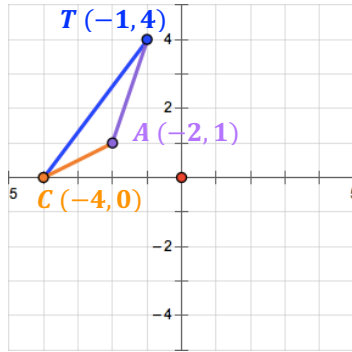


Find the coordinates after the triangle is rotated  $90^\circ$  clockwise about the origin.

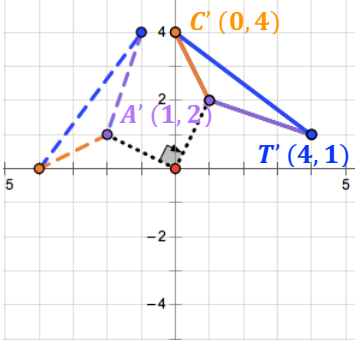
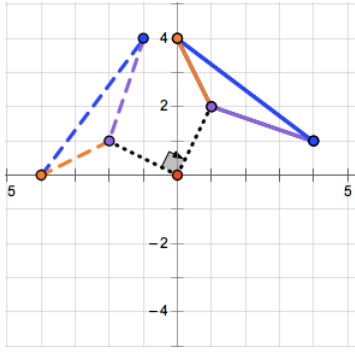
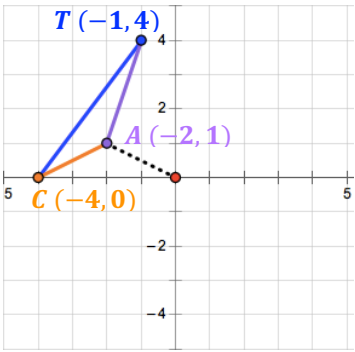


Jaxon's "Ferris Wheel" Method

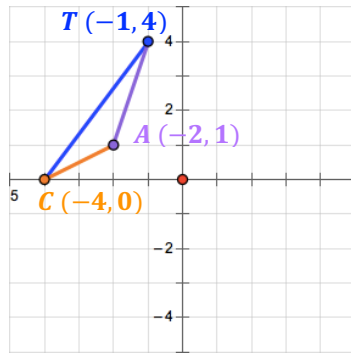
When I think about a rotation, I see a Ferris wheel, so I connect the figure to the origin.

Now I can rotate the figure  $90^\circ$  clockwise about the origin.

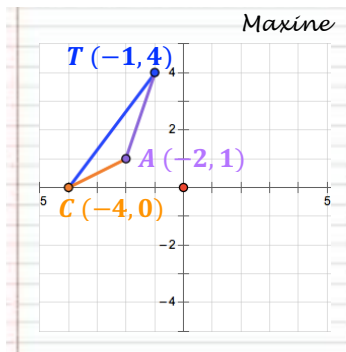
I label the coordinates of my rotated figure.



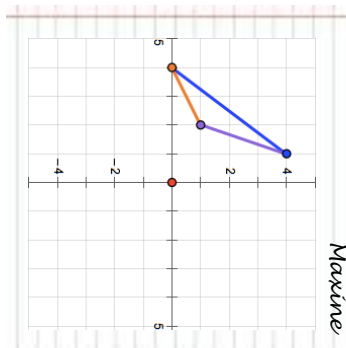
Find the coordinates after the triangle is rotated  $90^\circ$  clockwise about the origin.



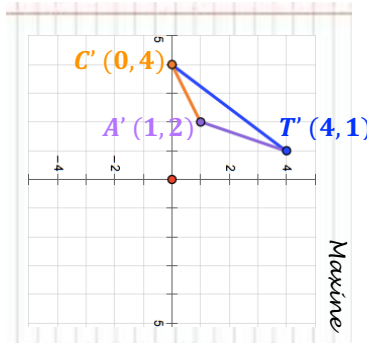
Maxine's "Turn the Paper" Method



When I rotate the triangle  $90^\circ$  clockwise about the origin, the triangle will be in the first quadrant when I rotate it.



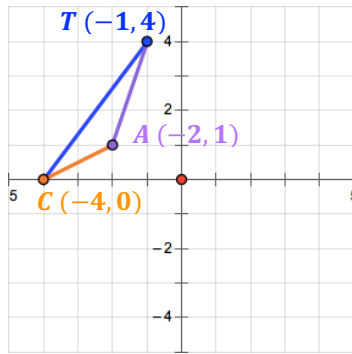
I put my pencil at the origin to hold my paper, then I rotate my paper  $90^\circ$  clockwise.



I relabel the coordinates as if they were in the first quadrant.



Find the coordinates after the triangle is rotated  $90^\circ$  clockwise about the origin.



