Day 291 **C Tier 10-a-day: Model Solutions**

1 Addition

Work out 627 + 322.

Add the hundreds, tens and units
627 + 322 = 949
Answer: 949

2 Tally charts

The tally chart shows the types of film some people watched.
Work out the total number of people.

Drama 5, Horror 9, Action 3
5 + 9 + 3 = 17
Answer: 17

3 Adding decimals

Work out 1.60 + 2.07.

Line up the decimal points
1.60 + 2.07 = 3.67
Answer: 3.67

4 Perimeter of a regular polygon

A regular decagon has sides of length 2 cm.
Work out its perimeter.

A regular decagon has 10 equal sides
10 × 2 = 20
Answer: 20 cm

5 Pay rates

Carlos is paid £5 for each hour of work.
Carlos works for 4 hours.
How much is Carlos paid?

£5 × 4 = £20
Answer: £20

6 Equations of lines

A straight line passes through the points
(5, 1), (5, 2), (5, 5)
Write down the equation of the line.

Every point has x-coordinate 5, so the line is vertical
Answer: x = 5

7 Ratio, finding the other part

In a club, the ratio of boys to girls is 1 : 2.
There are 6 boys.
Work out the number of girls.

6 ÷ 1 = 6 for each part
2 × 6 = 12
Answer: 12

Day 291 **C Tier 10-a-day: Model Solutions**

8 Missing side from area

A rectangular garden has an area of 26 cm^2.
Its length is 13 cm.
Work out its width.

Area = length × width
26 = 13 × width
width = 26 ÷ 13 = 2
Answer: 2 cm

9 Forming and solving equations

Priya has x stickers.
A friend gives Priya 15 more stickers.
Priya now has 28 stickers.
(a) Write down an equation using x.
(b) Solve your equation to find how many stickers Priya had at the start.

(a) x + 15 = 28
(b) x = 28 − 15 = 13
Answer: (a) x + 15 = 28 (b) x = 13

10 Reflection on a grid

The point P is drawn on the grid.
P is reflected in the line y = 4.
Write down the coordinates of the image of P.

P is (2, 2)
P is 2 squares below the line, so the image is 2 squares above
y-coordinate: 4 + 2 = 6
Answer: (2, 6)