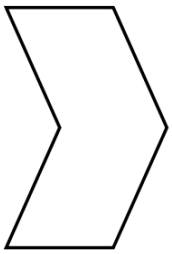
AGS 1 Name: _____ Period: _____ Date: _____

Assignment 7.6 – Geometric Transformations

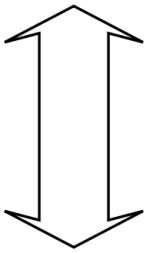
For each shape, determine then number of lines of symmetry, the order of rotational symmetry, and the angle of rotational symmetry.

1. 

Lines: _____

Order: _____

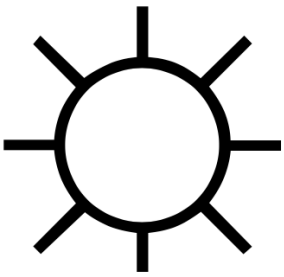
Angle: _____

2. 

Lines: _____

Order: _____

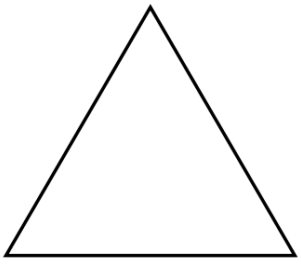
Angle: _____

3. 

Lines: _____

Order: _____

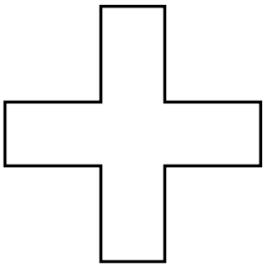
Angle: _____

4. 

Lines: _____

Order: _____

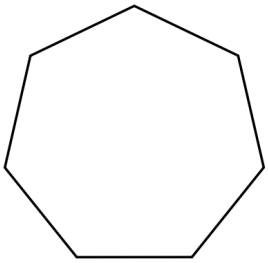
Angle: _____

5. 

Lines: _____

Order: _____

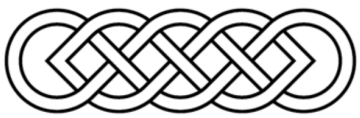
Angle: _____

6. 

Lines: _____

Order: _____

Angle: _____

7. 

Explain why this shape does not have any lines of symmetry.

Refresh Your Memory

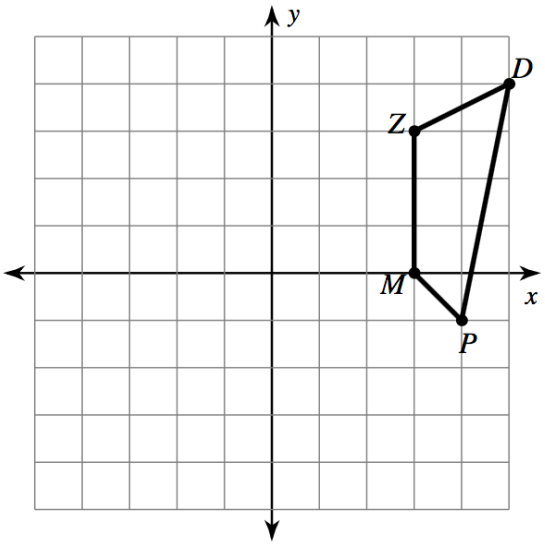
8. Give the slope of a line perpendicular to the given equation.

a. $y = \frac{2}{3}x - 3$ $\perp m =$

b. $y = -4x + 1$ $\perp m =$

c. $y = x + 2$ $\perp m =$

9. Reflect the shape over the line $y = -3x + 4$.



10. Rotate the shape 90˚ counterclockwise around the point (1, –2).