Day 244 **A Tier 10-a-day**

1 Write these numbers in order of size, starting with the smallest.

0.14 8% 0.41 $\frac{8}{10}$

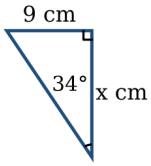
2 The frequency table shows data for 25 children.
(a) Find the median.
(b) Work out the range.

Number of siblings	0	1	2	3	4
Frequency	7	5	3	6	4

3 PQ is a straight line of length 4 cm.
A point S moves so that it is always less than 7 cm from the point P.
Describe the region where S can be.

4 Hugo invests £2000 in a savings account. (Calculator)
The account pays 4% compound interest per year.
Work out the amount in the account after 2 years.

5 (a) Solve $-22 \leq 4x - 6 < -2$
(b) Write down all the integer values of x that satisfy this inequality.

Day 244	A Tier 10-a-day
6 An isosceles triangle has two equal sides of length (5x + 3) cm and (x + 23) cm. The third side is 12 cm. Work out the perimeter of the triangle.	
7 f(x) = 2x − 1 g(x) = x^2 − 4 Solve fg(x) = −1	
8 Work out the value of x. (Calculator) Give your answer to 3 significant figures. The diagram is not drawn accurately. 	
9 Leah invests £1,000 in a savings account. (Calculator) Compound interest is paid at a fixed rate each year. After 2 years the investment is worth £1,060.90. Work out the annual rate of interest.	
10 Make x the subject of $y = \frac{2x + 1}{2x + 3}$	