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

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

12. Rotate trapezium $\mathbf{F} 90^{\circ}$ clockwise about the star (*). \{OR $90^{\circ}$ anti-clockwise $\}$

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|  |  |  |  | $F$ |  |  |  |
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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.

3.

1.

....
5.
6. Rotate shape $\mathbf{Q} 270^{\circ}$ anti-clockwise about the point $(3,2)$.

7.
8. On the grid below, rotate trapezium V $270^{\circ}$ clockwise about $(-1,1)$ and label it W


