

Solving simple equations – find the missing value

MODULE 8 · ALGEBRA — PATTERNS, EXPRESSIONS AND EQUATIONS

ALGEBRA

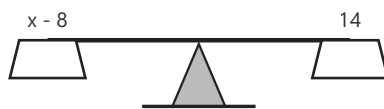
HOW TO ANSWER TODAY

- **Solve for x.** Do the OPPOSITE operation to both sides. + becomes –; × becomes ÷.

$$x + 7 = 15 \rightarrow x = 15 - 7 = 8 \quad 3x = 21 \rightarrow x = 21 \div 3 = 7$$

STRETCH PROBLEMS

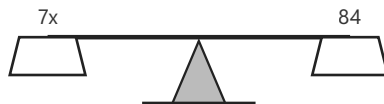
1



Find x so the scale balances.

Mr Ó Briain is counting worksheets in the photocopier room for tomorrow's maths lesson. After he hands **8** worksheets to the 5th class teacher next door, he has **14** worksheets left in his pile. If x is the number of worksheets he started with, then $x - 8 = 14$. What is x?

2



Find x so the scale balances.

The school canteen orders milk cartons in equal trays. **7** trays hold **84** cartons in total. If x is the number of cartons in one tray, solve $7x = 84$ to find how many cartons are in each tray.

3



Find x so the scale balances.

Ms Murphy's 5th class collected **81** autumn leaves for an art lesson on the school yard. The leaves are shared equally between **9** groups, with x leaves in each group. Solve $9x = 81$ to find how many leaves each group gets.