

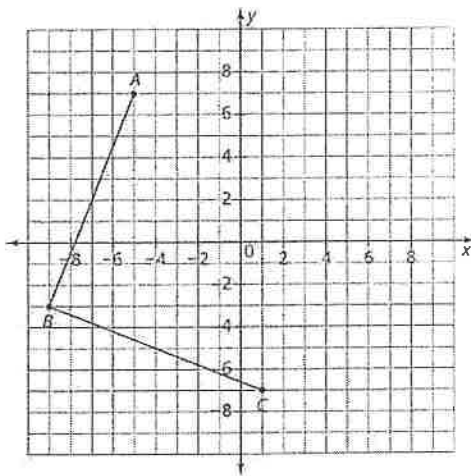
ACTIVITY
1.3

Determining an Unknown Point of a Quadrilateral



You have classified quadrilaterals by their sides and angles. You can use this information to compose quadrilaterals on a coordinate plane.

Analyze the given points A , B , and C . Suppose you want to plot point D such that quadrilateral $ABCD$ is a square.



1. Consider the properties of a square.

- How does knowing that a square has two pairs of parallel sides help to determine the unknown location?
- How does knowing that a square has four right angles help to determine the unknown location?

2. Determine the location of point D . Plot and label point D on the coordinate plane.

3. Is the triangle formed by the following points scalene, isosceles, or equilateral? $(15,6)$, $(5,1)$, $(5,11)$
Is the following triangle a right triangle?

Prove the triangle type

Is the triangle a right triangle? Prove why or why not.

