<name>
Class: Honors Geometry
Date: <date>
Topic: Lesson 1-6 (Coordinate Plane)

René Descartes	Invented Cartesian coordinate system

Cartesian Coord Sys	Intersection of 2 # lines (1 vertical, 1 horizontal)
	x-axis (horiz # line)
	y-axis (vert # line)
	Point of intersection is the *origin*
	x-axis positive & increasing to right of origin
	   negative & decreasing to left
	y-axis positive & increasing to above origin
	   negative & decreasing to below

Distance formula	The distance *d* between two points $A(x_1, y_1)$ and $B(x_2, y_2)$ is: $$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$
Example	Pg. 46, #6 <optional notes on example>
Midpoint formula	The midpoint *M* of $\overline{AB}$ with endpoints $A(x_1, y_1)$ and $B(x_2, y_2)$ is: $$M(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2})$$
Example	Pg. 46, #20 <optional notes on example>