

Forming an equation from a story

MODULE 8 · 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 5th class are going on a school tour to Glendalough in Wicklow. The total cost is €160. A €16 booking fee has already been paid, and the remaining cost is shared equally among 12 pupils. How much does each pupil still need to pay?



Find x so the scale balances.

- 2 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.

- 3 Saoirse is on a sponsored cycle around the school path. She has already collected €11 from sponsors at home. Each lap she cycles raises another €3, and she ends up with €53 in total. How many laps does she complete?



Find x so the scale balances.

- 4 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.

- 5 At break time, 5th class share out a big tin of biscuits. There are 10 identical packets with the same number of biscuits in each, plus 11 loose biscuits left over. Altogether there are 151 biscuits. How many biscuits are in each packet?



Find x so the scale balances.