Directions: Answer the following question(s).

A ship needs to leave port to deliver supplies to three nearby islands. Island A is located 1 mile west and 7 miles north of the port. Island B is located 9 miles east and 3 miles north of the port. Island C is located 6 miles east and 4 miles south of the port. The ship plans to deliver the supplies first to Island A, then to Island B, and finally to Island C before returning to port.

Step 1 – Using the coordinate grid below, in which each grid mark represents 1 mile, plot the port at the origin, then plot the locations of Island A, Island B, and Island C. Draw in the route that the ship plans to take.



Step 2 – Using the coordinate points plotted in Step 1, write equations that can be used to determine the distance traveled for each part of the route.

- Port to Island A:
- Island A to Island B:
- Island B to Island C:
- Island C to Port:

Step 3 – What is the total distance that the ship will travel on its route? Show your work. Round your answer to the nearest tenth.