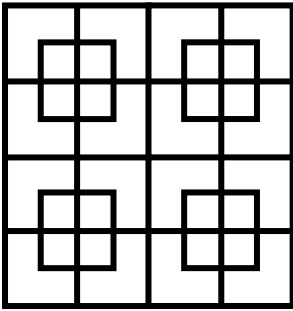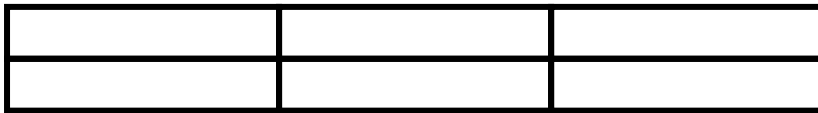# Virtual Maths Club – example problems

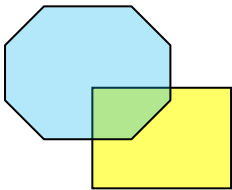What is the total number of squares in this diagram?

OR:

What is the total number of rectangles in this diagram?

The doors in a new school are to be numbered from 1 to 100.

How many 9s will be needed?

$\frac{7}{8}$ of the area of the octagon is shaded blue and 80% of the area of the rectangle is shaded yellow.

The area of how many octagons = the area of 24 rectangles?

The ratio of Beegee's age to Ozzie's age is 1 : 4
The ratio of Ozzie's's age to Phoebe's age is 2 : 5
Express Beegee's age as a percentage of Phoebe's age.