

Solving two-step equations

MODULE 10 · ALGEBRA — PATTERNS, EXPRESSIONS AND EQUATIONS

ALGEBRA

HOW TO ANSWER TODAY

- **Solve in two steps.** Undo the + or – first, then undo the × or ÷.

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

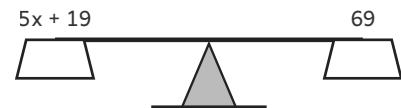
★ STRETCH PROBLEMS

- 1 On sports day, 5th class need to set out cones for the relay stations. The caretaker has **121** cones in the shed after putting **11** aside for the long jump, and the rest will be shared equally across **12** relay stations as $12x$ cones. If $12x - 11 = 121$ describes the count, how many cones go to each relay station?



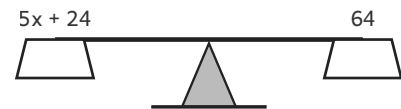
Find x so the scale balances.

- 2 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.



Find x so the scale balances.

- 3 Granny has **5** fields on her farm, each with the same number of calves. She also has **24** calves in the barn. Altogether there are **64** calves on the farm. How many calves are in each field?



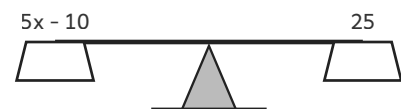
Find x so the scale balances.

- 4 5th class are heading on a school tour to the Cliffs of Moher. The total cost is **€58**, made up of a **€13** coach charge plus **€9** per pupil for the visitor centre ticket. How many pupils, x, are going on the tour?



Find x so the scale balances.

- 5 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?



Find x so the scale balances.