Finding the missing number (□ + 5 = 12)

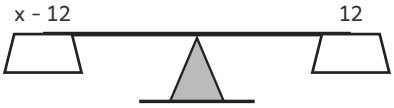
MODULE 10 · ALGEBRA — PATTERNS, RULES AND NUMBER SENTENCES ALGEBRA

HOW TO ANSWER TODAY

- **Solve for x.** Do the OPPOSITE operation to both sides. + becomes −; × becomes ÷.
  x + 7 = 15 → x = 15 − 7 = 8 3x = 21 → x = 21 ÷ 3 = 7

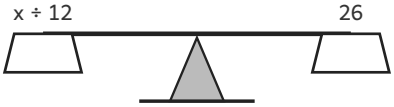
STRETCH PROBLEMS

1. Cian watches the bird feeder at the classroom window. After **12** birds fly away, there are **12** birds left. If x stands for how many birds were there at the start, then x - **12** = **12**. How many birds were there to begin with?



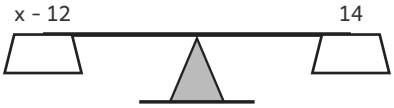
Find x so the scale balances.

2. On the sponsored cycle, Tadhg rides a number of laps of the cycle path and divides them equally across **12** days. He cycles **26** laps each day. If x is the total number of laps, then x ÷ **12** = **26**. What is x?



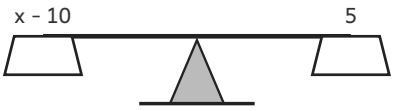
Find x so the scale balances.

3. Mr Ó Braonáin has some worksheets in the photocopier tray. After he takes out **12** for his own class, there are **14** left for the other teachers. If x stands for the number of worksheets he started with, then x - **12** = **14**. How many worksheets did he start with?



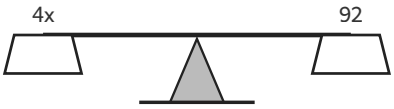
Find x so the scale balances.

4. On Monday morning in 5th class, some pupils are out sick. When **10** pupils have gone home early, there are **5** pupils left in the room. If x stands for how many pupils started the day, then x - **10** = **5**. How many pupils started the day?



Find x so the scale balances.

5. The classroom store has **92** pencils packed equally into **4** boxes. Let x be the number of pencils in one box, so 4x = **92**. How many pencils are in each box?



Find x so the scale balances.