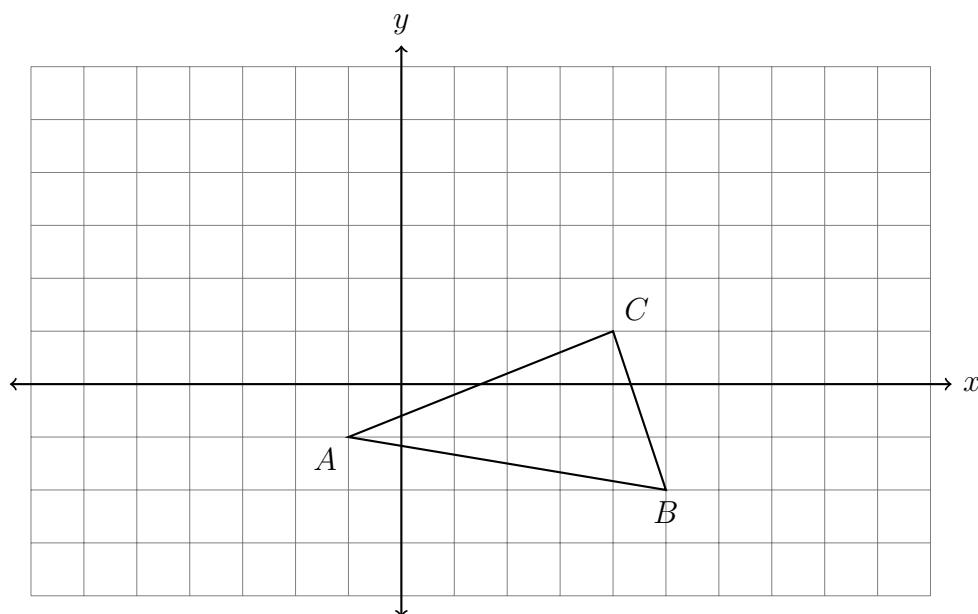Name:

BECA / Dr. Huson / Geometry 5 Congruence Transformations

5.9 PreQuiz: Mixed congruence transformations   **CCSS.HSG.CO.A.5**

1. Do Now: Slide $\triangle ABC$ to the left three and up four. Label the image $\triangle A'B'C'$.
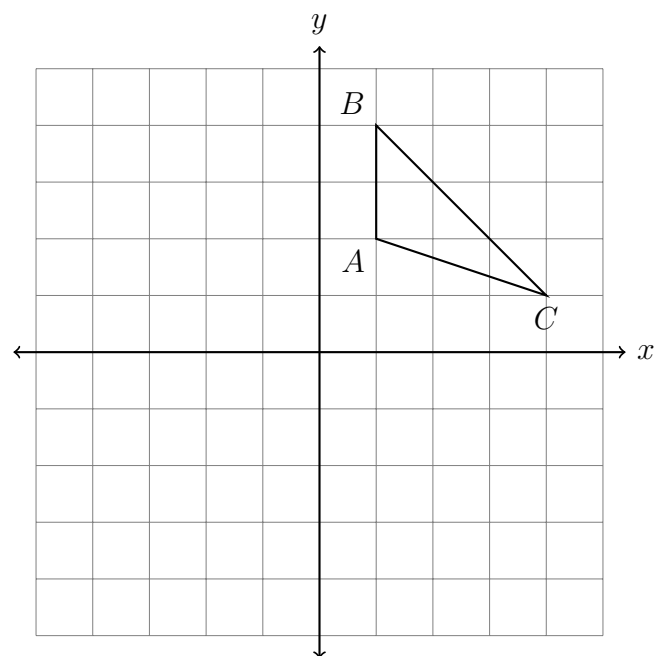

2. Reflect the triangle over the y-axis, $\triangle ABC \rightarrow \triangle A'B'C'$. Complete the table of the coordinates and plot and label the image on the grid.
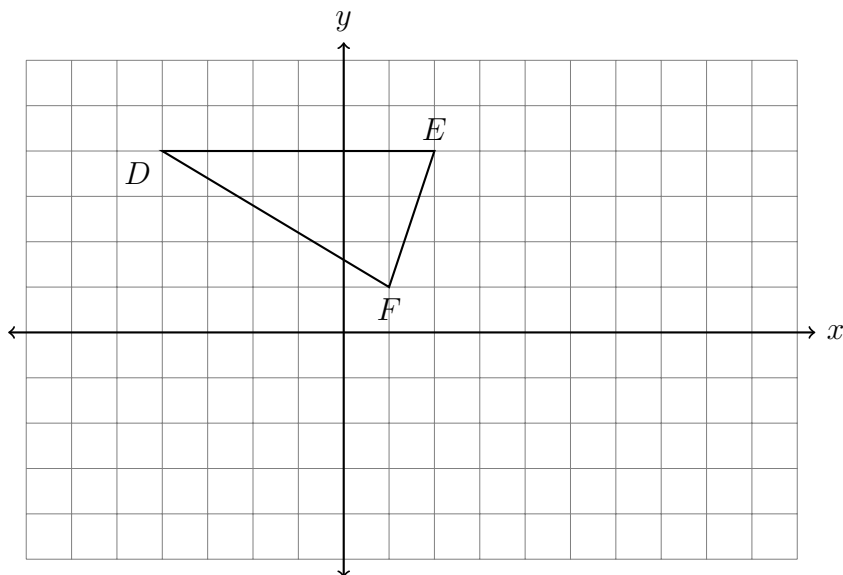
$A(1,2) \rightarrow$

$B(1,4) \rightarrow$

$C(4,1) \rightarrow$

3. Translate $\triangle DEF$ by $(x, y) \to (x + 5, y - 1)$, then reflect the result over the x-axis. Label the images $\triangle D'E'F'$ and $\triangle D''E''F''$ respectively.
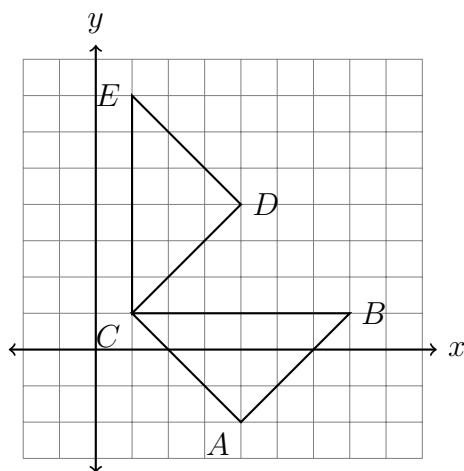

4. A transformation maps $\triangle ABC \to \triangle DEC$, shown below.

(a) Fully specify the transformation.

(b) Identify each corresponding object.

    i. $A \to$ _____

    ii. $B \to$ _____

    iii. $C \to$ _____

    iv. $\angle ACB \cong$ _____

    v. _____ $\cong \overline{DE}$

5. Check those transformations that are rigid motions.

☐ Dilation   ☐ Rotation

☐ Translation   ☐ An isometry

☐ Reflection   ☐ Horizontal stretch