

M152: Reasoning and Proof Through Congruence

Post-Badge Task

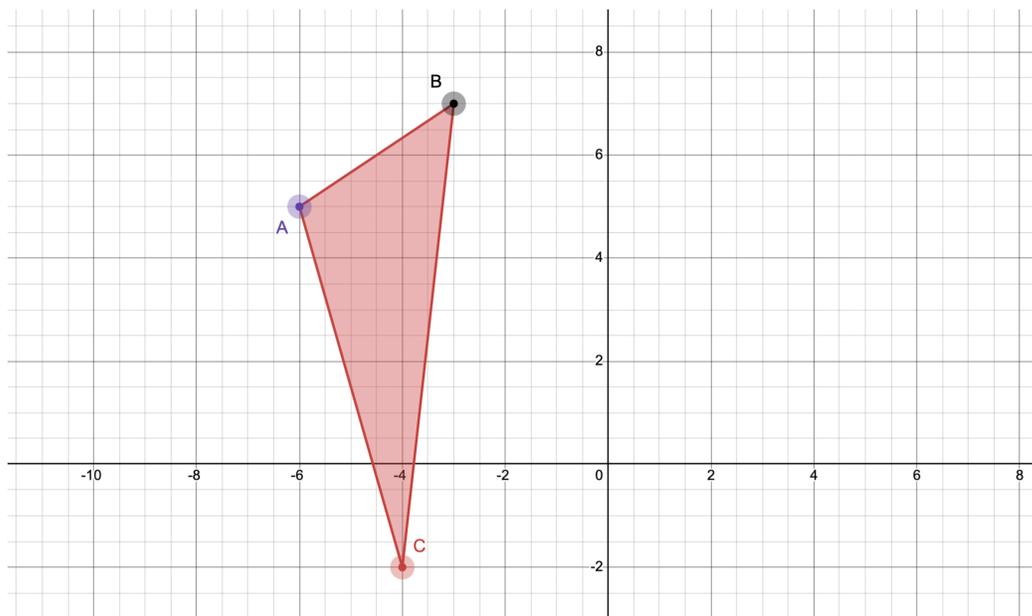
Reflecting on Badge Learning

Now that you have learned more about congruence, respond to the questions that follow. These are the same questions you responded to before the start of this badge.

