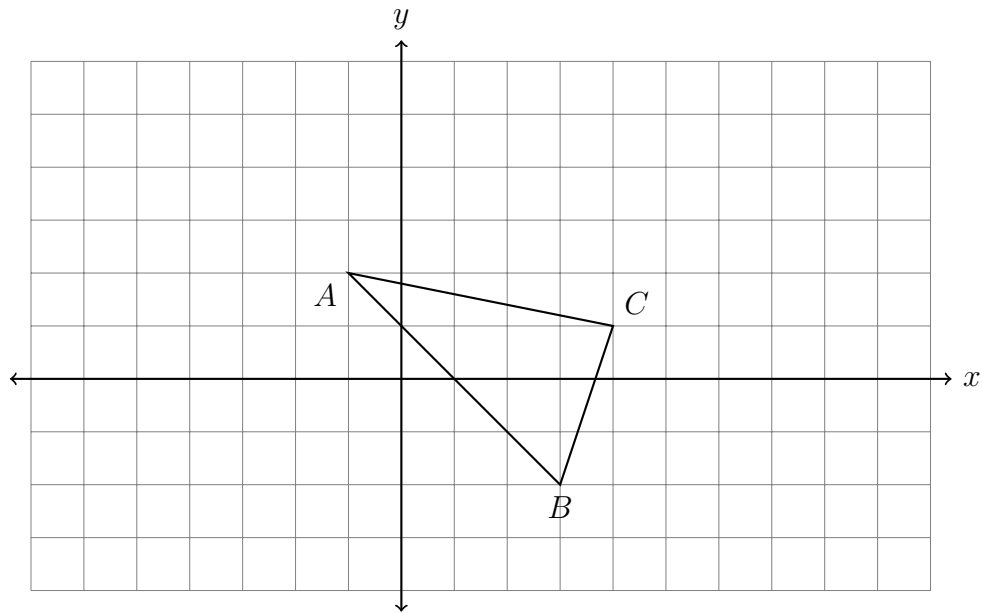


Name:

8.8 Homework: Mixed congruence transformations

CCSS.HSG.CO.A.5

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

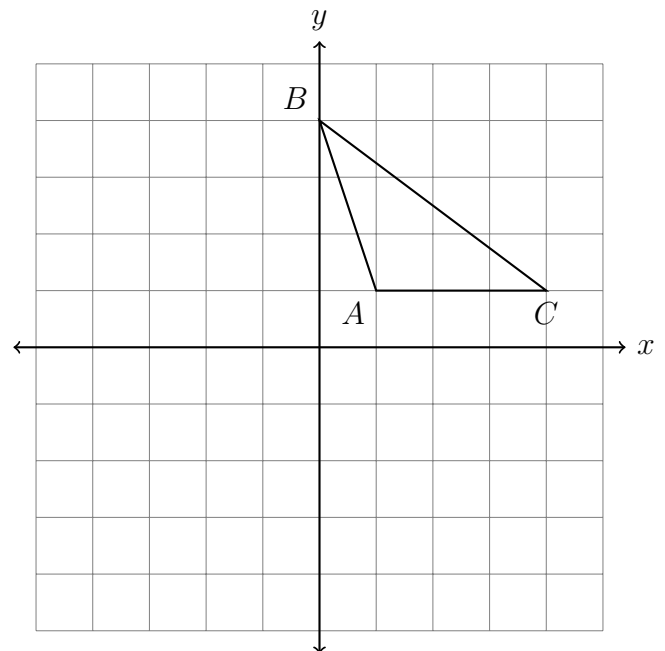


- Reflect the triangle over the x -axis, $\triangle ABC \rightarrow \triangle A'B'C'$. Complete the table of the coordinates and plot and label the image on the grid.

$A(1, 1) \rightarrow$

$B(0, 4) \rightarrow$

$C(4, 1) \rightarrow$



3. A transformation maps $\triangle TOP \rightarrow \triangle CAP$, shown below.

(a) Fully specify the transformation.

(b) Identify each corresponding object.

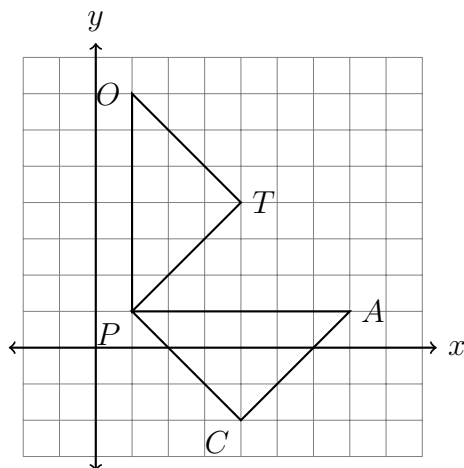
i. $T \rightarrow$ _____

ii. $O \rightarrow$ _____

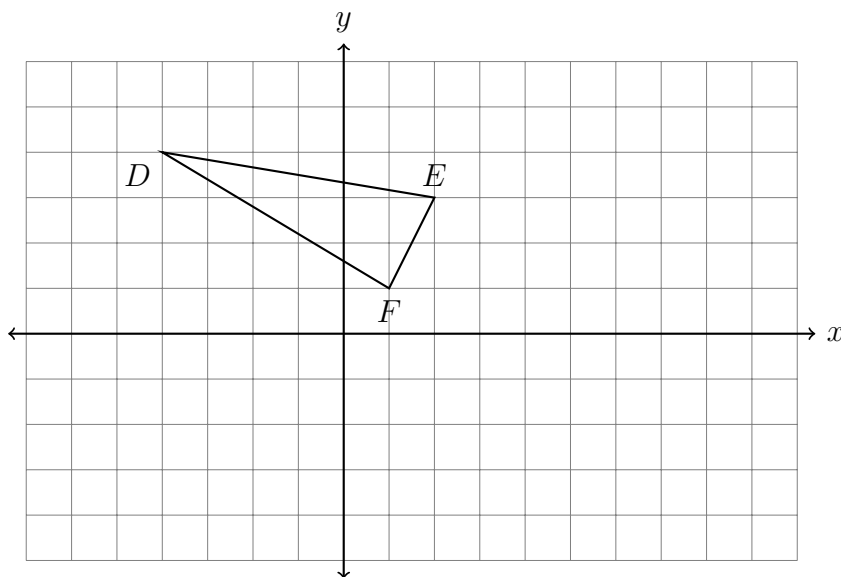
iii. $P \rightarrow$ _____

iv. $\angle PTO \cong$ _____

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.

☐ Reflection

☐ Rotation

☐ Dilation

☐ An isometry

☐ Translation

☐ Horizontal stretch