

One-Step Equations

Name:

Date:

INQUIRY

You have 50 yuan and buy a drink. You have 38 yuan left. How much was the drink? You just solved an equation!

Discuss with your partner. Write your initial ideas below:

Key Vocabulary

Term	Definition
Equation	A statement with an equals sign — two balanced sides.
Inverse operation	The opposite operation used to solve (+ and −, x and /).

Part A — Solving One-Step Equations

1. Solve: $x + 8 = 15$ [1 marks]

Show your working:

2. Solve: $y - 4 = 11$ [1 marks]

Show your working:

3. Solve: $5m = 35$ [1 marks]

Show your working:

4. Solve: $n / 3 = 9$ [1 marks]

Show your working:

5. Solve: $x + 17 = 42$ [1 marks]

Show your working:

6. Solve: $8p = 56$ [1 marks]

Show your working:

7. Solve: $t - 23 = 15$ [1 marks]

Show your working:

8. Solve: $w / 6 = 12$ [1 marks]

Show your working:

Part B — Writing & Solving

9. You buy a drink for x yuan and have 38 yuan left from 50 yuan. Write and solve the equation. [2 marks]

Show your working:

10. Three identical Korean sticker packs cost 9,000 won total. Write and solve an equation to find the cost of one pack. [2 marks]

Show your working:

11. A German train ticket costs the base fare plus 5.90 euro fee, totalling 15 euro. Write and solve an equation for the base fare. [2 marks]

Show your working:

Part C — Checking Answers

12. A student solves $x + 7 = 20$ and gets $x = 27$. (a) Check their answer by substituting. (b) Explain their mistake. (c) Find the correct answer. [3 marks]