

Where am I Going?
Geometry Review and Application
9th grade

Standard: MAF.912.G.C.0.1.1

Know precise definitions of angle, ..., perpendicular line, parallel line, and line segment, based on the undefined notion of point, line, and distance....

Objective:

Students will demonstrate knowledge of point, line, distance, angle, midpoint, perpendicular line, parallel lines and line segment on a coordinate plane.

Students will be introduced to the transportation industry by reading about Publix, Walpole, and Martin Bower.

Materials:

*Electronic Student Worksheet

Map with coordinate plane drawn on

Basic Tools

- Straightedge. A straightedge is a geometric tool used to construct straight lines.
...
- Ruler. A ruler is a geometric tool used to measure the length of a line segment. ...
- Compass. A compass is a V-shaped tool used to construct circles or arcs of circles. ...
- Protractor.
- Pencil
- Calculator**

* Hyperlinks to company websites and geometry resources

** optional, not required

Electronic Student Worksheet

1. Place Point A (8.5,2) at the [Publix Deerfield Beach Distribution](#)
 - a. Name the county_____

2. Place Point B (8,3.5) at the [Publix Supermarket](#).
 - a. Name the county_____

3. The Publix Distribution plant delivers produce and frozen food along the southeastern coast of Florida, and to the Okeechobee Publix supermarket. Draw ray AB to demonstrate this route.
3. [Walpole Trucking](#) began in 1952 with 1 man and a truck. This company now has 3 locations in Florida located at Point B ,Point C (6.5,4), and point D(8.5,2.5). Place points C and D on the map. They also have a 4th location in Birmingham, Alabama.
3. Walpole Trucking has recruited you to find the midpoint between the Okeechobee and Tampa locations , and the Tampa and West Palm Beach locations .

- a. Mark the midpoint of line segment BC with point E. What are the coordinates_____?
- b. Mark the midpoint of line segment CD with point F. What are the coordinates_____?
- c. Does line EF have a positive or negative slope?
3. [Martin Brower](#) is the leading distributor for McDonald's Fast Food Restaurants in Florida. They are also located at point A. What is the distance in units from the Distribution center to the McDonald's Restaurant in Okeechobee?
 - a. [Distance](#) in units from point A to Point B_____

Wrap up

Choose one of the companies listed that is located closest to your home. Research their website and give 1 fact about the company that surprised you.