4.3 Rotations Warm-up

Open up the file 4.3 Rotations Warm-up.ggb, perform the following operations and answer the questions.

Select the “rotate around point” tool (9th box in from the left, select triangle ABE(be sure the entire triangle is highlighted before you click) and point E. Then enter in the option for rotating 90 degrees clockwise.

1. What is the relationship between the points of the pre-image ABD and image A’B’D’ (D’ is the one point not labeled)? Complete the rule for rotating 90 degrees clockwise.

(x, y) → ( , )

1. Use the rotate around point tool to rotate ABD the following ways and complete the rules.

180 degrees clockwise

(x, y) → ( , )

180 degrees counterclockwise

(x, y) → ( , )

270 degrees clockwise

(x, y) → ( , )

-90 degrees counterclockwise

(x, y) → ( , )

90 degrees clockwise

(x, y) → ( , )

What do you notice about the angles and sides of the pre-image and all the images?