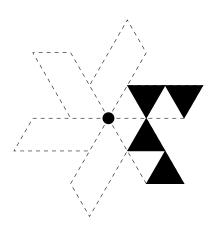
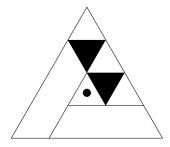
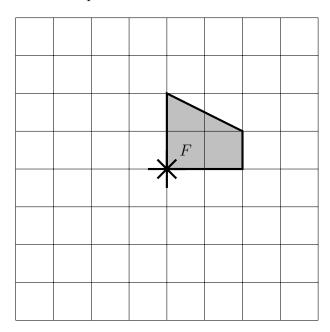
- 1. Complete this diagram so that it has rotational symmetry of order 6.
  - 1. Trace the incomplete diagram on to tracing paper.
- 2. Flip the tracing paper (drawn 1st side down).
- 3. Do steps 4 away from the diagram (it's messy).
- 4. Trace the diagram again on a blank part of a page.
- 5. Flip the tracing paper again (drawn 1st side up).
- 6. Place the tracing paper exactly over the diagram.
- 7. Turn about the centre until the radii line up again.
- 8. Trace over the diagram more will be added.
- 9. Repeat steps 7 and 8 until the diagram is complete.



2. Complete this diagram so that it has rotational symmetry of order 3.



3. Rotate trapezium **F** 90° clockwise about the star (\*). {OR 90° anti-clockwise}



4. Yaseen uses this way to find the order of rotational symmetry of shapes.



1st: Draw a dot on one corner of the shape.



2nd: Trace the shape and write on the tracing paper, a letter near the dot.

3rd: Keep turning the tracing paper

- try to cover the shape with the tracing paper shape,
- every exact fit, write a letter near the dot,
- stop when you can't find anymore.







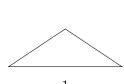
Yaseen wrote the order of rotational symmetry below 2 shapes.

Write down the order of rotational symmetry below the other shapes.



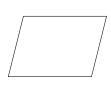
....

5.



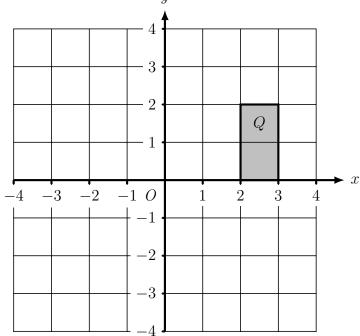
.1.





5. not written yet

6. Rotate shape  $\mathbf{Q}$  270° anti-clockwise about the point (3, 2).



{Rotate 90° anti-clockwise/clockwise}

{Rotate  $180^{\circ}$ }

{Rotate 270° anti-clockwise/clockwise}

7. not written yet

8. On the grid below, rotate trapezium V  $270^{\circ}$  clockwise about (-1, 1) and label it W

