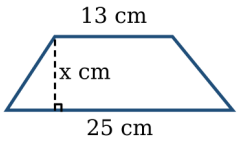
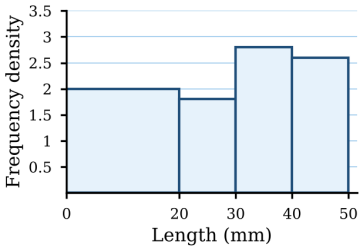
Day 70	A Tier 10-a-day
1 Isla and Ben each invest £2000 for 3 years. (Calculator) Isla's account pays 4% simple interest per year. Ben's account pays 4% compound interest per year. Work out how much more interest Ben earns than Isla.	
2 Rationalise the denominator of $\frac{8}{\sqrt{2}}$ Give your answer in its simplest form.	
3 A is the point (8, 4) and B is the point (2, 2). Find the equation of the perpendicular bisector of AB.	
4 The area of this trapezium is 152 cm^2. Work out the value of x. The diagram is not drawn accurately. 	
5 $A = 3^2 \times 5^4 \times 7^3$ $B = 3 \times 5^4 \times 7^4$ Find the highest common factor (HCF) and the lowest common multiple (LCM) of A and B. Give your answers as products of prime factors.	

Day 70 **A Tier 10-a-day**

6 A spinner can land on red, blue or green.
P(red) = 0.2 and P(blue) = 0.3.
(a) Work out the probability that it lands on red or blue.
(b) Work out the probability that it lands on green.

7 An isosceles triangle has two equal sides of length (4x + 2) cm and (2x + 22) cm.
The third side is 17 cm.
Work out the perimeter of the triangle.

8 The histogram shows information about the length of some items.
(a) Work out the number of items with a length in the class 30 to 40 mm.
(b) Work out an estimate for the number with a length greater than 35 mm.



9 $E = \frac{1}{2}mv^2$
Work out the value of E when m = 2 and v = 8

10 Write these numbers in order of size, starting with the smallest.
0.52 $\frac{1}{10}$ 93% 84%