4.1 Translations Geogebra Activity

1) What are the coordinates of triangle ABC? Is it a right triangle? How can you tell if it is right or not?

2) Adjust the sliders for a and b on the right hand side of the geogebra file. What is the relationship between the original coordinates of triangle ABC, the values for the sliders a and b, and the new coordinates for triangle ABC?

3) What do you observe about the side lengths and angle measures of the original and new triangles? Is the new triangle a right triangle?

4) Write the rule for translating a point (x, y) 2 units right and 3 units down.

(x, y) →( , )

5) Write the rule for translating a point (x, y) a units horizontally and b units vertically.

(x, y) →( , )