Day 279 **C Tier 10-a-day: Model Solutions**

1 Reading a clock

The clock shows the time now.
(a) Write down the time shown.
(b) What time will it be in 15 minutes?

(a) The minute hand points to 8, which is 8 × 5 = 40 minutes past, and the hour hand has passed the 7, so the time is 7:40
(b) 7:40 + 15 minutes = 7:55
Answer: (a) 7:40 (b) 7:55

2 Number sequences

Here is a number sequence.
8, 15, 22, 29, ...
Write down the next two numbers.

The sequence goes up by 7 each time
29 + 7 = 36, 36 + 7 = 43
Answer: 36, 43

3 Which expression

Which of these means x multiplied by 3?

$3x$, $x + 3$, x^2, $\frac{x}{3}$

x × 3 is written 3x
Answer: 3x

4 Reading a table

The table shows the types of film some people watched.
Write down the number of people for Comedy.

Read the value under Comedy: 12
Answer: 12

5 Map scales

On a map, 1 cm represents 10 km.
On the map, two towns are 5 cm apart.
Work out the real distance between the towns.

1 cm represents 10 km
5 × 10 = 50
Answer: 50 km

6 Pay rates

Harry is paid £6 for each hour of work.
Harry works for 5 hours.
How much is Harry paid?

£6 × 5 = £30
Answer: £30

7 Time

A film starts at 8:30 pm.
It lasts for 3 hours 10 minutes.
At what time does it finish?

8:30 pm + 3 hours = 11:30 pm
11:30 pm + 10 minutes = 11:40 pm
Answer: 11:40 pm

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8 Time from distance and speed

A bus travels 400 km at 50 km/h.
How long does the journey take?

Time = distance ÷ speed
400 ÷ 50 = 8
Answer: 8 hours

9 Shaded area

The diagram shows a rectangle with a smaller rectangle cut out of it.
Work out the area of the shaded part.
The diagram is not drawn accurately.

Big rectangle: 12 × 10 = 120
Small rectangle: 8 × 8 = 64
Shaded area: 120 − 64 = 56
Answer: 56 cm^2

10 Coordinates

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

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