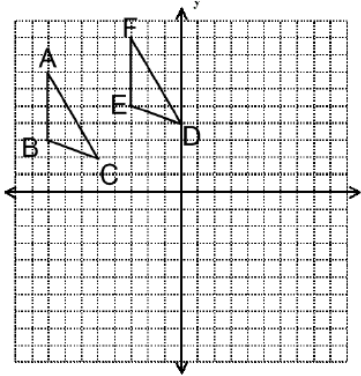
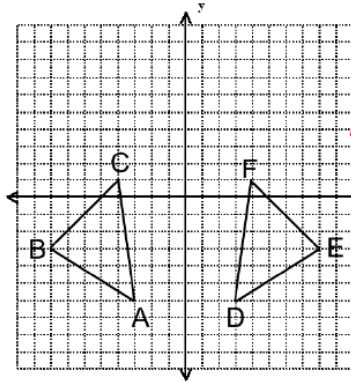


1. Determine if $\triangle ABC \cong \triangle FED$. Explain how you know.



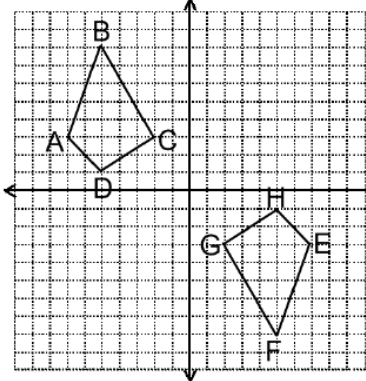
$\triangle ABC$ can be mapped onto $\triangle FED$ by a translation of right 5 and up 2.
 $(x, y) \rightarrow (x+5, y+2)$
 A translation is a rigid motion. Rigid motions create congruent figures.
 Thus, $\triangle ABC \cong \triangle DEF$

2. Determine if $\triangle ABC \cong \triangle DEF$. Explain how you know.



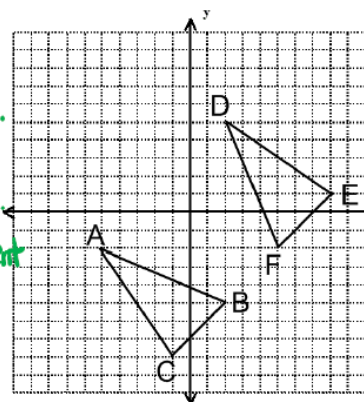
$\triangle ABC$ can be mapped onto $\triangle DEF$ by a reflection over the y -axis, $(x, y) \rightarrow (-x, y)$
 A reflection is a rigid motion. Rigid motions create congruent figures.
 Thus, $\triangle ABC \cong \triangle DEF$.

3. Determine if $\triangle ABC \cong \triangle EFGH$. Explain how you know.



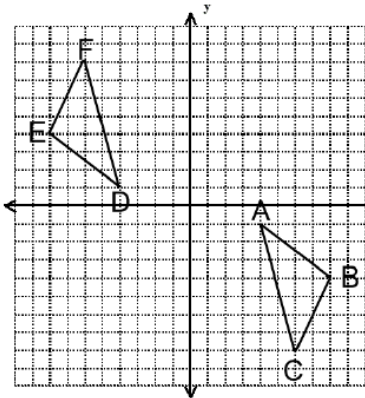
$\triangle ABC$ can be mapped onto $\triangle EFGH$ by a rotation of 180° about the origin.
 $(x, y) \rightarrow (-x, -y)$
 A rotation is a rigid motion. Rigid motions create congruent figures.
 Thus $\triangle ABC \cong \triangle EFGH$

4. Determine if $\triangle ABC \cong \triangle DFE$. Explain how you know.



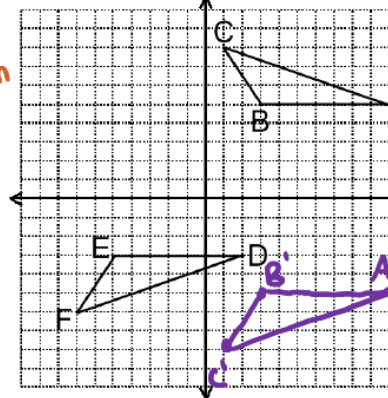
$\triangle ABC$ can be mapped onto $\triangle DEF$ by a reflection over $y = -x$.
 $(x, y) \rightarrow (-y, -x)$
 A reflection is a rigid motion. Rigid motions create congruent figures.
 Thus, $\triangle ABC \cong \triangle DEF$

5. Determine if $\triangle ABC \cong \triangle DEF$. Explain how you know.



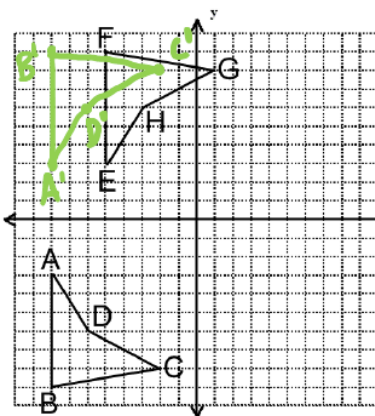
$\triangle ABC$ can be mapped onto $\triangle DEF$ by a rotation of 180° about the origin. $(x, y) \rightarrow (-x, -y)$
 A rotation is a rigid motion. Rigid motions create congruent figures. Thus, $\triangle ABC \cong \triangle DEF$

6. Determine if $\triangle ABC \cong \triangle DEF$. Explain how you know.



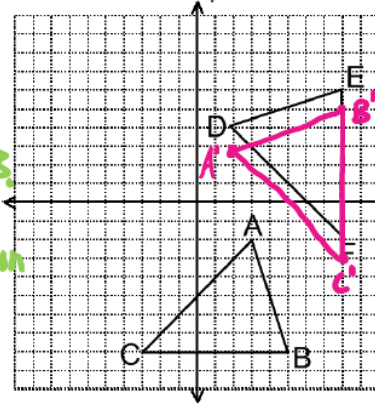
$\triangle ABC$ can be mapped onto $\triangle DEF$ by a reflection over the y -axis, then a translation of left 8 and up 2. $(x, y) \rightarrow (x-8, y+2)$
 A reflection and translation are rigid motions. Rigid motions create congruent figures. Thus, $\triangle ABC \cong \triangle DEF$

7. Determine if $\triangle ABCD \cong \triangle EFGH$. Explain how you know.



$ABCD$ can be mapped onto $EFGH$ by a reflection over the x -axis then a translation of right 3. $(x, y) \rightarrow (x+3, -y)$
 A reflection then translation are rigid motions. Rigid motions create congruent figures. Thus, $ABCD \cong EFGH$

8. Determine if $\triangle ABC \cong \triangle DEF$. Explain how you know.



$\triangle ABC$ can be mapped onto $\triangle DEF$ by a rotation of 90° ccw about the origin then a translation up 1. $(x, y) \rightarrow (-y, x+1)$
 A rotation and translation are rigid motions. Rigid motions create congruent figures. Thus, $\triangle ABC \cong \triangle DEF$.