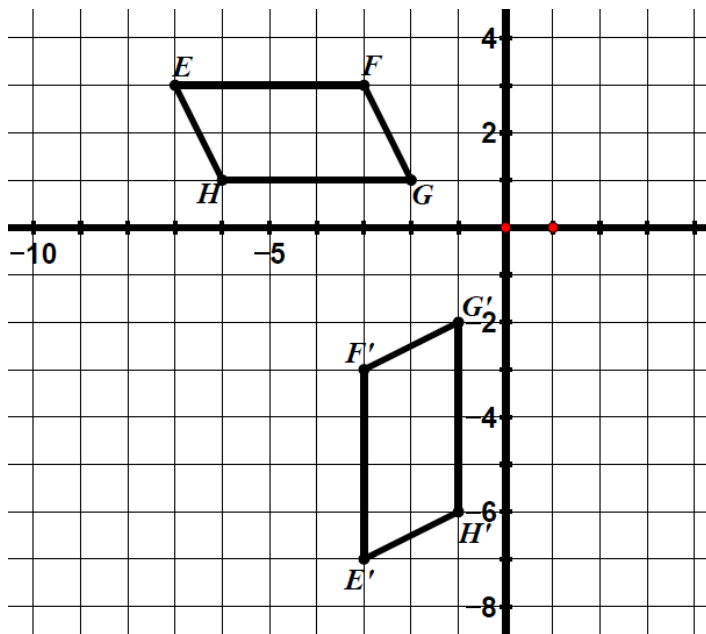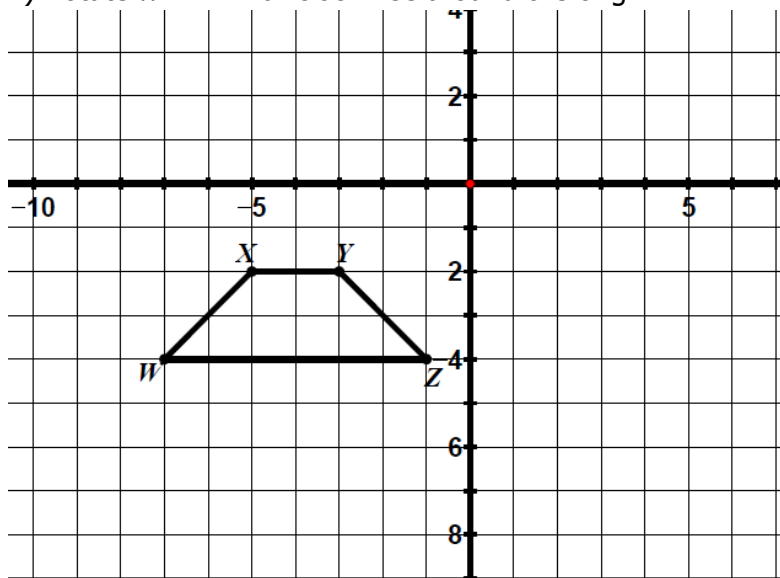1) For the following rotation, the center of rotation is the origin.

a) Determine the degree of the clockwise rotation.

b) If the slope of $\overline{EH}$ is -2, determine the slope of $\overline{E'H'}$ without doing any calculations.
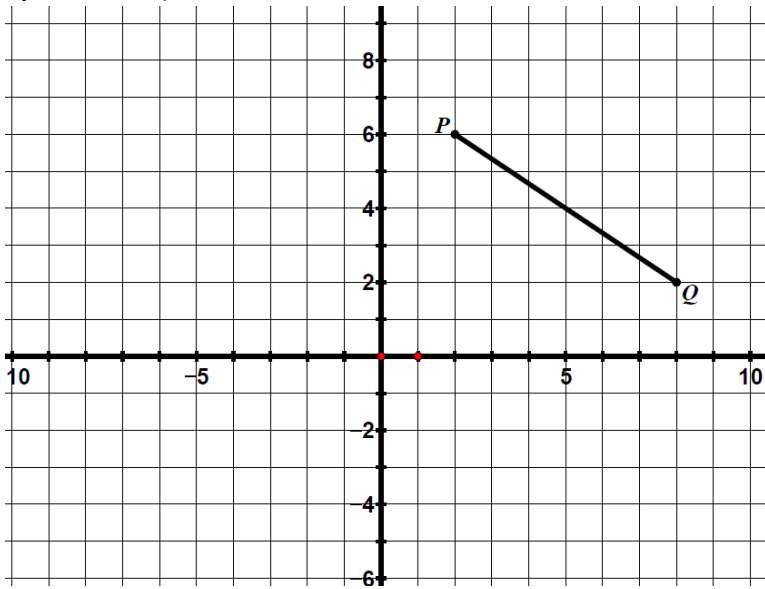
2) Rotate $WXYZ$ 270° clockwise around the origin.

a) What is the coordinate rule for this rotation?

