Connecting Big Ideas in Geometry

Chapter 3

Coordinate Geometry

Big Idea: Coordinate Geometry

You can write the equation of a line by using its slope and y-intercept.

YOUR TASK

- Describe a step by step solution to the problem on the next slide

- Your solution must be **clear** and **detailed** enough so that any geometry student can complete them

- Graph the points and lines in the problem and include this diagram in your solution

Big Idea: Coordinate Geometry

PROBLEM

$\overrightarrow{AB}$ contains points A(-6, -1) and B(1, 4).

$\overleftrightarrow{CD}$ contains point D(7, 2).

∠ABC ≅ ∠BCD and m∠ABC = 90.

What is an equation of $\overrightarrow{CD}$?

Keep your coeffients in fraction form.
Do not use decimal form.

Submit to the Dropbox

- Write your solution in a Word document
- Write in <u>paragraph form</u> with **details** and **explanations**
- Use <u>geometry language</u>
- Insert your graph(s) and refer to them in your writing
- Include any
  - **Formulas** you used
  - **Algebra steps** you completed
- Submit your document to the dropbox

How to Graph (Option 1)

- Download the provided grid file
- Open it in any drawing tool
  - MS Paint
  - Paint.NET
  - PicMonkey   http://www.picmonkey.com/
- Draw your complete diagram
  - Make sure your points are labeled
- Save your drawing as an image file and insert it into your Word Document

How to Graph (Option 2)

- Download the provided grid file
- Print it on paper
- Draw your complete diagram by hand
  - Make sure your points are labeled
- Scan your diagram as an image file
- Insert the file into your Word Document