Day 117 **C Tier 10-a-day: Model Solutions**

1 Multiplication

Work out 35 × 9.

30 × 9 = 270 and 5 × 9 = 45
270 + 45 = 315
Answer: 315

2 Types of angle

Write down the type of each angle.
Choose from: acute, right, obtuse, reflex.
(a) 25°
(b) 90°

(a) 25° is less than 90°, so it is acute
(b) 90° is exactly 90°, so it is right
Answer: (a) acute (b) right

3 Coordinates

ABCD is a rectangle.
A is the point (0, 9), B is the point (0, 1) and C is the point (3, 1).
Write down the coordinates of D.

AB is vertical so D has the same y-coordinate as A: 9
BC is horizontal so D has the same x-coordinate as C: 3
Answer: (3, 9)

4 The mean

Here are the shoe sizes of some students.
6 3 4 8 3 6
Work out the mean.

Add up the values: 6 + 3 + 4 + 8 + 3 + 6 = 30
Divide by 6: 30 ÷ 6 = 5
Answer: 5

5 Solving equations

Solve 8k = 88

8k means 8 × k, so divide both sides by 8
k = 88 ÷ 8 = 11
Answer: k = 11

6 Completing a table

The table shows the ways 25 students travel to school.
Work out the number of students for Bus.

Add the known numbers: 4 + 7 + 4 = 15
25 − 15 = 10
Answer: 10

7 Estimation

Estimate the value of 84 + 16 by rounding each number to the nearest 10.

84 rounds to 80 and 16 rounds to 20
80 + 20 = 100
Answer: 100

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8 Reading a pie chart

32 children were asked about their favourite animal.
The pie chart shows the results.
How many children chose Fish?

The Fish sector is a quarter of the pie chart
32 ÷ 4 = 8
Answer: 8

9 The nth term

The nth term of a sequence is n + 6.
Work out the 6th term of the sequence.

Put n = 6 into n + 6
6 + 6 = 12
Answer: 12

10 Circles with an approximate pi

A circle has a diameter of 9 cm.
Use π = 3 to work out an estimate for its circumference.

Circumference = π × diameter
3 × 9 = 27
Answer: 27 cm