Thursday 11ᵗʰ June 2020   Maths Y4

Watch this clip about the 3 ways to transform a shape at https://www.bbc.co.uk/bitesize/topics/z2dqrwx/articles/zcjs97h then try these Mastery questions – you will need to draw the grids in your maths books.

When you have completed these questions practise the multiplication tables check at www.timestables.co.uk See if you can still score as highly as you did before Easter.

There are also some Greater Depth questions on the next page.

If pupils have mastered this objective they will be able to complete these activities independently:
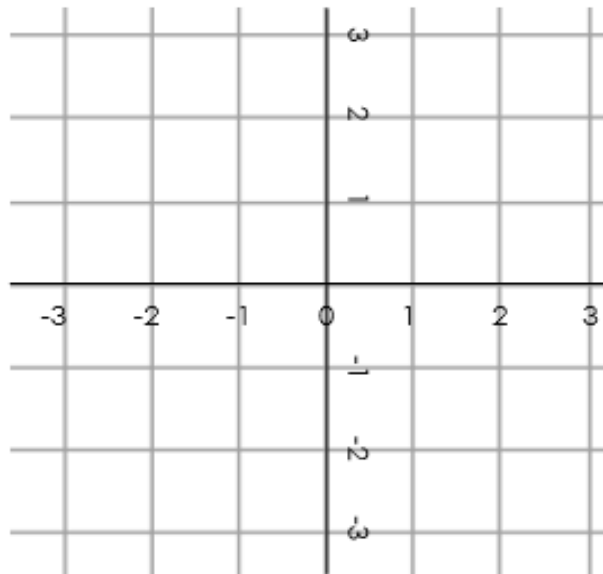
Mark your grid as shown with numbers on both axes going from -10 to 10.
Plot out a polygon (start with a hexagon) in the first quadrant (top left hand side).
Make a note of the coordinates.
Now reflect the shape into the second quadrant (top right).

Using the grid marked as shown, reflect the polygon so that it appears in all four quadrants.
Make sure that the distance from the axes is the same in all four quadrants.

Now use another grid to create another shape or polygon and practise reflecting as with the first polygon.

Plot a set of coordinates to create a shape without drawing the shape.
Let your partner use the coordinates to make a shape and then go on to reflect the shape into all 4 quadrants.

Now create a shape in the first quadrant and rotate the shape, by moving the shape through a 90° turn.
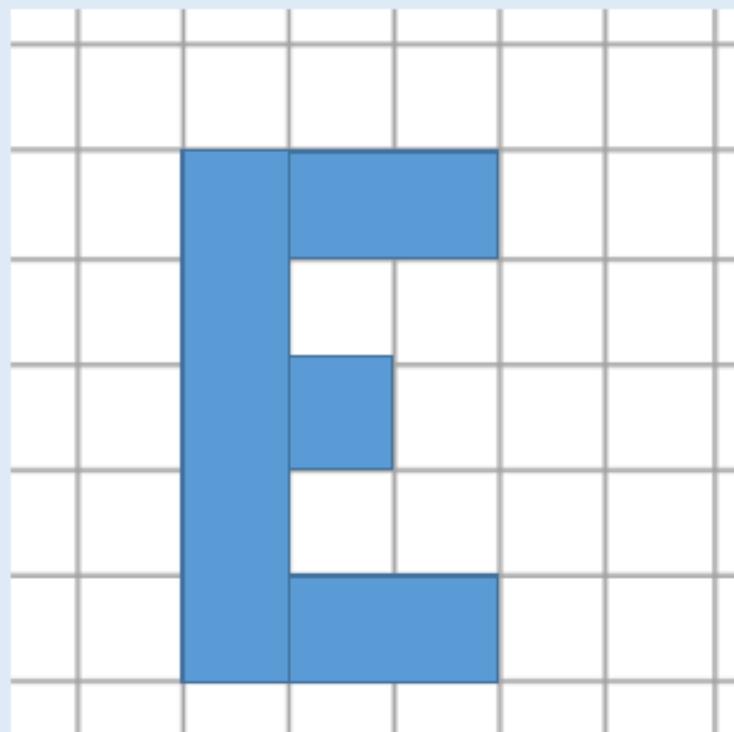Plot the rotated shape in the second quadrant.
Continue rotating the shape through into the third and fourth quadrants.
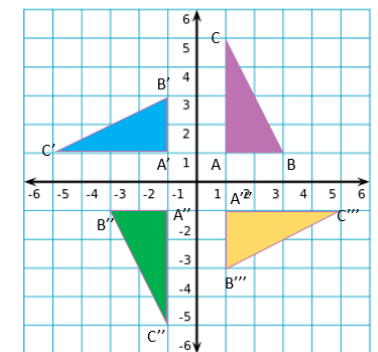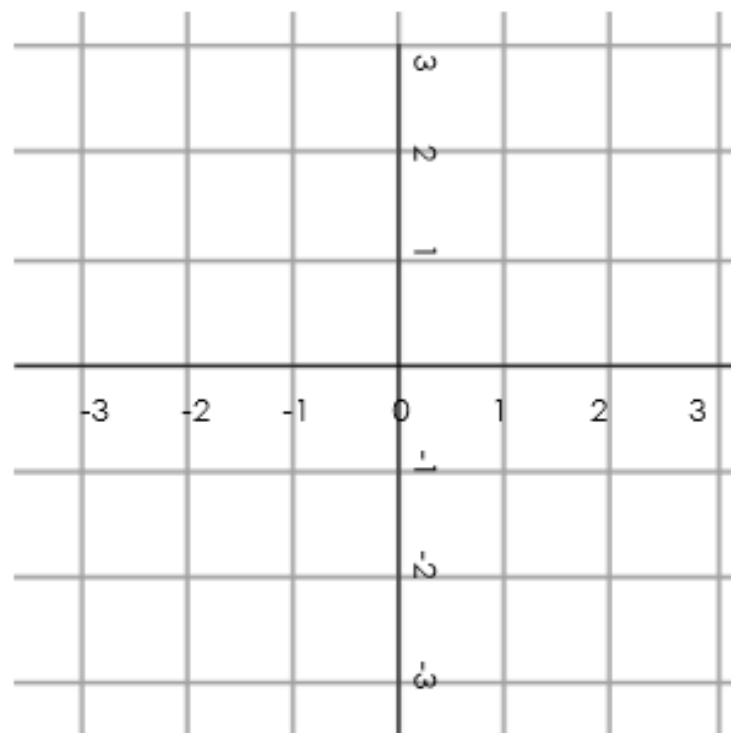
Rotated shape example

Activities for pupils working at greater depth:

Using a grid with the 4 quadrants shown and marked. Plot the letters E, F, H, I, L or T as shown below.

Now rotate the letters through a 90° into the next quadrant. Make a note of the coordinates in each of the quadrants. Provide coordinates for your partner to try to plot and rotate letters.

Game time:

Take a grid and mark as shown above. Create a game that has movement around the grid in all four quadrants. The movement is organised by naming the coordinates. Your aim is to create the most interesting game.