Day 73	B Tier 10-a-day

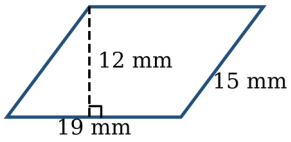
1 Write each number as an ordinary number.

(a) 7.2×10^{6}

(b) 8.6×10^{-5}

2 n is an integer.
Write down all the values of n for which
$-6 \leq n < 1$

3 The diagram shows a parallelogram.
Find the area of the parallelogram.
The diagram is not drawn accurately.



4 A straight line has equation $y = 4x + 4$

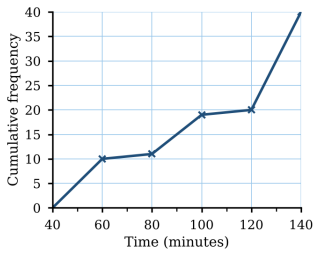
(a) Write down the gradient of the line.

(b) Write down the equation of a line that is parallel to this line and passes through the point (0, 8).

5 (a) Write $\frac{7}{16}$ as a decimal.

(b) Write $\frac{11}{12}$ as a recurring decimal.

For part (b), write down the first 8 decimal places and say which digits repeat.

Day 73	B Tier 10-a-day
6 The population of a colony of bats is 8,000. (Calculator) It increases by 10% each year. Work out the population after 2 years.	
7 Expand and simplify $(x + 5)(x - 4)$	
8 An isosceles triangle has two equal sides of length $(x + 1)$ cm and a third side of length $(3x + 1)$ cm. The perimeter of the triangle is 53 cm. Work out the value of x.	
9 The cumulative frequency graph shows the times taken by 40 students to complete a puzzle. (a) Use the graph to estimate the median. (b) Work out an estimate for the interquartile range. 	
10 A triangle has sides of length 9 m, 16 m and 12 m. Is the triangle right-angled? You must show your working.	