Name_____ Date_____
Geometry Honors   Martucci

GeoGebra – Assignment #2

Parallel and Perpendicular Lines (worth 6 points)

1. Construct a pair of parallel lines. The first will be labeled $\overleftrightarrow{AB}$ and the second you will need to add point D to the line so that it becomes $\overleftrightarrow{CD}$. Next construct $\overleftrightarrow{AC}$ which will be a transversal. Verify that the lines are parallel by showing that <u>one</u> pair of alternate interior angles, corresponding angles <u>or</u> alternate interior angles are congruent.

2. Next show that a pair of same-side interior <u>or</u> same-side exterior angles are supplementary.

3. Construct a line perpendicular to $\overleftrightarrow{AB}$. Verify that the lines are perpendicular by showing that the lines form a right angle.

4. What is the relationship between the line you constructed in #3 and $\overleftrightarrow{CD}$? What theorem justifies your response? Use the text tool to answer this question.

5. Use the text tool to add your name to the drawing canvas.