Day 30 **B Tier 10-a-day**

1 Factorise 15x + 18

2 Kofi buys 5 pens at £1.50 each and 2 sandwiches at £1.65 each.
He pays with a £20 note.
Work out how much change he gets.

3 I think of a number.
I multiply it by 6 and then subtract 10.
The answer is 50.
Work out my number.

4 The table shows some information about 57 members of a leisure centre.
One person from the group "Children" is chosen at random.
Find the probability that this person chose "Swim".

	Swim	Gym	Total
Adults	13		27
Children		25	
Total			57

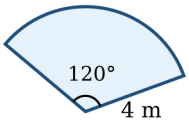
5 Work out
(a) $\sqrt[3]{64} \times 6$
(b) the square root of 36

Day 30	B Tier 10-a-day

6 A car uses 50 litres of petrol to travel 600 km.
Work out how many kilometres it travels on each litre of petrol.

7 There are 8.7×10^6 bacteria in a dish.
The number doubles every day.
How many are there after 5 days?
Give your answer in standard form.

8 The diagram shows a sector of a circle with radius 4 m and angle 120°. (Calculator)
Work out the length of the arc of the sector.
Give your answer correct to 1 decimal place.
The diagram is not drawn accurately.



9 Here is an iteration formula.

$x_{n+1} = 5 + \frac{8}{x_n}$

$x_0 = 2$

(a) Work out x_1

(b) Work out x_2. Give your answer correct to 3 decimal places. (Calculator)

10 A circle has centre O and radius 9 m. (Calculator)
AB is a chord and M is the midpoint of AB. OM is perpendicular to AB.
Work out the value of x. Give your answer correct to 1 decimal place.
The diagram is not drawn accurately.

