Day 154	B Tier 10-a-day
1 Triangle DEF is isosceles with DE = DF. Angle EDF = 32°. Work out the size of angle DEF.	
2 Leah has $\frac{4}{5}$ of £100. Ella has 35% of £140. Who has more money? You must show your working.	
3 Kira types at 40 words per minute. (a) How many words does Kira type in 5 minutes? (b) How long does Kira take to type 600 words?	
4 Work out the value of $2a - 3b$ when $a = -5$ and $b = 6$	
5 The number of members of a club goes from 500 to 350. Work out the percentage decrease.	

Day 154 **B Tier 10-a-day**

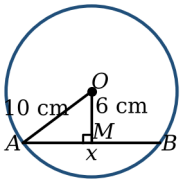
6 The table shows the pets owned by each student in a class.
(a) Write down the mode.
(b) Work out the median.

Pets	2	3	4	5	6	7
Frequency	9	8	5	1	2	2

7 A straight line has equation $y = 5x + 5$
(a) Write down the coordinates of the point where the line crosses the y-axis.
(b) Work out the coordinates of the point where the line crosses the x-axis.

8 In a bag of counters, the ratio of black to white is 1 : 5.
The ratio of white to blue is 3 : 2.
Write down the ratio black : white : blue.

9 A circle has centre O and radius 10 cm.
AB is a chord and M is the midpoint of AB. OM is perpendicular to AB.
Work out the value of x.
The diagram is not drawn accurately.



10 The length of a rectangle is 40 cm and its width is 11 cm.
Both measurements are correct to the nearest cm.
Work out the upper bound for the perimeter of the rectangle.