

Two-step equations – informal solving

MODULE 8 · ALGEBRA — PATTERNS, EXPRESSIONS AND EQUATIONS

ALGEBRA

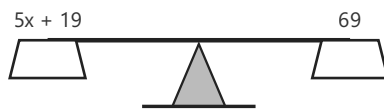
HOW TO ANSWER TODAY

- **Solve in two steps.** Undo the + or – first, then undo the $\times$ or $\div$.

$$2x + 5 = 13 \rightarrow 2x = 8 \rightarrow x = 4$$

STRETCH PROBLEMS

1

Find x so the scale balances.

Cian opens a packet of biscuits at break and shares them equally onto **5** plates for his table group. There were already **19** biscuits on the tray from yesterday, so the tray now holds **69** biscuits in total. If x is the number of biscuits Cian put on each plate, solve $5x + 19 = 69$ to find x .

2

Find x so the scale balances.

Saoirse packs the same number of grapes into each of **4** small pots in her lunchbox, then adds **9** extra grapes loose on top. Altogether her lunchbox holds **45** grapes. If x is the number of grapes in each pot, solve $4x + 9 = 45$ to find how many grapes are in each pot.

3

Find x so the scale balances.

Granny gives the same number of sweets to each of her **5** grandchildren after Sunday dinner. They put **10** sweets back into the tin to share later, leaving **25** sweets on the table. If x is the number of sweets each child got, then $5x - 10 = 25$. What is x ?