 60% above cost. If he offers a 10% discount, what is his profit percentage?**
Solution: Marked price = $750 \times 1.60 = \text{Rs}1200$; SP = $1200 \times 0.90 = \text{Rs}1080$; Profit = $1080 - 750 = \text{Rs}330$; Profit% = $(330/750) \times 100 = 44\%$
29. **A seller marks a product 50% above cost and sells it with a 10% discount. If the cost price is Rs800, find the profit percentage.**
Solution: Marked price = $800 \times 1.50 = \text{Rs}1200$; SP = $1200 \times 0.90 = \text{Rs}1080$; Profit = $1080 - 800 = \text{Rs}280$; Profit% = $(280/800) \times 100 = 35\%$
30. **A trader marks his goods 25% above cost and offers a 5% discount. If the cost price is Rs1000, what is his profit percentage?**
Solution: Marked price = $1000 \times 1.25 = \text{Rs}1250$; SP = $1250 \times 0.95 = \text{Rs}1187.50$; Profit = $1187.50 - 1000 = \text{Rs}187.50$; Profit% = $(187.5/1000) \times 100 = 18.75\%$
31. **A merchant buys an article for Rs1800 and marks it at Rs2250. If he offers a 20% discount, what is his profit percentage?**
Solution: SP = $2250 \times 0.80 = \text{Rs}1800$; Profit = $1800 - 1800 = \text{Rs}0$; Profit% = 0%
32. **A trader marks an article 30% above cost. If he gives a 20% discount and makes a profit of Rs300, find the cost price.**
Solution: Let CP = x ; Marked = $1.30x$; SP = $1.30x \times 0.80 = 1.04x$; Profit = $1.04x - x = 0.04x = 300$, so $x = 300/0.04 = \text{Rs}7500$
33. **A shopkeeper marks an article at Rs5000 and gives a 20% discount. If he makes a profit of 10%, what is the cost price?**
Solution: SP = $5000 \times 0.80 = \text{Rs}4000$; $4000 = 1.10 \times \text{CP}$, so CP = $4000/1.10 \approx \text{Rs}3636.36$
34. **A product is marked at Rs8500 and sold after a 15% discount. If the profit is 5% on cost, find the cost price.**
Solution: SP = $8500 \times 0.85 = \text{Rs}7225$; $7225 = 1.05 \times \text{CP}$, so CP = $7225/1.05 \approx \text{Rs}6880.95$
35. **A trader buys an article for Rs3500, marks it 50% above cost, and sells it after a 20% discount. Find his profit percentage.**
Solution: Marked = $3500 \times 1.50 = \text{Rs}5250$; SP = $5250 \times 0.80 = \text{Rs}4200$; Profit = $4200 - 3500 = \text{Rs}700$; Profit% = $(700/3500) \times 100 = 20\%$
36. **A trader bought an article for Rs4000 and marked it at Rs5000. If he sold it after a 15% discount, what is his profit percentage?**
Solution: SP = $5000 - (0.15 \times 5000) = \text{Rs}4250$; Profit = $4250 - 4000 = \text{Rs}250$; Profit% = $(250/4000) \times 100 = 6.25\%$
37. **A merchant buys a product for Rs2800 and marks it at Rs3500. If he offers a 10% discount, what is his profit percentage?**
Solution: SP = $3500 \times 0.90 = \text{Rs}3150$; Profit = $3150 - 2800 = \text{Rs}350$; Profit% = $(350/2800) \times 100 = 12.5\%$
38. **A trader marks a product at Rs6000 and sells it with a 25% discount, making a profit of Rs900. Find the cost price.**
Solution: SP = $6000 \times 0.75 = \text{Rs}4500$; CP = $4500 - 900 = \text{Rs}3600$
39. **A retailer buys a product for Rs5200 and marks it 30% above cost. After a 10% discount, what is his profit percentage?**

Solution: Marked = $5200 \times 1.30 = \text{Rs}6760$; SP = $6760 \times 0.90 = \text{Rs}6084$; Profit = $6084 - 5200 = \text{Rs}884$; Profit% $\approx (884/5200) \times 100 \approx 17\%$

