9.4b Classwork: Transformations

1. A transformation is applied to a triangle, $\triangle CAT \to \triangle C'A'T'$. Circle True or False to identify each transformation correctly represented below.

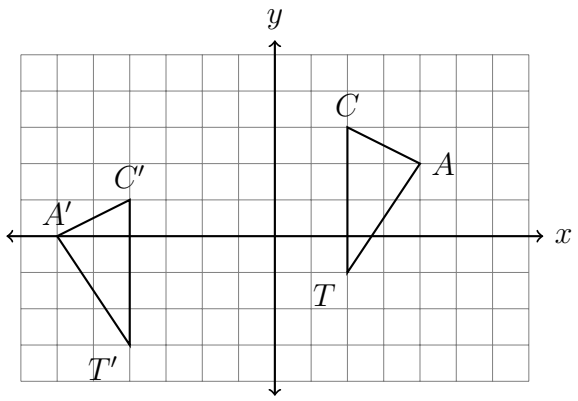
T F Translated six to the left, down two

T F Reflected across the y-axis

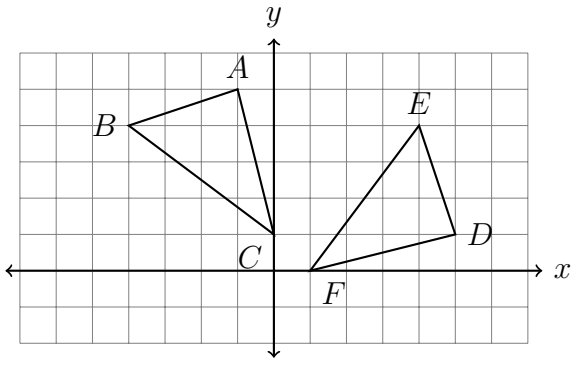
T F $(x, y) \to (x - 6, y - 2)$

T F Reflected across the y-axis, then left 2, down 2

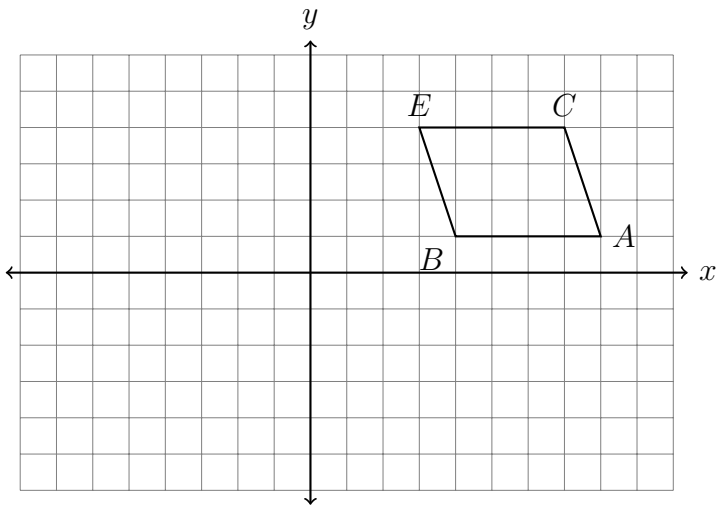
T F Reflect across $x = -1$



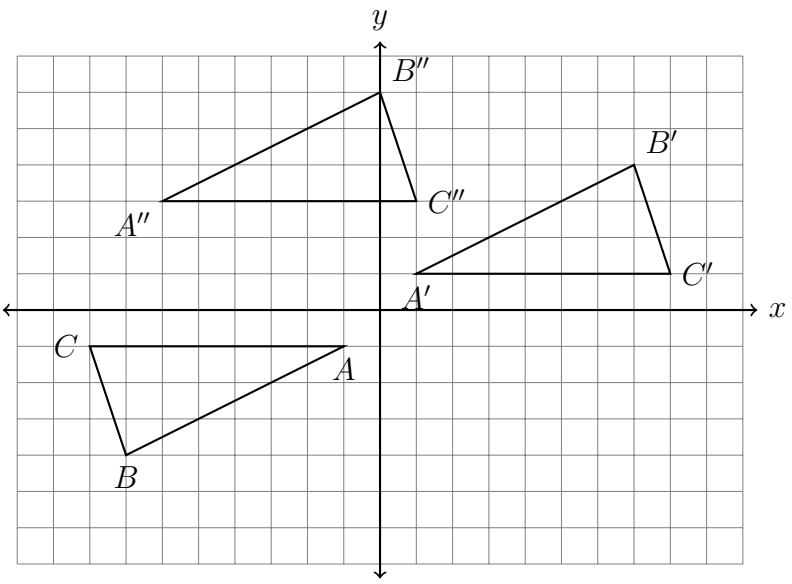
2. Determine and state the transformation mapping $\triangle DEF$ onto $\triangle ABC$. Also, make a mapping table of the coordinate pairs.



3. First reflect the trapezoid $BECA$ across the y-axis, then move it down five and right two. Label the images $B'E'C'A'$ and $B''E''C''A''$.


y
E
C
A
B
x

4. Two transformations have been applied to a triangle in the diagram below, $\triangle ABC \to \triangle A'B'C' \to \triangle A''B''C''$. Fully characterize each transformation.



5. The quadrilateral $ROCK$ undergoes two transformations, shown below. Describe the sequence of transformations applied.