Day 350 **C Tier 10-a-day: Model Solutions**

1 Sequences

Here is a sequence with one number missing.
1, 10, ?, 28, 37
Work out the missing number.

The terms go up by 9 each time
10 + 9 = 19
Answer: 19

2 The range

Here are the ages of some children.
7 7 7 12 7 11 8
Work out the range.

Range = largest value − smallest value
12 − 7 = 5
Answer: 5

3 Money: wages

Uzma earns £8 for each hour of work.
Uzma works for 5 hours.
How much does Uzma earn?

£8 × 5 = £40
Answer: £40

4 Area on a square grid

The diagram shows a shape drawn on a square grid.
Each square has an area of 1 m^2.
Work out the area of the shape.

Count the squares in the shape.
Split into two rectangles: 3 × 3 = 9 and 3 × 3 = 9
9 + 9 = 18
Answer: 18 m^2

5 Money: saving

Isla saves £8 each week.
How many weeks does it take to save £64?

£64 ÷ £8 = 8
Answer: 8 weeks

6 Perimeter of an L-shape

The diagram shows an L-shape.
All the corners are right angles.
Work out the perimeter of the shape.
The diagram is not drawn accurately.

Find the two missing sides.
Missing horizontal side: 7 − 3 = 4
Missing vertical side: 12 − 3 = 9
Add all six sides: 7 + 3 + 4 + 9 + 3 + 12 = 38
Answer: 38 m

7 Tables of values

Complete the table of values for y = 3x + 5.

When x = 2: y = 3 × 2 + 5 = 11
When x = 3: y = 3 × 3 + 5 = 14
Answer: x = 2: y = 11; x = 3: y = 14

Day 350 **C Tier 10-a-day: Model Solutions**

8 The mean

Here are the times, in minutes, of some bus journeys.
15 11 14 7 28
Work out the mean.

Add up the values: 15 + 11 + 14 + 7 + 28 = 75
Divide by 5: 75 ÷ 5 = 15
Answer: 15

9 Simplifying expressions

Simplify $5y + 5 - 3y$

Letters: $5y - 3y = 2y$
Numbers: 5 on its own
Answer: $2y + 5$

10 Simplifying fractions

Write $\frac{16}{36}$ in its simplest form.

Divide the top and bottom by 4
$\frac{16}{36} = \frac{4}{9}$

Answer: $\frac{4}{9}$