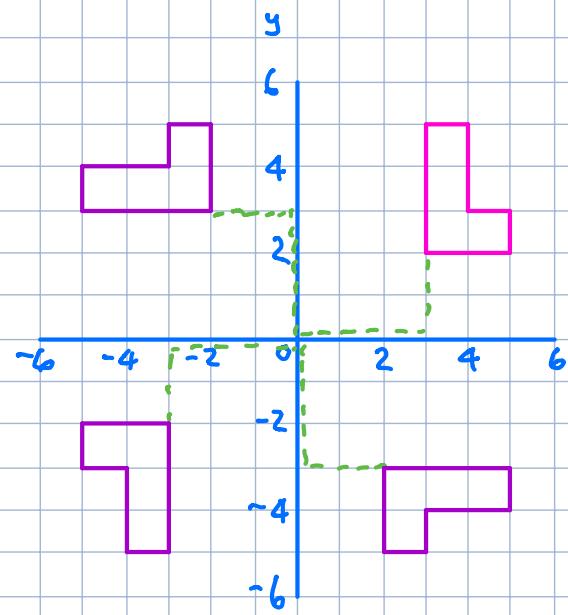
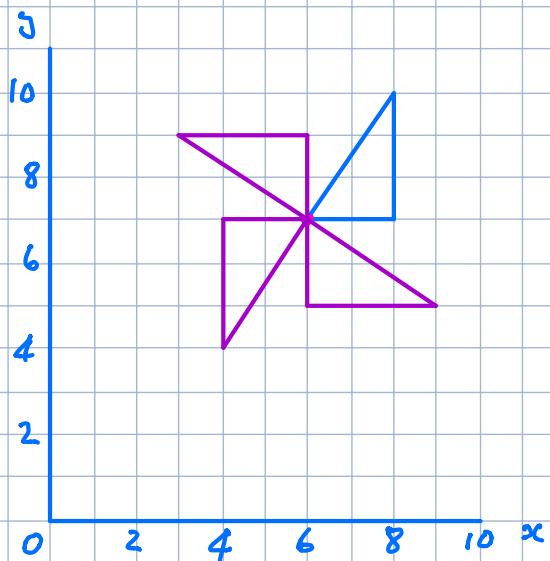


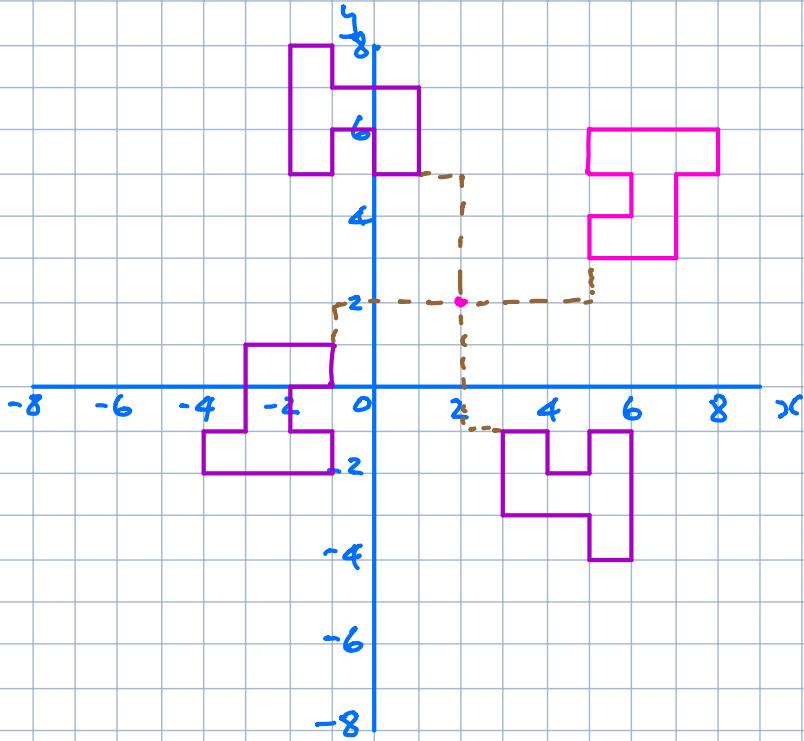
Rotations



Rotate L shape
by $90^\circ, 180^\circ, 270^\circ$
clockwise about $(0,0)$

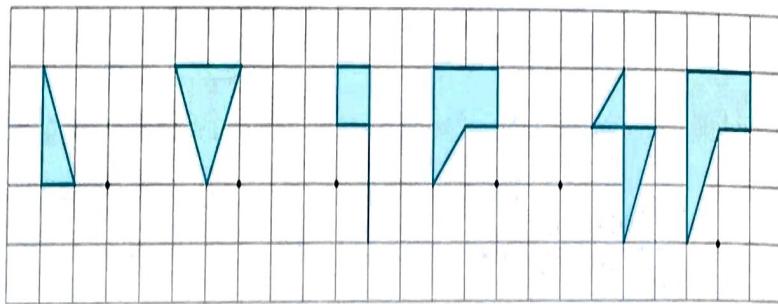


Rotate Triangle
 $90^\circ, 180^\circ, 270^\circ$
clockwise about $(6,7)$



Rotate J shape
 $90^\circ, 180^\circ, 270^\circ$
clockwise about $(2,2)$

- 1** On squared paper, draw each of these shapes and its centre of rotation, leaving plenty of space all round the shape.

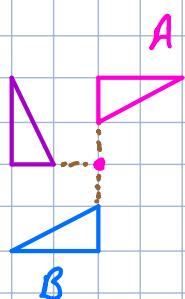


a Rotate each shape about its centre of rotation

i first by 90° clockwise (call the image A) ii then by 90° anticlockwise (call the image B).

b Describe, in each case, the rotation that would take

i A back to its original position ii A to B.



To take A back to original
rotate 90° anti-clockwise

To take A to B rotate 180°
about centre of rotation

1 a