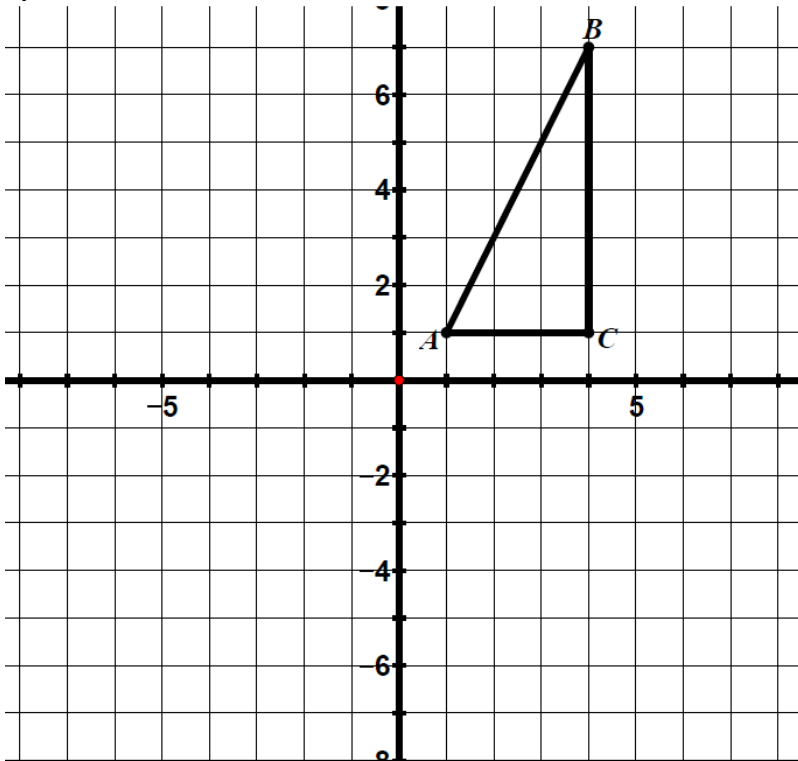b) Compare the slopes of the line segments of the pre-image to the image.

3) Rotate PQ 90° **counterclockwise** with the center of rotation around the origin. Label the image.

a) What is the coordinate rule you used to rotate this figure around the origin?

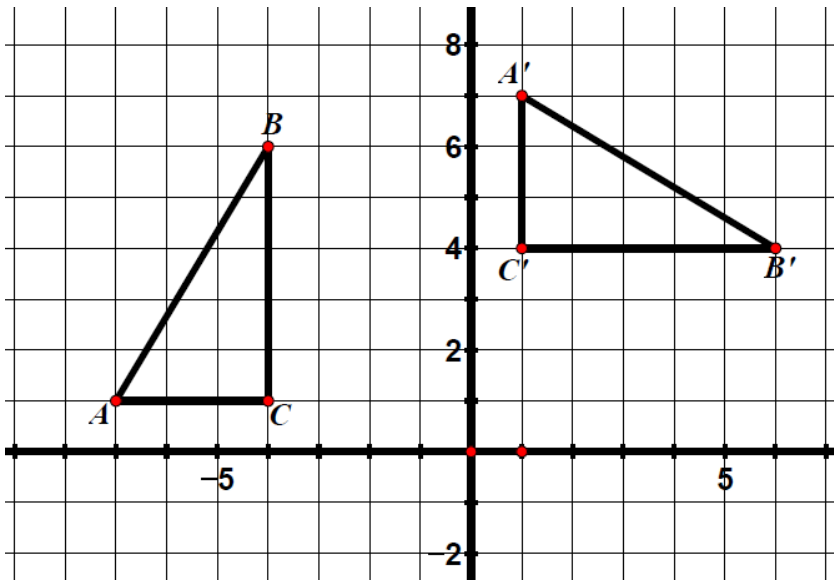b) What is the corresponding clockwise rotation around the origin?

4) Rotate $\triangle ABC$ 180° counterclockwise with the center of rotation at the origin. Label the image.

a) What is the coordinate rule for this rotation?

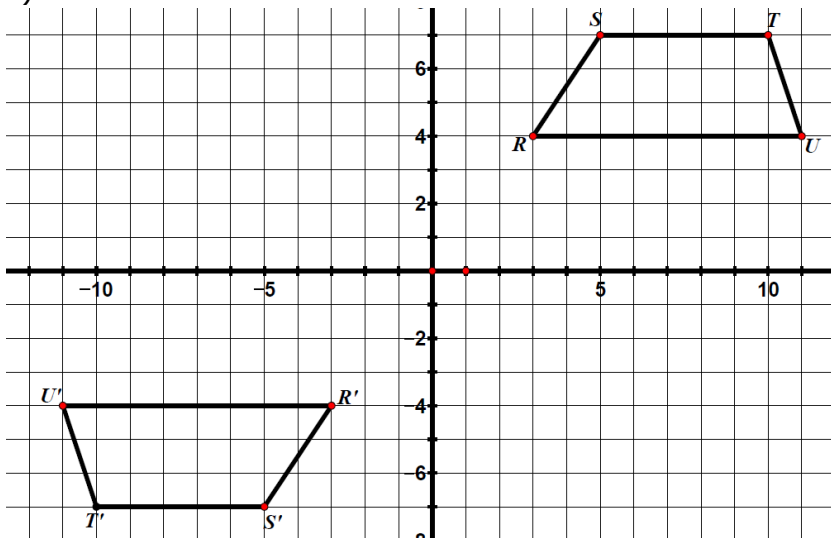b) Compare the slopes of the line segments of the image to the pre-image.

5) This is a clockwise rotation with the center of rotation is around the origin.

a) What is the degree of rotation?

b) What is the coordinate rule for this rotation?

B

A'

B

6

A'

C'

B'

A

C

-5

5

-2

6) This is a clockwise rotation with the center of rotation is around the origin.

S

T

6

R

U

a) What is the degree of rotation?

-10

-5

5

10

-2

U'

R'

-4

b) What is the coordinate rule for this rotation?

-6

T'

S'