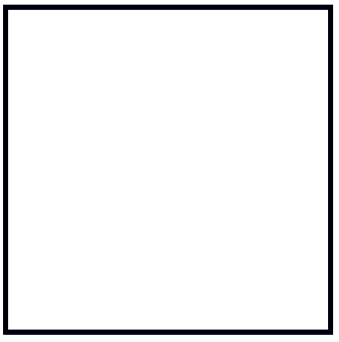
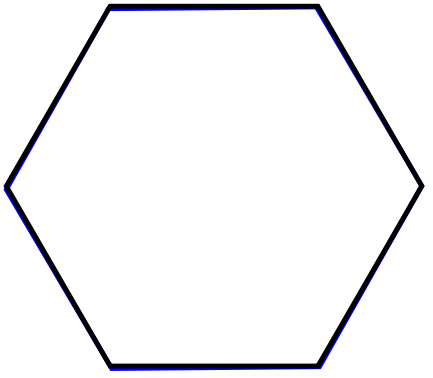
1.7 Reflectional and Rotational Symmetry

You can look at your reflection 100 times today, that pimple isn't going anywhere

Rotational Symmetry

Rotational Symmetry is the amount of degrees you must turn an object so it looks exactly the same



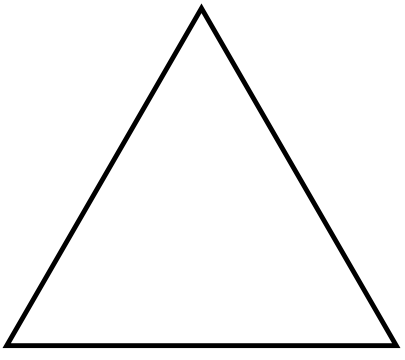


For REGULAR POLYGONS use the following formula to find out how much you must turn an object to **cary onto itself**

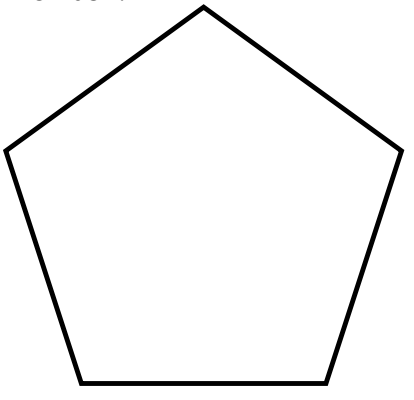
$$\text{Angle of rotation} = \frac{360^\circ}{n}$$

n = # of sides

What is the minimum amount of degrees you must rotate each REGULAR polygon to carry it onto itself.



Angle of rotation = $\frac{360}{}^\circ$

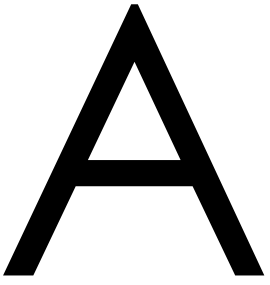


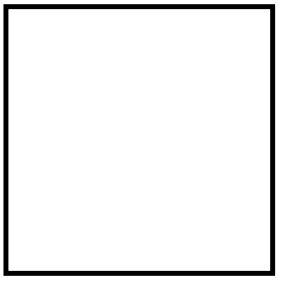
Angle of rotation = $\frac{360}{}^\circ$

What is the minimum amount of degrees you must rotate each REGULAR polygon to carry it onto itself.

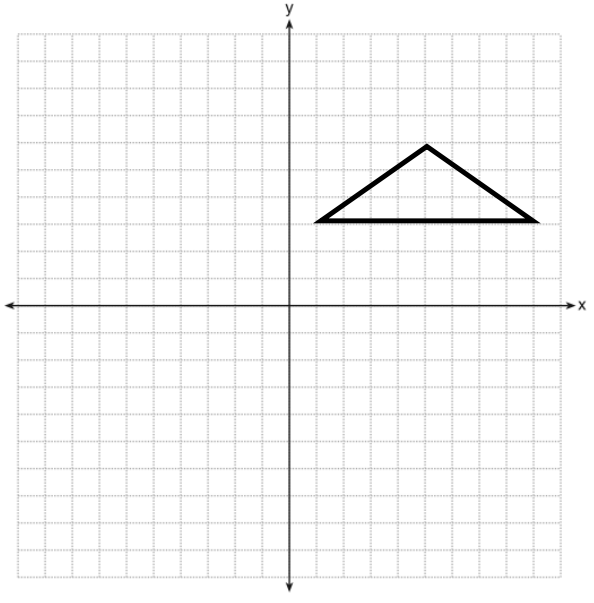
Lines of Symmetry

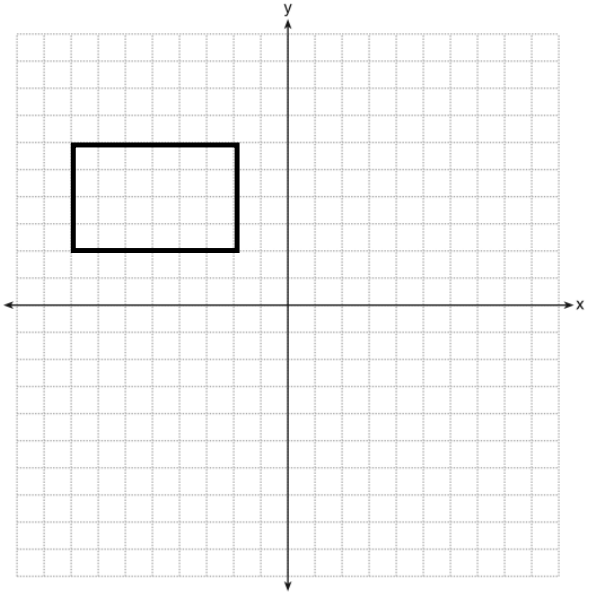
The "Line of Symmetry" is the line where you could fold the image and have both halves match exactly.
Draw lines of symmetry that **carry the figure onto itself**





Draw all lines of symmetry. State the reflection that would carry the figures onto themselves

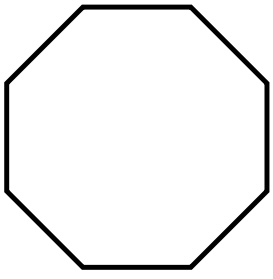




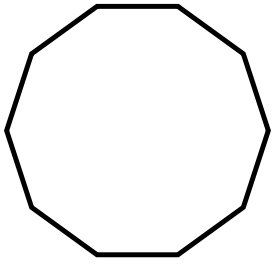
Independent Practice

What is the definition of a regular polygon?

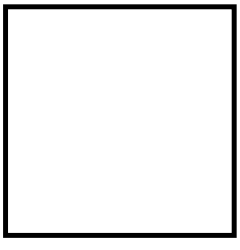
What is the minimum amount of degrees you must rotation each REGULAR polygon to carry it onto itself



Angle of Rotation:_____



Angle of Rotation:_____

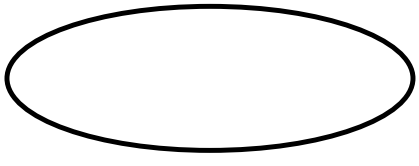


Angle of Rotation:_____

A regular polygon with 12 sides.

Angle of Rotation:_____

What is the minimum amount of degrees you must rotation each polygon to carry it onto itself



Draw all lines of symmetry. State the reflection that would carry the figures onto themselves