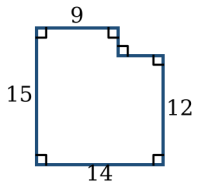
Day 282 **B Tier 10-a-day**

1 Here are four digit cards.
7 8 3 4
Use all four cards to make the largest possible even number.

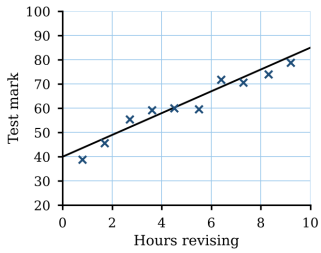
2 (a) Write down the number of lines of symmetry of an isosceles triangle.
(b) Write down the order of rotational symmetry of an isosceles triangle.

3 The ratio of cats to dogs at a vets is 7 : 5.
What fraction of them are cats?

4 The diagram shows the shape of a garden.
All the corners are right angles. All lengths are in cm.
(a) Find the perimeter.
(b) Find the area.



5 The scatter graph shows information about hours revising and test mark.
A line of best fit is drawn.
(a) Describe the correlation.
(b) Use the line of best fit to estimate the test mark when hours revising is 4.



Day 282 **B Tier 10-a-day**

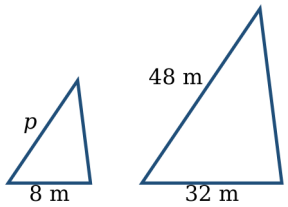
6 Write down all the common factors of 20 and 50.

7 The table shows some information about 62 people at a meeting.
One person from the group "Female" is chosen at random.
Find the probability that this person chose "Tea".

	Tea	Coffee	Total
Male	7		32
Female		6	
Total			62

8 A shop sells pens and pencils. All pens cost the same and all pencils cost the same.
3 pens and 2 pencils cost 365p.
4 pens and 2 pencils cost 460p.
Work out the cost of one pen and the cost of one pencil.

9 The two triangles are similar.
(a) Work out the scale factor of the enlargement from the smaller triangle to the larger triangle.
(b) Work out the value of p.
The diagram is not drawn accurately.



10 Here is an iteration formula.

$x_{n+1} = 6 + \frac{6}{x_n}$

$x_0 = 2$

(a) Work out x_1

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