40. **A trader buys a product for Rs7500 and marks it 20% above cost. With a 5% discount, find the profit percentage.**

Solution: Marked = $7500 \times 1.20 = \text{Rs}9000$; SP = $9000 \times 0.95 = \text{Rs}8550$; Profit = $8550 - 7500 = \text{Rs}1050$; Profit% = $(1050/7500) \times 100 = 14\%$

41. **A merchant marks an item at Rs9800 and gives a 20% discount. If his profit is Rs980, find the cost price.**

Solution: SP = $9800 \times 0.80 = \text{Rs}7840$; CP = $7840 - 980 = \text{Rs}6860$

42. **A trader marks his product 60% above cost and sells it after a 30% discount, earning a profit of 12%. If the marked price is Rs10400, find the cost price.**

Solution: SP = $10400 \times 0.70 = \text{Rs}7280$; CP = $7280/1.12 \approx \text{Rs}6500$

43. **A product is bought for Rs4600 and marked 45% above cost. After a 15% discount, what is the profit percentage?**

Solution: Marked = $4600 \times 1.45 = \text{Rs}6670$; SP = $6670 \times 0.85 = \text{Rs}5669.5$; Profit = $5669.5 - 4600 = \text{Rs}1069.5$; Profit% $\approx (1069.5/4600) \times 100 \approx 23.24\%$

44. **A trader marks an article 35% above cost and sells it with a 10% discount, earning a profit of Rs350. Find the cost price.**

Solution: Let CP = x ; Marked = $1.35x$; SP = $0.90 \times 1.35x = 1.215x$; Profit = $1.215x - x = 0.215x = 350$, so $x = 350/0.215 \approx \text{Rs}1627.91$

45. **A retailer buys an item for Rs3200 and marks it 25% above cost. With a 15% discount, what is his profit percentage?**

Solution: Marked = $3200 \times 1.25 = \text{Rs}4000$; SP = $4000 \times 0.85 = \text{Rs}3400$; Profit = $3400 - 3200 = \text{Rs}200$; Profit% = $(200/3200) \times 100 = 6.25\%$

46. **A trader buys an article for Rs1800 and marks it at Rs2250. If he sells it at a 20% discount, what is his profit percentage?**

Solution: SP = $2250 \times 0.80 = \text{Rs}1800$; Profit = $1800 - 1800 = \text{Rs}0$; Profit% = 0%

47. **A merchant buys an article for Rs950 and marks it 50% above cost. With a 20% discount, what is his profit percentage?**

Solution: Marked = $950 \times 1.50 = \text{Rs}1425$; SP = $1425 \times 0.80 = \text{Rs}1140$; Profit = $1140 - 950 = \text{Rs}190$; Profit% = $(190/950) \times 100 = 20\%$

48. **A trader marks his product at Rs3000 and gives a 10% discount. To earn a 20% profit, what should be the cost price?**

Solution: SP = $3000 \times 0.90 = \text{Rs}2700$; For 20% profit, CP = $2700/1.20 = \text{Rs}2250$

49. **A seller buys an item for Rs2200 and marks it 40% above cost. After a 25% discount, what is the profit percentage?**

Solution: Marked = $2200 \times 1.40 = \text{Rs}3080$; SP = $3080 \times 0.75 = \text{Rs}2310$; Profit = $2310 - 2200 = \text{Rs}110$; Profit% = $(110/2200) \times 100 = 5\%$

50. **A trader buys a gadget for Rs5000 and marks it 70% above cost. With a 20% discount, what is his profit percentage?**

Solution: Marked = $5000 \times 1.70 = \text{Rs}8500$; SP = $8500 \times 0.80 = \text{Rs}6800$; Profit = $6800 - 5000 = \text{Rs}1800$; Profit% = $(1800/5000) \times 100 = 36\%$

You now have 50 examples in each of the four types. These exercises cover a wide range of profit, loss, discount, and marked price problems. Happy practicing!