Day 31 **C Tier 10-a-day: Model Solutions**

1 Types of angle

Write down the type of each angle.
Choose from: acute, right, obtuse, reflex.
(a) 90°
(b) 155°

(a) 90° is exactly 90°, so it is right
(b) 155° is between 90° and 180°, so it is obtuse
Answer: (a) right (b) obtuse

2 Units of time

How many hours are there in 4 days?

1 day = 24 hours
4 × 24 = 96
Answer: 96

3 Radius and diameter

The diameter of a pond is 48 m.
Work out the radius.

The radius is half the diameter
48 ÷ 2 = 24
Answer: 24 m

4 Tables of values

The table shows some values of x and y.
(a) Write down the value of y when x = 1.
(b) Write down the value of x when y = 12.

(a) Find 1 in the top row; the number underneath is 6
(b) Find 12 in the bottom row; the number above is 4
Answer: (a) 6 (b) 4

5 Line graphs

The line graph shows the temperature in a garden at different times.
At what time was the temperature greatest?

The highest point on the graph is 17°C
This is at 9 am
Answer: 9 am

6 Factors

Write down all the factors of 15.

Find pairs that multiply to make 15
1 × 15, 3 × 5
Answer: 1, 3, 5, 15

7 Venn diagrams

Some students were asked whether they play football or netball.
The Venn diagram shows the results.
How many students play netball?

Add the number in the netball circle: 10 + 7 = 17
Answer: 17

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8 Angles between clock hands

Work out the smaller angle between the hour hand and the minute hand of a clock at 9 o'clock.

There are 12 hours round a clock, so each hour is 360 ÷ 12 = 30°
At 9 o'clock the hands are 9 hours apart (going the short way: 3)
3 × 30 = 90
Answer: 90°

9 Money: saving

Eva saves £4 each week.
How many weeks does it take to save £24?

£24 ÷ £4 = 6
Answer: 6 weeks

10 Substitution

Work out the value of z^2 when z = 3.

z^2 means z × z
3 × 3 = 9
Answer: 9