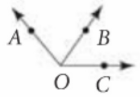
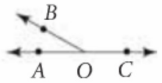
Postulate 1-8 **Angle Addition Postulate**

If point B is in the interior of $\angle AOC$, then $m\angle AOB + m\angle BOC = m\angle AOC$.



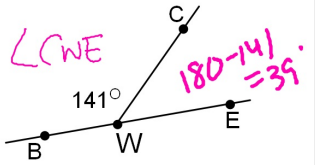
If $\angle AOC$ is a straight angle, then $m\angle AOB + m\angle BOC = 180$.



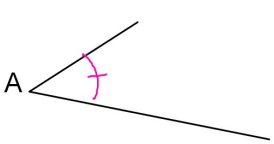
Congruent Angles:

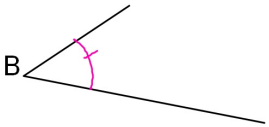
Angles with the same measure.

Name two congruent angles: $\angle R \cong \angle CWE$



How do you show with symbols that $\angle A \cong \angle B$





Section 9-4: Symmetry

Symmetry: If you can rotate, reflect, or translate a figure so that it maps onto itself.

Reflectional Symmetry (line symmetry):

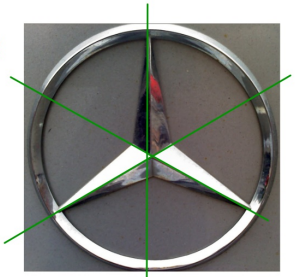
When one half of a figure is a mirror image of the other half.

Line of Symmetry: The line you could fold a figure over so that the two halves would match up exactly.

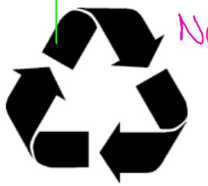
Does each figure have reflectional symmetry?
If yes, draw a line of symmetry.

1

2

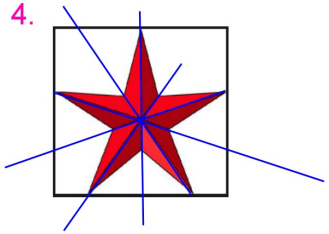


3

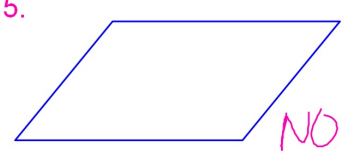


NO

4.

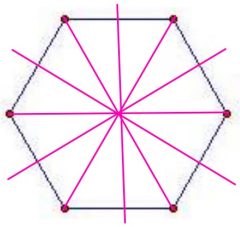


5.

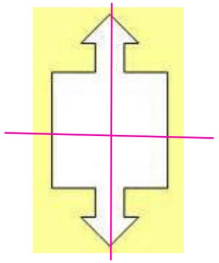


NO

6.



7.



Rotational Symmetry:

If a figure is it's own image for some rotation of 180° or less.

Point Symmetry:

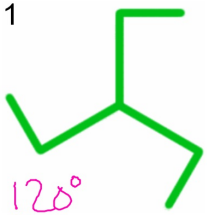
If a figure has 180° rotational symmetry it is said to have point symmetry.

To describe rotational symmetry you state the number of degrees a figure has to be rotated to match the preimage.

You will give degree values $0° < x \leq 180°$

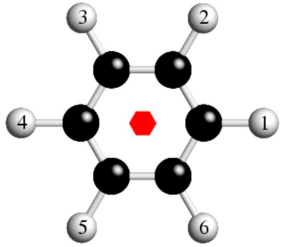
Describe the rotational symmetry for each figure.

1



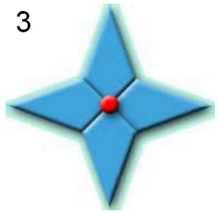
120°

2



60°

3



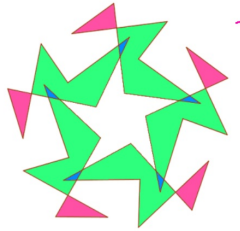
90°

Describe the rotational symmetry for each figure.

4

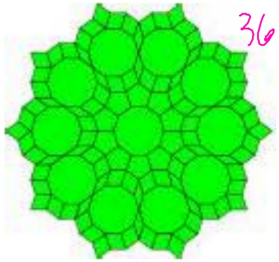
45°

5



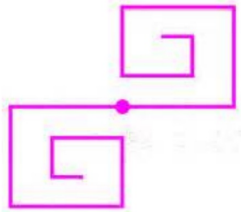
72°

6



36°

7



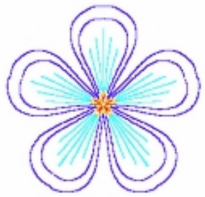
180° or point

Describe the types of symmetry, if any, of each figure.

1.

Reflectional

2.



Reflectional &

Rotational 72°

3.

Point

4.

Rotational only 72°

You can now finish hwk #4.