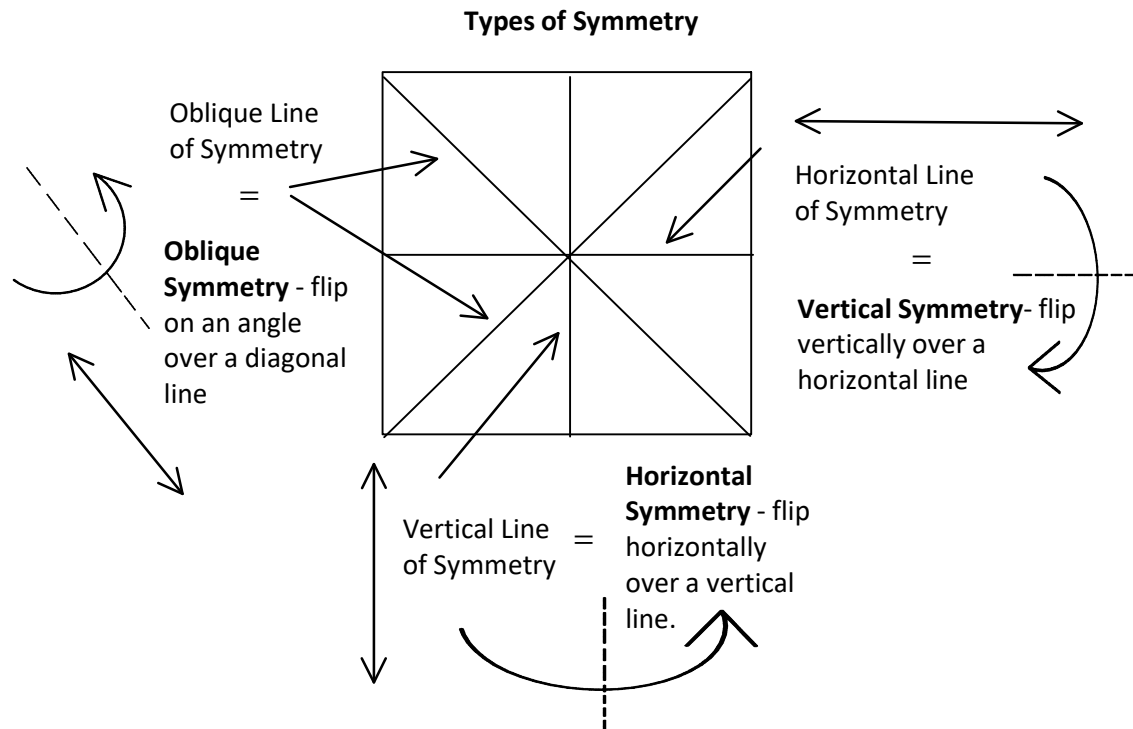


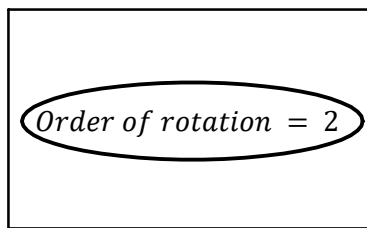
# M9 - 1.1 - Symmetry/Rotational Notes



**Order of Rotation:** The number of times you can rotate the shape to be identical to its original orientation in one circle of rotation  $360^\circ$ .

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

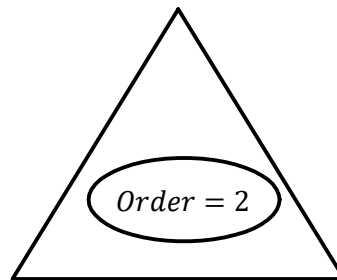
$$\text{Angle of Rotation} = \frac{360^\circ}{\text{Order of rotation}}$$



$$\text{Angle of Rotation} = \frac{360^\circ}{2}$$

$$\text{Angle of Rotation} = 180^\circ$$

If you rotate a rectangle  $180^\circ$ , it is in the same orientation it started.



$$\text{Angle of Rotation} = \frac{360^\circ}{3}$$

$$\text{Angle of Rotation} = 120^\circ$$

If you rotate an equilateral triangle  $120^\circ$ , it is in the same orientation it started.