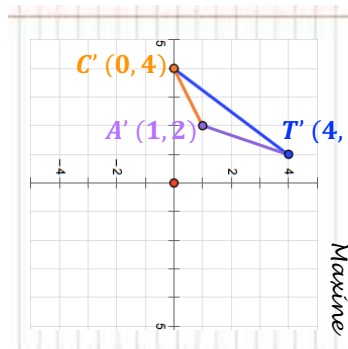
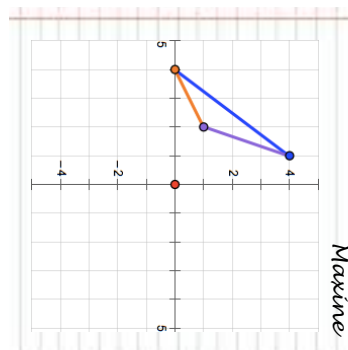
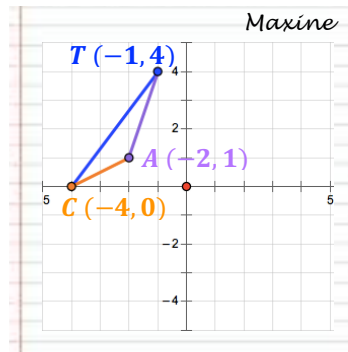
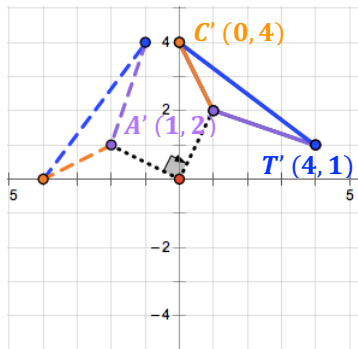
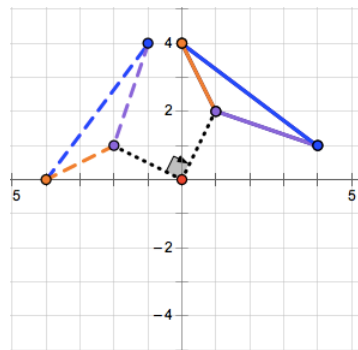
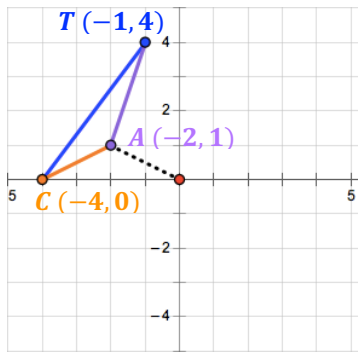
Jaxon's "Ferris Wheel" Method

Maxine's "Turn the Paper" Method

When I think about a rotation, I see a Ferris wheel, so I connect the figure to **the origin**.

Now I can rotate the figure  $90^\circ$  clockwise about **the origin**.

I label the coordinates of my rotated figure.



When I rotate the triangle  $90^\circ$  clockwise about **the origin**, the triangle will be in the first quadrant when I rotate it.

I put my pencil at **the origin** to hold my paper, then I rotate my paper  $90^\circ$  clockwise.

I relabel the coordinates as if they were in the first quadrant.

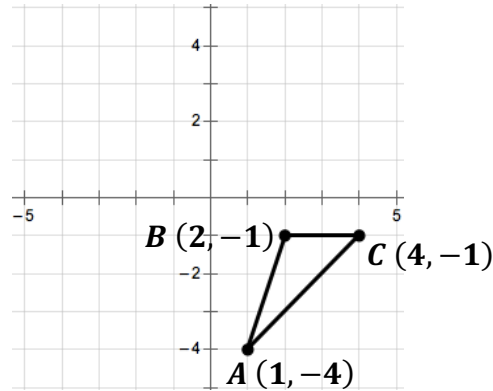


T.3: Rotation

1) What are the similarities and differences between Jaxon and Maxine's methods?

Similarities	Differences

2) Using Jaxon or Maxine's method, rotate  $\triangle ABC$   $180^\circ$  counterclockwise. Draw and label the coordinates of your rotated figure.



3) a) For each of the rotations listed below, sketch and label the rotated figure.

90° clockwise	270° counterclockwise	180° clockwise	180° counterclockwise

b) Which of the rotations above land in the same place?

4) a) Given point  $(2, -3)$ , what are the coordinates if it is rotated  $90^\circ$  clockwise?

b) Given point  $(J, K)$ , what are the coordinates if it is rotated  $90^\circ$  clockwise?

Find the coordinates after the triangle is rotated 90° clockwise about the origin.

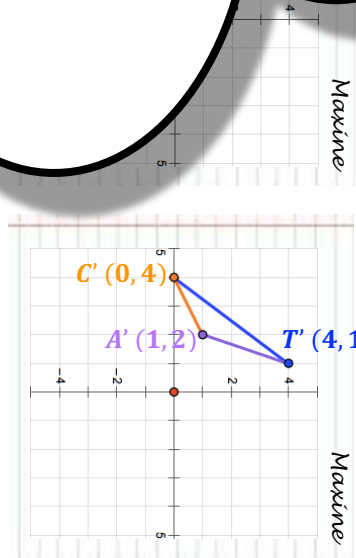
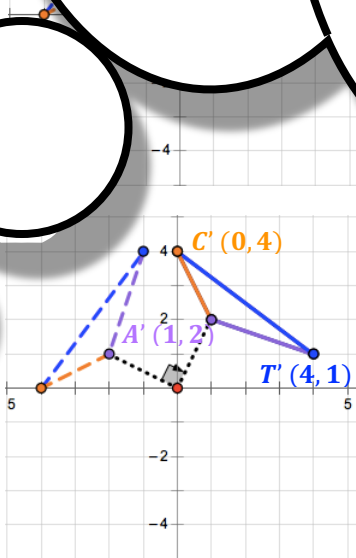
If I rotate my paper 90° clockwise like Maxine, that is the same thing as rotating the triangle 90° clockwise using the “Ferris Wheel” Method.

Jaxon’s

When I think about a rotation, I see a Ferris wheel, so I connect the figure to the origin.

Now I can rotate the figure 90° clockwise about the origin.

I label the coordinates of the rotated figure.



I put my pencil at the origin to hold my paper, then I rotate my paper 90° clockwise.

I relabel the coordinates as if they were in the first quadrant.

