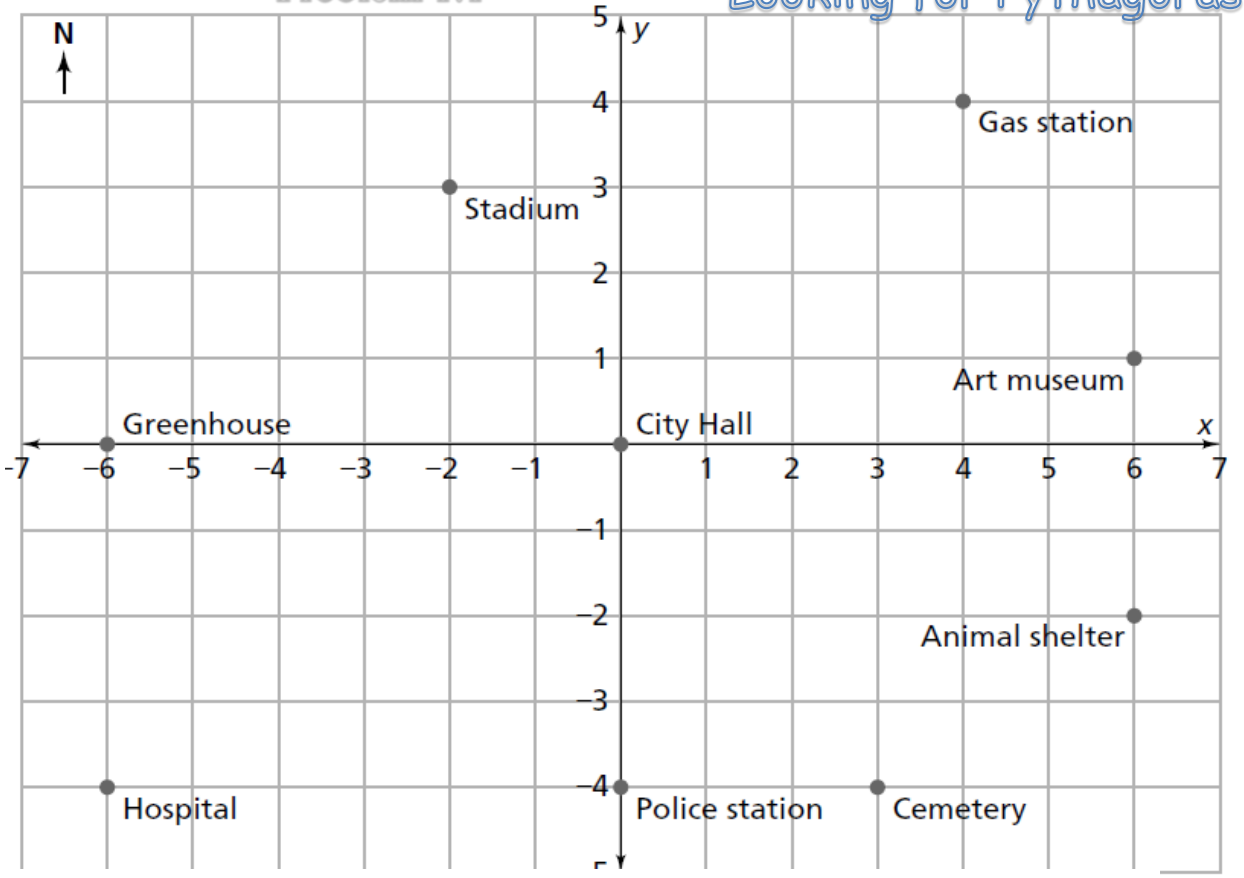

A. Give the coordinates of each landmark.

1. gas station

2. animal shelter

3. stadium

B. Euclid's chief of police is planning emergency routes. She needs to find the shortest driving route between the following pairs of locations:

Pair 1: the police station to City Hall

Pair 2: the hospital to City Hall

Pair 3: the hospital to the art museum

1. Give precise directions for an emergency car route for each pair.

2. For each pair, find the total distance in blocks a police car following your route would travel.

C. Suppose you know the coordinates of two landmarks in Euclid. How can you determine the shortest driving distance (in blocks) between them?

D. A helicopter can travel directly from one point to another. For each pair in Question B, find the total distance (in blocks) a helicopter would have to travel to get from the starting location to the ending location. You may find it helpful to use a centimeter ruler.

E. Will a direct helicopter route between two locations always be shorter than a car route? Explain your reasoning.