

Geometry: Winter Break Extra Credit Project

Purpose: To apply our learning about distances (including circumcenters, incenters, centroids) to Taxi Geometry. To use problem solving and concepts of Geometry in more real-world scenarios.

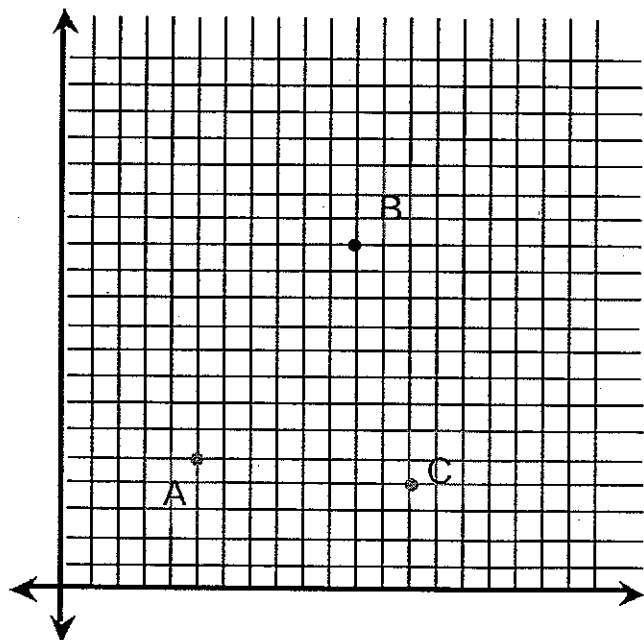
Descriptions: Jeanne is moving to a new city for school and for work. She wants to ride her bicycle to work and school, so she is looking for a place in between the two.

- (1) Identify 3 corner houses that would be closest to an equal "taxi"-distance from City College (point C) and her work in Albany Village (point A).
- (2) If she did not live at a corner house, find 3 locations to be equal distance from Albany Village and City College.

Jeanne will also be going to the Baltin Shopping Center (point B) often, and she would like to live relatively close to this shopping center.

- (3) Identify 4-6 corner houses that would allow her to travel around the same distance to work, school, and shopping center, and state the distances for each (you may want to organize the information in a table).
- (4) Can you find the optimum (best) location for Jeanne to live if she does not need to leave in a corner house and wants to be equal (or close to equal) distances from each important location? Justify your answer.

Resources: Use the Taxi-Geometry exercises discussed in class and in your textbook. Use the textbook for information about distances, including those involved in triangles (since you are working with three vertices – school, work, and shopping center).



Due Date: This project will be due on Tuesday, January 8, 2013. Turning the project in early is encouraged, while lateness will result in a significant loss of possible points.

Final Notes: Creativity in design and detail will be rewarded, but ALL projects should be complete, organized, and neat to receive maximum extra credit.

The project should not be last minute or the first draft of your work, but should reflect time and planning. Start as soon as possible so that if you have questions, you will have time to ask them and receive a response.

