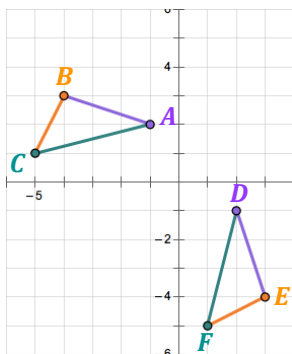


Transform $\triangle ABC$ to show $\triangle ABC \cong \triangle DEF$.

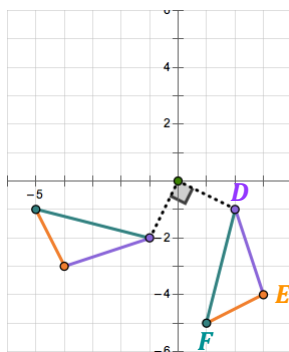
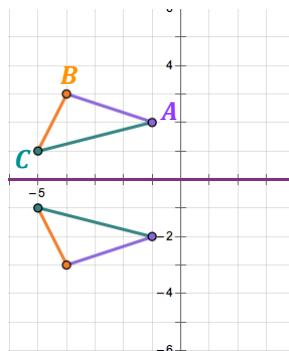


Jaxon's "Reflection & Rotation" Method

I reflect the triangle over the x -axis.

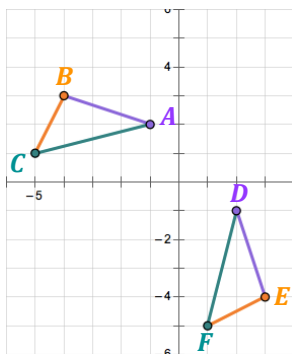
I rotate the triangle 90° counterclockwise about the origin.

I was able to transform $\triangle ABC$ to be $\triangle DEF$.

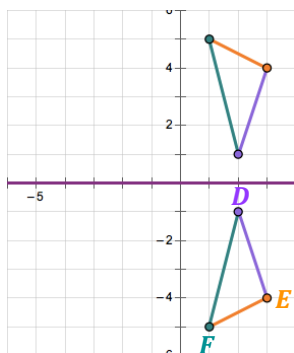
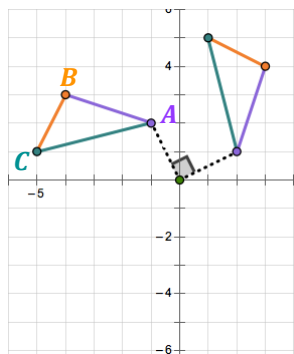


$$\triangle ABC \cong \triangle DEF$$

Transform $\triangle ABC$ to show $\triangle ABC \cong \triangle DEF$.



Maxine's "Rotation & Reflection" Method



$$\triangle ABC \cong \triangle DEF$$

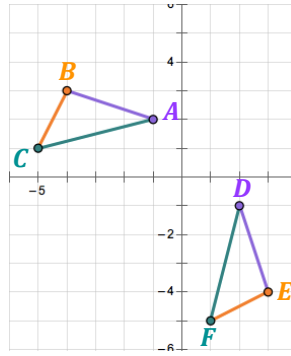
I rotate the triangle 90° clockwise about the origin.

I reflect the triangle over the x-axis.

I was able to transform $\triangle ABC$ to be $\triangle DEF$.



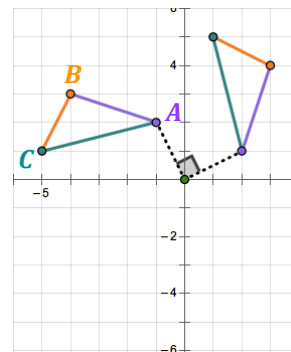
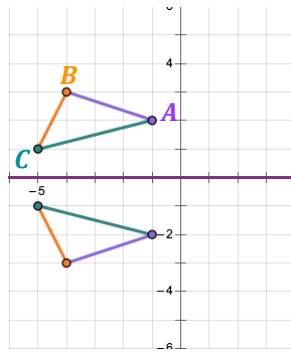
Transform $\triangle ABC$ to show $\triangle ABC \cong \triangle DEF$.



