Take a look at the image.
How do you think it was created?

Did you notice any symmetry in the image?
Does this help you to imagine how the image was made?


Here is a diagram which shows how we created the image.

We started with a triangle (shaded) and then used the coordinate grid to help us to rotate it through multiples of $90^{\circ}$ around the point $(0,0)$.


Create some images of your own by rotating a shape through multiples of $90^{\circ}$.

You might like to start with a triangle as we did, or you might want to use other shapes.

How can you use a coordinate grid to help you to rotate each vertex around (0, 0)?

What is the relationship between the coordinates of the vertices as they rotate through multiples of $90^{\circ}$ ?

