Equality and the balance

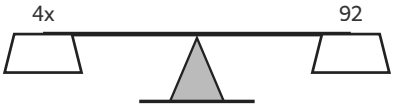
MODULE 8 · ALGEBRA — PATTERNS, EXPRESSIONS AND EQUATIONS ALGEBRA

HOW TO ANSWER TODAY

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

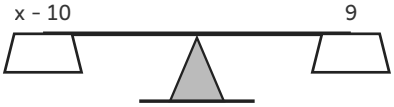
STRETCH PROBLEMS

1. For Halloween, 5th class bake **4** identical barmbracks and use **92** raisins in total. Each barmbrack gets the same number of raisins. How many raisins go into each one?



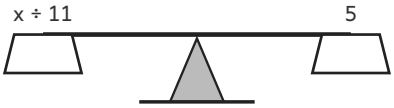
Find x so the scale balances.

2. The 5th class library had x books on the shelves on Monday morning. During the week, **10** books were borrowed and the shelves were left with **9** books. How many books were on the shelves on Monday?



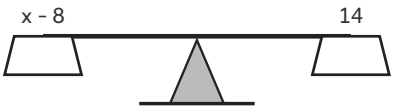
Find x so the scale balances.

3. Aoife is sorting the reading books for the school-bag rota. The books are shared equally between **11** pupils and each pupil gets **5** books. How many books are there in total?



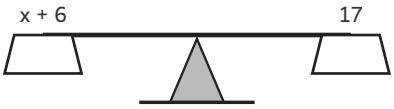
Find x so the scale balances.

4. 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?



Find x so the scale balances.

5. Cian is feeding ducks at the local pond. He has some pieces of bread already, and after he throws in **6** more pieces there are **17** pieces floating on the water. How many pieces did he start with?



Find x so the scale balances.