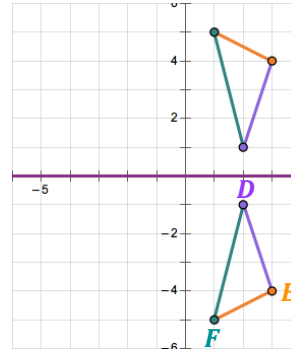
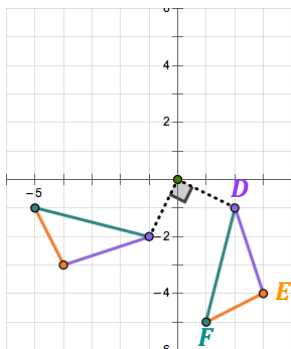
Jaxon's "Reflection & Rotation" Method

Maxine's "Rotation & Reflection" Method

I reflect the triangle over the **x-axis**.



I rotate the triangle 90° counterclockwise about **the origin**.



I rotate the triangle 90° clockwise about **the origin**.

I reflect the triangle over the **x-axis**.

I was able to transform $\triangle ABC$ to be $\triangle DEF$.

$\triangle ABC \cong \triangle DEF$

$\triangle ABC \cong \triangle DEF$

I was able to transform $\triangle ABC$ to be $\triangle DEF$.

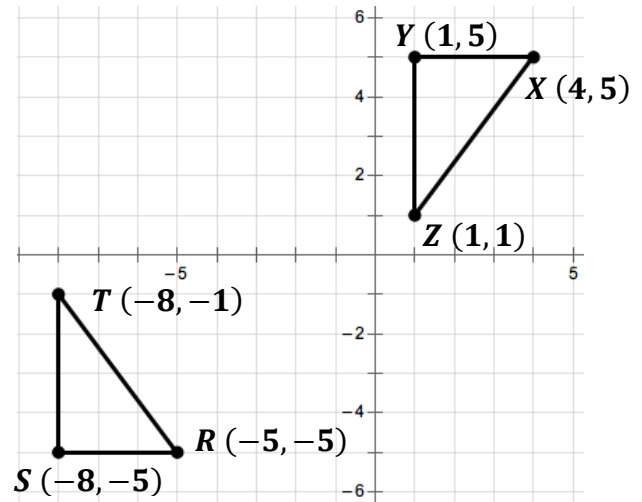


T.5: *Verify Congruence*

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

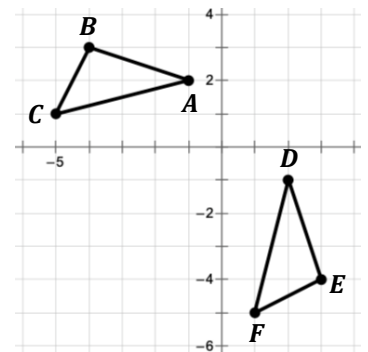
Similarities	Differences

2) Using translations, reflections, and/or rotations, describe the steps that show that $\triangle XYZ \cong \triangle RST$.



3) How do you know if two figures are congruent?

4) To show the triangles are congruent, Maxine says you have to start with $\triangle DEF$. Jaxon believes she would be incorrect, and you have to start with $\triangle ABC$. Their friend, Shannon, says they are both right and you can start with either triangle. Explain who you think is correct and why.



Transform ΔA

We both used a combination of rotations and reflections to show the triangles are congruent. Since these transformations preserve congruence, the order did not matter.

Jaxon's "E"

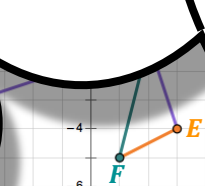
I reflect the triangle over the x-axis.

I rotate the triangle 90° counterclockwise about the origin.

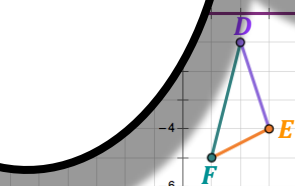
I was able to transform ΔABC to be ΔDEF .

I reflect the triangle over the x-axis.

I was able to transform ΔABC to be ΔDEF .



$$\Delta ABC \cong \Delta DEF$$



$$\Delta ABC \cong \Delta DEF$$

