Day 340 **C Tier 10-a-day: Model Solutions**

1 Substitution

Work out the value of 4c when c = 3.

4c means 4 × c
4 × 3 = 12
Answer: 12

2 Tally charts

The tally chart shows the favourite sport of some students.
Write down the frequency for Cricket.

Each group of 5 is 5 and any extra lines are added on
Cricket: 2 groups of 5 and 4 = 5 × 2 + 4 = 14
Answer: 14

3 Types of angle

Write down the type of each angle.
Choose from: acute, right, obtuse, reflex.
(a) 310°
(b) 90°

(a) 310° is more than 180°, so it is reflex
(b) 90° is exactly 90°, so it is right
Answer: (a) reflex (b) right

4 Subtracting decimals

Work out 6.01 − 2.70.

Line up the decimal points
6.01 − 2.70 = 3.31
Answer: 3.31

5 24-hour clock

Write 6:45 am using the 24-hour clock.

am times stay the same, with a zero in front if needed
6:45 am = 06:45
Answer: 06:45

6 Formulae in words

Here is a rule to work out the cost of hiring a bike.
Cost (£) = 6 × number of hours + 4
Work out the cost of hiring a bike for 4 hours.

Cost (£) = 6 × 4 + 4
= 24 + 4 = 28
Answer: £28

7 Ordering numbers

Write these numbers in order, starting with the smallest.
334, 885, 917, 983

Compare the hundreds digits first, then the tens
334, 885, 917, 983
Answer: 334, 885, 917, 983

8 Equations of lines

A straight line passes through the points
(0, 8), (5, 8), (8, 8)
Write down the equation of the line.

Every point has y-coordinate 8, so the line is horizontal
Answer: y = 8

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9 Finding a missing value from the mean

The mean of five numbers is 4.
Four of the numbers are 1, 3, 7 and 3.
Work out the other number.

Total of all the numbers: $4 \times 5 = 20$
Total of those given: $1 + 3 + 7 + 3 = 14$
$20 - 14 = 6$
Answer: 6

10 Cost from perimeter

A rectangular play area is 6 m long and 5 m wide.
Fencing costs £8 per metre.
Work out the cost of putting fence all the way round the play area.

Perimeter = 6 + 5 + 6 + 5 = 22 m
Cost = 22 × £8 = £176
Answer: £176