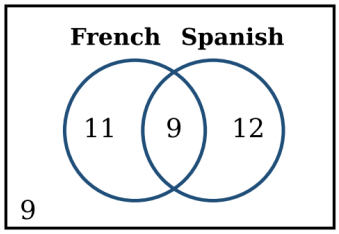
Day 279	B Tier 10-a-day
1 Write these in order of size. Start with the smallest. $\frac{3}{10}$, 25%, 80%, $\frac{1}{5}$	
2 The first term of a sequence is 1. The term-to-term rule is: multiply by 3 and then add 5. Work out the 4th term.	
3 After 4 tests, Tara's mean mark is 77. After her next test, her mean mark is 80. What mark did she get in her next test?	
4 A badge is made from a rectangle and a semicircle. (Calculator) The rectangle is 28 cm wide and 20 cm high. The diameter of the semicircle is 28 cm. (a) Work out the area of the shape. (b) Work out the perimeter of the shape. Give each answer correct to 1 decimal place.	
5 A piece of wood has a density of 0.6 g/cm^3 and a volume of 100 cm^3. Work out its mass.	

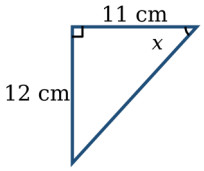
Day 279 **B Tier 10-a-day**

6 Amir's rent goes up by 35%. (Calculator)
The new rent is £1080 a month.
Work out the rent before the increase.

7 The Venn diagram shows information about 41 pupils in Year 9.
One of them is chosen at random.
Find the probability that the person chose both French and Spanish.



8 Find the size of angle x. (Calculator)
Give your answer correct to 1 decimal place.
The diagram is not drawn accurately.



9 Factorise $a^2 + 7a$

10 Two rectangles are joined to make a shape.
The first is 4 cm by 3 cm.
The second is 9 cm by 14 cm.
Work out the total area of the shape.