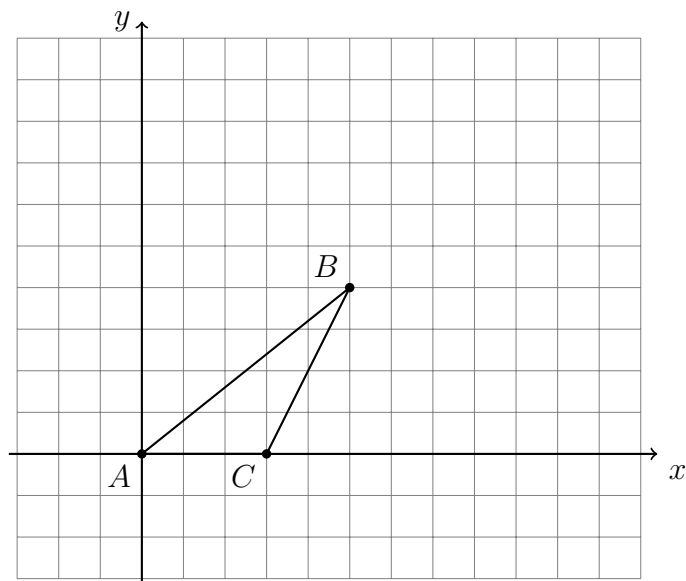


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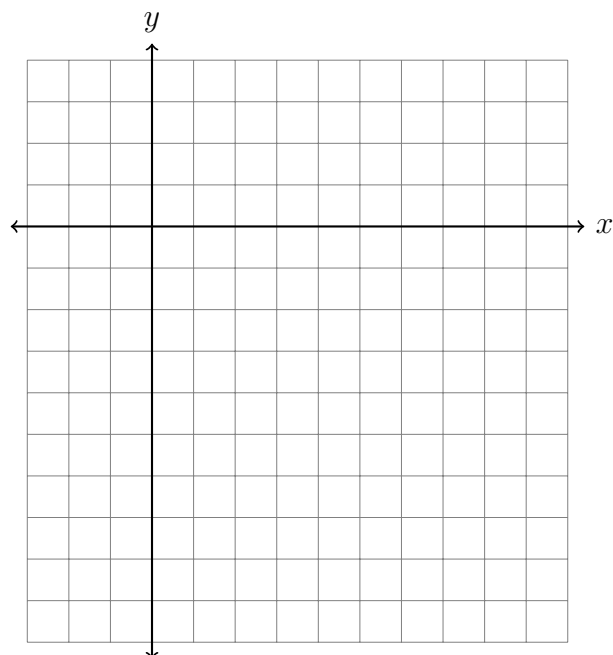
7.10b Do Now: Transformations

1. Apply a dilation mapping $\triangle ABC \rightarrow \triangle A'B'C'$ with a factor of $k = 2$ centered at $(0,0)$. Draw and label the image on the grid and make a table of the coordinates.



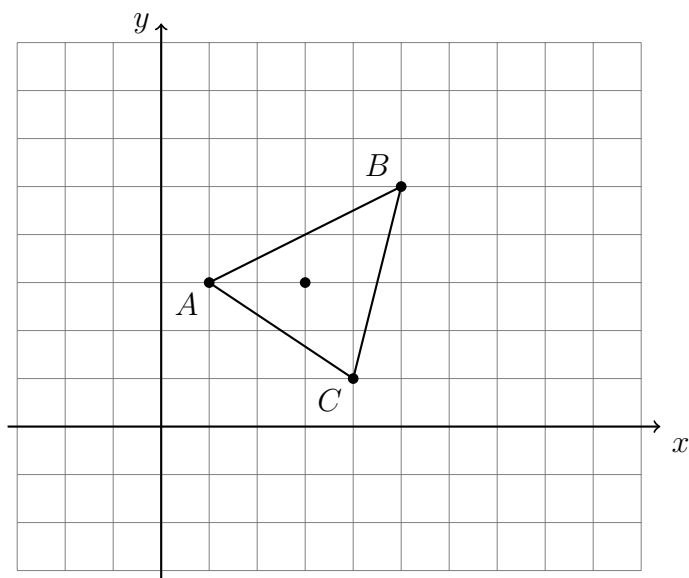
2. After a dilation centered at the origin, the image of \overline{AB} is $\overline{A'B'}$. If the coordinates of the endpoints of these segments are $A(-1, -3)$, $B(4, -5)$, $A'(-2, -6)$, and $B'(8, -10)$, find the scale factor of the dilation.

