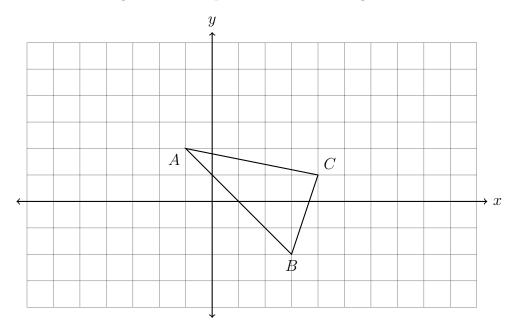
Unit 8: Congruence transformations Name:

12 January 2023

8.8 Homework: Mixed congruence transformations

CCSS.HSG.CO.A.5

1. Slide $\triangle ABC$ to the right five and up two. Label the image $\triangle A'B'C'$.

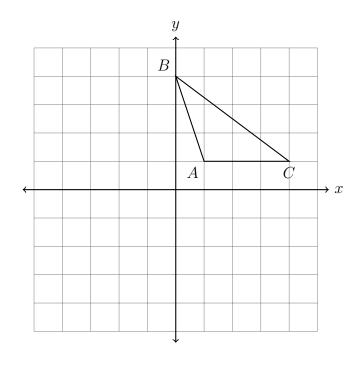


2. Reflect the triangle over the x-axis, $\triangle ABC \rightarrow \triangle A'B'C'$. Complete the table of the coordinates and plot and label the image on the grid.

$$A(1,1) \rightarrow$$

$$B(0,4) \rightarrow$$

$$C(4,1) \rightarrow$$



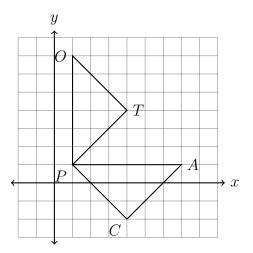
- 3. A transformation maps $\triangle TOP \rightarrow \triangle CAP$, shown below.
 - (a) Fully specify the transformation.
 - (b) Identify each corresponding object.



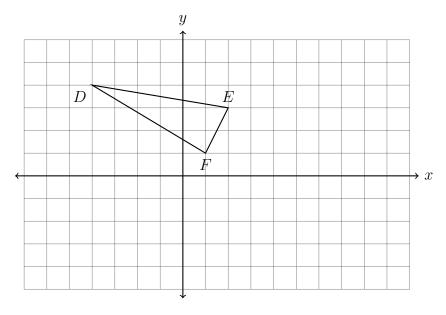
ii.
$$O \rightarrow$$

iii.
$$P \rightarrow$$

v. ____
$$\cong \overline{CA}$$



4. Translate $\triangle DEF$ by $(x,y) \rightarrow (x-2,y-5)$, then reflect the result over the y-axis. Label the images $\triangle D'E'F'$ and $\triangle D''E''F''$ respectively.



5. Check those transformations that are rigid motions.

 \square Reflection

 \square Rotation

☐ Dilation

☐ An isometry

 \square Translation

 \square Horizontal stretch