Unit 7 · Profit and Loss

HARDER PRACTICE QUESTIONS · ANSWER KEY

Full marks 28

Give the marks for the points in the marking scheme; an answer in other words that says the same is right.

1 Copy and complete

ANSWER U · 4

Cost price (Rs)	Selling price (Rs)	Profit (Rs)	Loss (Rs)
850	1000	**150**	**none**
2400	**2050**	**none**	350
5600	6300	700	**none**
1375	1250	**none**	125

Row 2: S.P. = C.P. − Loss = 2400 − 350. Row 3: C.P. = S.P. − Profit = 6300 − 700. Row 4: C.P. = S.P. + Loss = 1250 + 125.

MARKING SCHEME

- ✓ Row 1: profit 150.
- ✓ Row 2: S.P. 2050.
- ✓ Row 3: C.P. 5600.
- ✓ Row 4: C.P. 1375.

2 Spot the error

ANSWER U · 3

i. With a **loss**, the seller paid **more** than he got, so the loss is **added** to the S.P., not taken away.

ii. C.P. = S.P. + Loss = 9000 + 1000 = **Rs 10000**.

iii. If he paid Rs 8000 and sold for Rs 9000, he made a **profit** of Rs 1000, not a loss.

MARKING SCHEME

- ✓ The loss must be added for the C.P.
- ✓ Rs 10000.
- ✓ His C.P. would give a profit, not a loss.

3 By the dozen, by the piece

ANSWER A · 3

i. S.P. of a dozen = 12 × 20 = Rs 240. Profit = 240 − 180 = **Rs 60**.

ii. 300 ÷ 60 = **5 dozen** (60 pens).

iii. One pen costs her 180 ÷ 12 = Rs 15, so the profit is 20 − 15 = **Rs 5** a pen (60 ÷ 12 = 5 too).

MARKING SCHEME

- ✓ Rs 60 a dozen.
- ✓ 5 dozen.
- ✓ Rs 5 a pen.

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4 A tea stall's day

ANSWER HA · 4

i. C.P. = 1200 + 100 × 8 = Rs 2000; S.P. = 100 × 25 = Rs 2500: a **profit of Rs 500**.
ii. C.P. = 1200 + 60 × 8 = Rs 1680; S.P. = 60 × 25 = Rs 1500: a **loss of Rs 180**.
iii. Each cup brings in 25 − 8 = Rs 17 above its own cost. 1200 ÷ 17 = 70 with 10 left over, so 70 cups pay only Rs 1190 of the Rs 1200 (a loss of Rs 10). With **71 cups** she makes a profit of Rs 7.

MARKING SCHEME

- ✓ Profit of Rs 500 on 100 cups.
- ✓ Loss of Rs 180 on 60 cups.
- ✓ Each cup brings in Rs 17 above its cost.
- ✓ 71 cups.

5 Passed from hand to hand

ANSWER A · 3

Work backwards. Anjali's S.P. was Rs 4800 and her loss Rs 200, so her C.P. was 4800 + 200 = Rs 5000. Anjali's C.P. is Samir's S.P. His profit was Rs 500, so his C.P. was 5000 − 500 = **Rs 4500**.

MARKING SCHEME

- ✓ Anjali paid Rs 5000.
- ✓ Samir sold it for Rs 5000.
- ✓ Samir paid Rs 4500.

6 At the farm or at the market?

ANSWER A · 4

i. 80 × 30 = **Rs 2400**.
ii. 80 × 42 − 600 = 3360 − 600 = **Rs 2760**.
iii. The **market**, by 2760 − 2400 = **Rs 360**.
iv. At the market each kilogram brings Rs 12 more, and the truck costs Rs 600: 600 ÷ 12 = **50 kg**. (Check: 50 × 30 = 1500, and 50 × 42 − 600 = 1500.)

MARKING SCHEME

- ✓ Rs 2400 at the farm.
- ✓ Rs 2760 at the market.
- ✓ The market, by Rs 360.
- ✓ 50 kg.

7 Make your own

ANSWER A · 3

For example: "Sandesh bought a school bag for Rs 800 and a water bottle for Rs 300. He sold the bag for Rs 700 and the bottle for Rs 325."
Bag: loss 800 − 700 = Rs 100. Bottle: profit 325 − 300 = Rs 25. Together: C.P. 1100, S.P. 1025, **loss Rs 75**.
Any story is right if one thing makes a profit, the other a loss, and the total S.P. is Rs 75 less than the total C.P.

MARKING SCHEME

- ✓ One profit and one loss in the story.
- ✓ Total C.P. and total S.P. worked out.
- ✓ A total loss of Rs 75.

8 Think: the same price, twice

ANSWER

i. With the profit: C.P. = 9000 − 1000 = **Rs 8000**. With the loss: C.P. = 9000 + 1000 = **Rs 10000**.
ii. Total C.P. = 8000 + 10000 = Rs 18000; total S.P. = 2 × 9000 = Rs 18000. **Neither profit nor loss.**

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iii. Then the S.P.s are $9000 + 1000 = 10000$ and $9000 - 1000 = 8000$: again Rs 18000 for Rs 18000, **neither profit nor loss**. A profit and a loss of the same size always cancel, whatever the prices.

MARKING SCHEME

- ✓ Rs 8000 and Rs 10000.
- ✓ Total C.P. and S.P. both Rs 18000.
- ✓ Neither profit nor loss.
- ✓ iii: again neither, since the profit and loss cancel.

Marks by level	Knowledge	Understanding	Application	Higher ability	Total
Marks	0	7	13	8	**28**

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