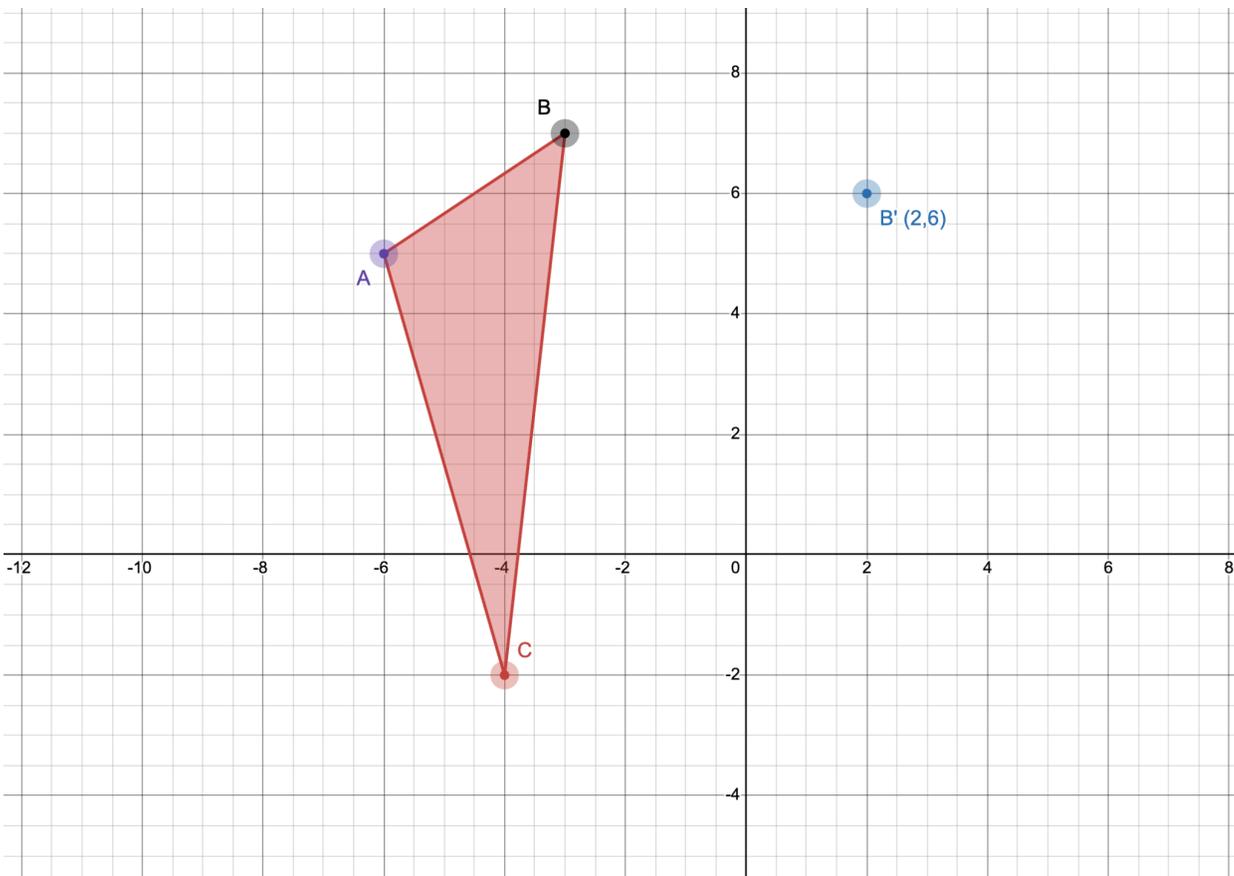
The Task

Respond to the four questions in this task about Triangle ABC.

QUESTION 1 What are the coordinates of Point A, Point B and Point C? Label the coordinates next to each point on the graph.

