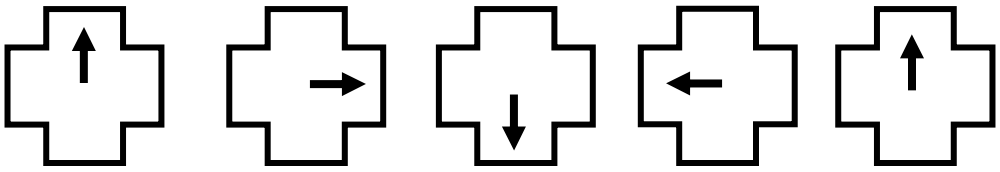
Topic: 7.6 Rotations and Rotational Symmetry	Name: _____ Class: Math 9 Date: _____
Questions/Main Ideas:	Notes:
Learning Intention	Draw and classify shapes with rotational symmetry.



A shape has *Rotational Symmetry* when it coincides (matches) with itself after a rotation of less than 360^0. A shape that only matches itself after a full rotation does not have rotational symmetry.



Rotational Symmetry:

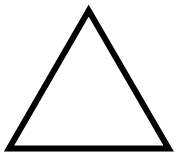
In general, the angle of rotational symmetry

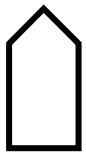
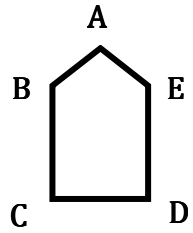
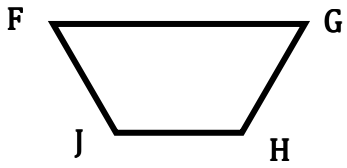
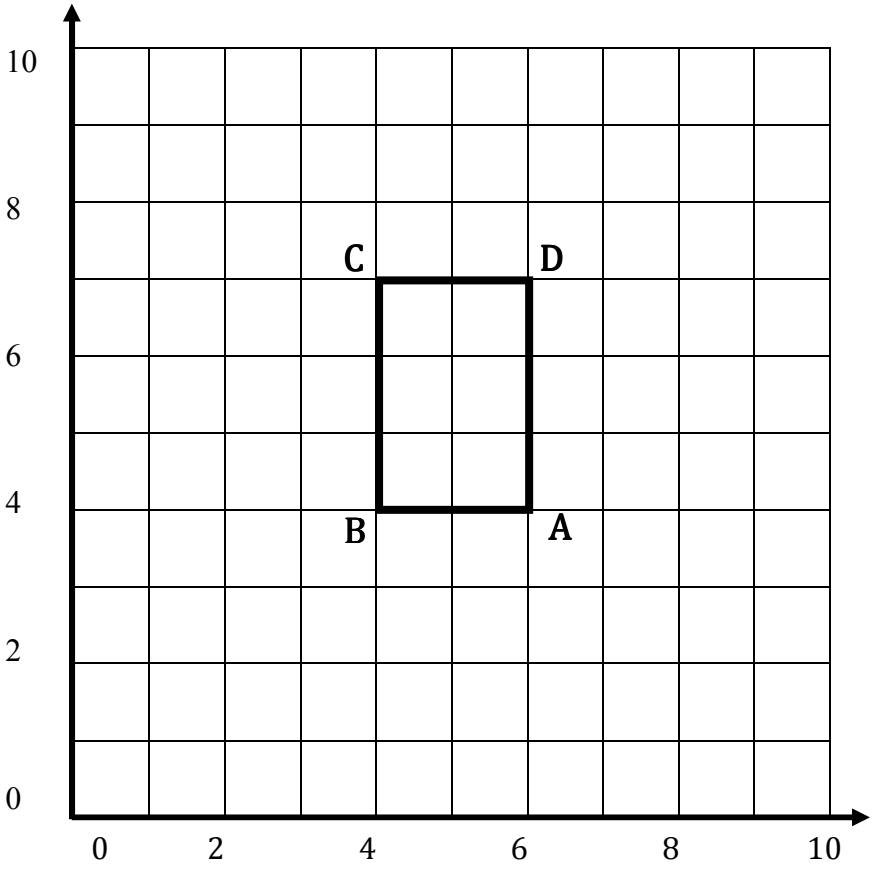
$$= \frac{360}{\text{the order of rotation}}$$

This shape matches up with itself 4 times in one complete turn (ie during a rotation of 360^0)

So...this shape has a rotational symmetry of order 4.

Try these:



Drawing Rotation Images Rotate rectangle ABCD - 90^0 clockwise about vertex A - 180^0 clockwise about vertex A - 270^0 clockwise about vertex A What is the rotational symmetry of this shape?	 Rotate pentagon ABCDE 90^0 clockwise about vertex E. Draw the rotation image.  Rotate trapezoid FGHJ 120^0 counterclockwise about F. Draw the rotation image.  
Next Step	p. 365 # 4, 5, 6, 7, 13