Make a table of coordinate pairs and graph the two line segments, \overline{AB} and $\overline{A'B'}$, on the set of axes below.

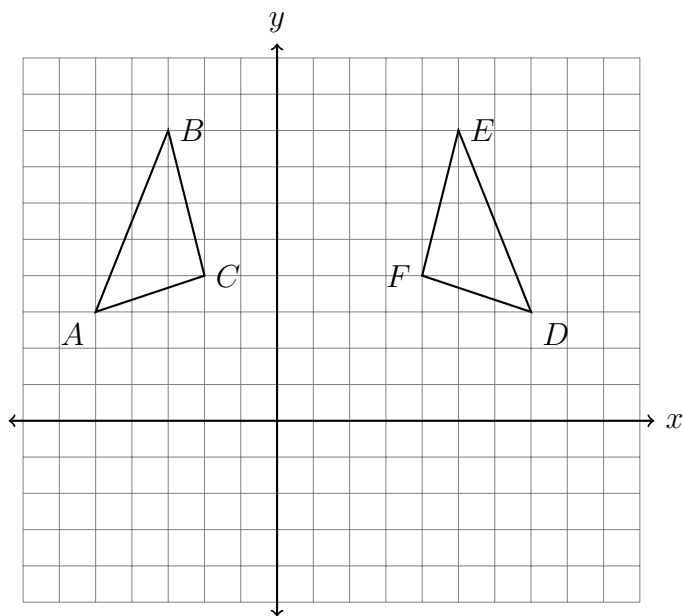


3. Find the image of $P(3, 5)$ after a translation up 3 and to the left 7.

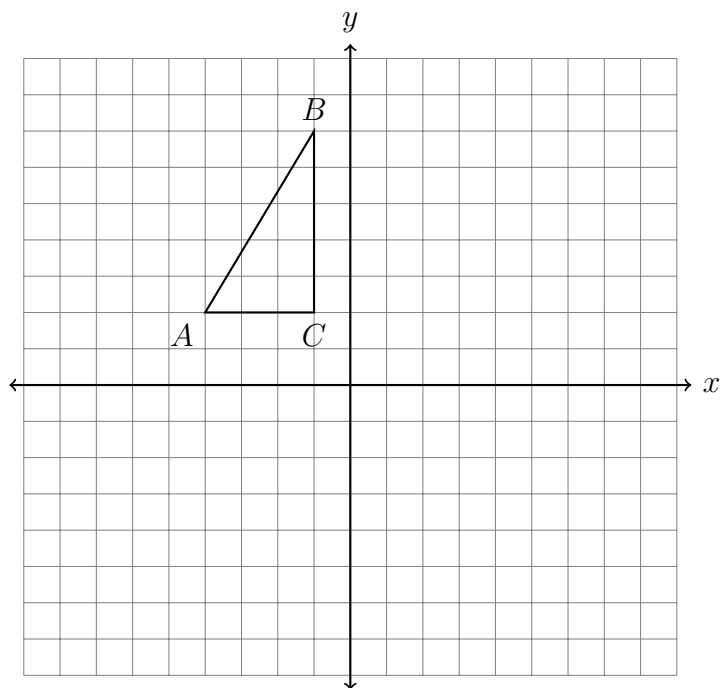
4. Apply a dilation mapping $\triangle ABC \rightarrow \triangle A'B'C'$ with a factor of $k = 2$ centered at $(3, 3)$. Draw and label the image on the grid and make a table of the coordinates.



5. What transformation maps $\triangle ABC$ onto $\triangle DEF$, shown below? Fully specify the transformation.



6. Plot two transformations. Rotate $\triangle ABC$ clockwise 90° around the origin, then reflect the result across the x -axis. Make a table of the coordinates and plot and label the images on the axes.



7. A translation maps $A(-2, 1) \rightarrow A'(5, 1)$. What is the image of $B(3, -1)$ under the same translation?
8. Reflect $\triangle ABC$ over the y -axis. Plot and label the image on the axes and make a table of the coordinates showing $\triangle ABC \rightarrow \triangle A'B'C'$.

