

Polygons in the Coordinate Plane - Guided Lesson

Complete the following problems:

1) On a map, the museum is situated at $(-5, 3)$, the nursing college is located at $(3, -5)$ and the community hall is positioned at $(3, 3)$. Represent the locations as points on a coordinate grid with a unit of 1 mile.

a) What is the distance from the museum to the community hall? What is the distance from the community hall to the nursing college? How do you know?

b) What shape connects the three locations? The city council is planning to place a hospital in this area. How large is the area as planned?

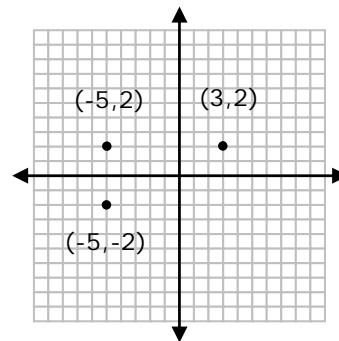
2) If the points on the coordinate plane below are the three vertices of a rectangle;

What are the coordinates of the fourth vertex?

How do you know?

What are the length and width of the rectangle?

Find the area and perimeter of the rectangle?



3) On a map the Central school is situated at $(-1, 1)$. The Legislative Assembly is located at $(4, -1)$ and Central Park is positioned at $(4, 1)$. Represent the locations as points on a coordinate grid with a unit of 1 mile.

a) What is the distance from the Central School to the Central Park? What is the distance from the Central Park to the Legislative Assembly? How do you know?

b) What shape connects all locations? The city council is planning to place a community hall in this area. How large is the area for the hall?