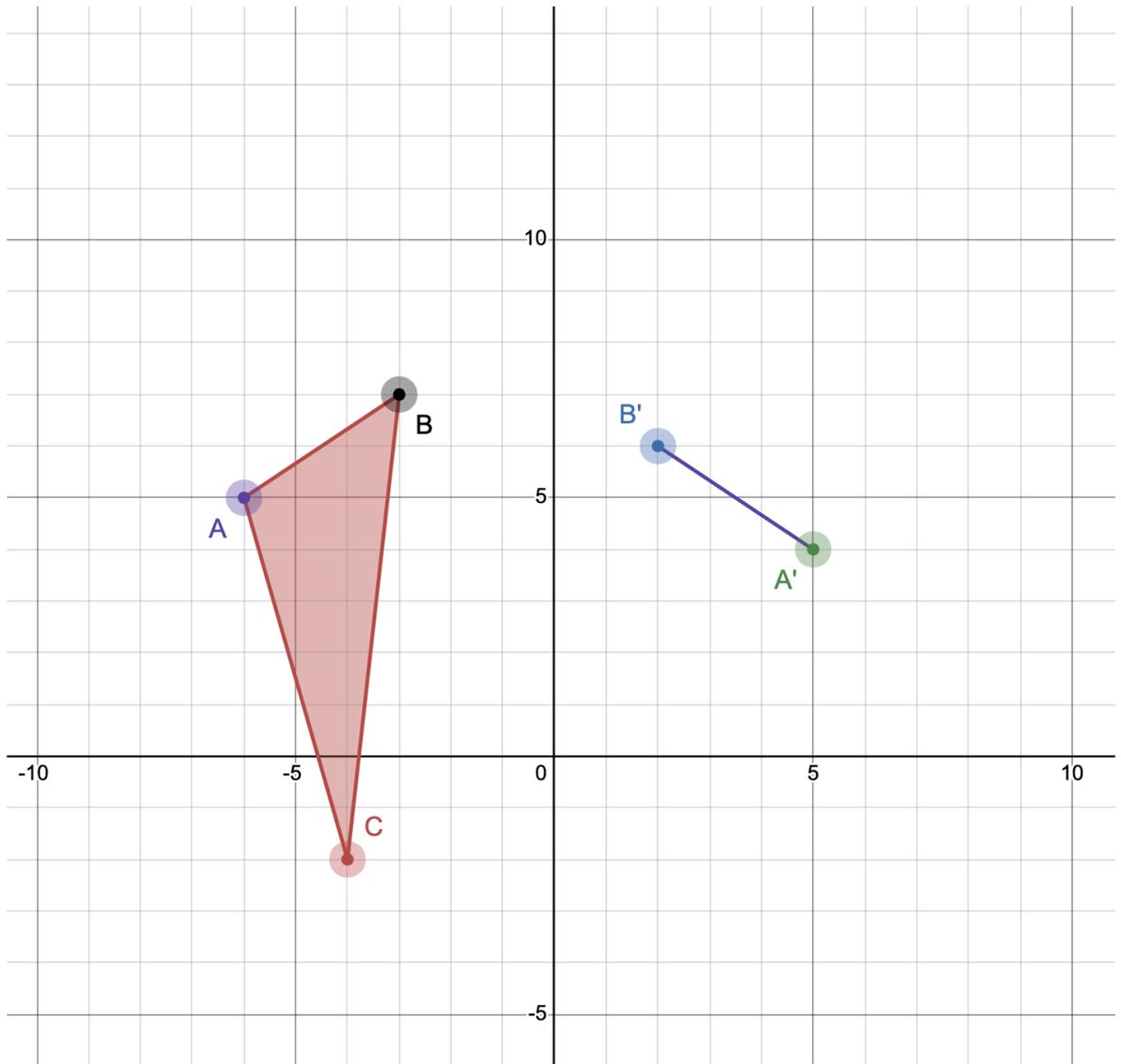


QUESTION 2 Draw Triangle A'B'C' congruent to Triangle ABC such that Point B' is the image of Point B. Label the coordinates of A' and C'.

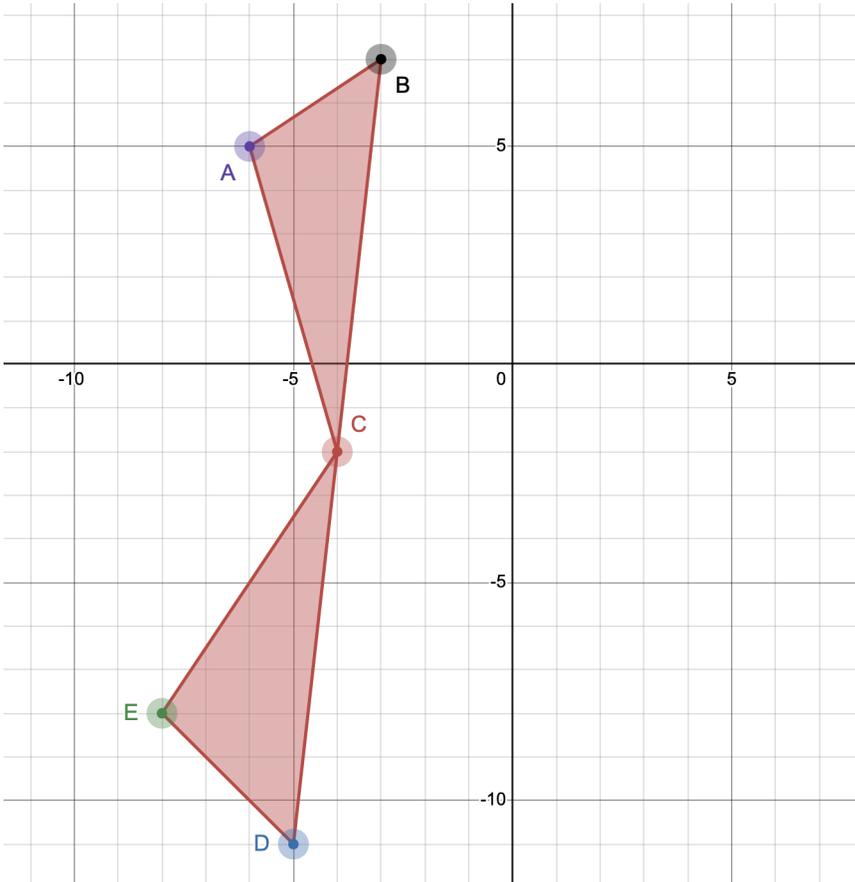


QUESTION 3

- (a) Draw a point C' such that Triangle ABC is congruent to Triangle $A'B'C'$.
- (b) If possible, draw another point to create a new triangle that is congruent to Triangle ABC such that $A'B'$ is still one of its sides. Otherwise, write below the grid "There is no other point."



QUESTION 4 Nolan claims that he created Triangle EDC congruent to Triangle ABC. Amber does not believe the two triangles are congruent. Choose whether you will take the perspective of Nolan or Amber. If you choose to be Nolan, you will explain to Amber why you are certain that the two triangles are congruent. If you choose to be Amber, you will help Nolan understand what changes need to be made to ensure that the two triangles are congruent. Have fun!



QUESTION 5 What else did you learn that was not reflected in Questions 1-4?



QUESTION 6 Compare your answers to these questions now to your answers from the earlier attempt. What do you notice about your progress?

