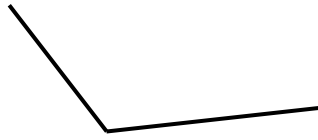
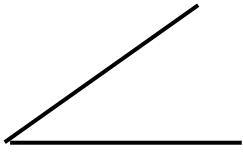


10.1H "Write" in the Middle

Name: _____ Per: _____

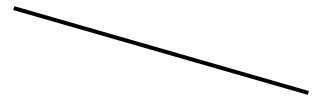
SHOW YOUR WORK AND WORK IN PENCIL

1. Construct a copy of the given angles showing all necessary markings.

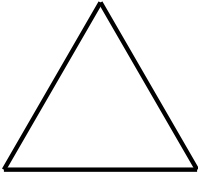
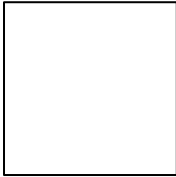
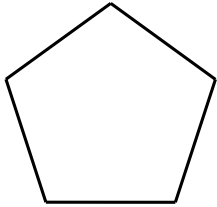
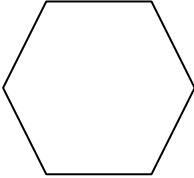
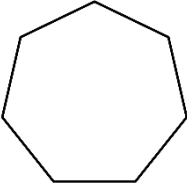
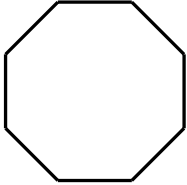


2. Construct the angle bisector of the original angles above. Explain why they are the angle bisectors.

3. Construct the perpendicular bisector of the given line segments.



4. Answer the questions for each of the regular (equal sides) polygons below.

 <p>a) Name: _____ b) # of Lines of Symmetry: ____ c) # of Diagonals: _____ d) Angle of Rotation: _____</p>	 <p>a) Name: _____ b) # of Lines of Symmetry: ____ c) # of Diagonals: _____ d) Angle of Rotation: _____</p>	 <p>a) Name: _____ b) # of Lines of Symmetry: ____ c) # of Diagonals: _____ d) Angle of Rotation: _____</p>
 <p>a) Name: _____ b) # of Lines of Symmetry: ____ c) # of Diagonals: _____ d) Angle of Rotation: _____</p>	 <p>a) Name: _____ b) # of Lines of Symmetry: ____ c) # of Diagonals: _____ d) Angle of Rotation: _____</p>	 <p>a) Name: _____ b) # of Lines of Symmetry: ____ c) # of Diagonals: _____ d) Angle of Rotation: _____</p>

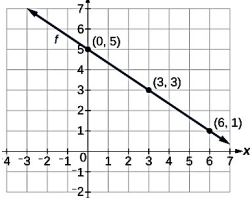
5. Are all diagonals also lines of symmetry? _____ Explain: _____
6. Are all lines of symmetry also diagonals? _____ Explain: _____

EC. How can you determine the number of diagonals in a polygon? _____

7. Draw ALL the lines of symmetry (if any) for each of the following letters. If none, state so.

I LOVE MATH

8. Find parallel and perpendicular linear equations given the following information through the given points.

	PARALLEL	PERPENDICULAR								
a. Equation: $y = 4x + 1$	Parallel line through the point $(-1, -7)$	Perpendicular through the point $(-1, -7)$								
b. Table of the line: <table border="1" style="display: inline-table; vertical-align: middle;"> <thead> <tr> <th>x</th> <th>y</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>-8</td> </tr> <tr> <td>4</td> <td>-10</td> </tr> <tr> <td>5</td> <td>-12</td> </tr> </tbody> </table>	x	y	3	-8	4	-10	5	-12	Parallel line through the point $(3, 8)$	Perpendicular through the point $(3, 8)$
x	y									
3	-8									
4	-10									
5	-12									
c. Graph: 	Parallel line through the point $(-6, 2)$	Perpendicular line through the point $(-6, 2)$								

9. Given the graphed points **A**, **B**, **C** to the right,

- Find the lengths of the segments of the triangle made by the points.
- Find the midpoint of each segment of the triangle.
- CONSTRUCT** the perpendicular bisectors of the segments of the triangle.
- Where do the bisectors intersect each other? _____
- Find the equations for each of the perpendicular bisectors of the segments of the triangle.
- Find their intersections algebraically. SYW.
- Find the intersection of the lines using row echelon reduction.

