

### 9-3bDN-Composition

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

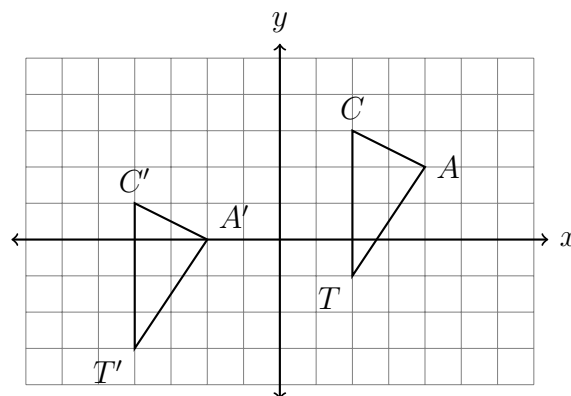
T   F   Translated six to the left, up two

T   F   Reflected across the  $y$ -axis

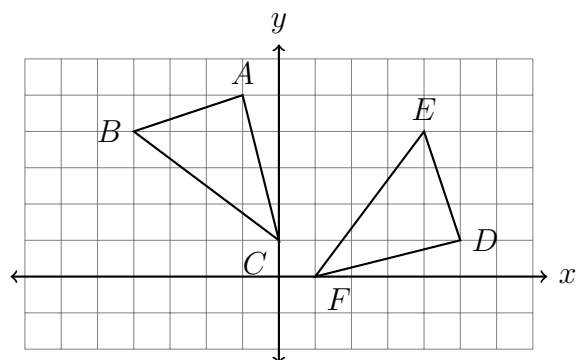
T   F    $(x, y) \rightarrow (x - 6, y - 2)$

T   F   Rotated  $90^\circ$  counterclockwise around the origin

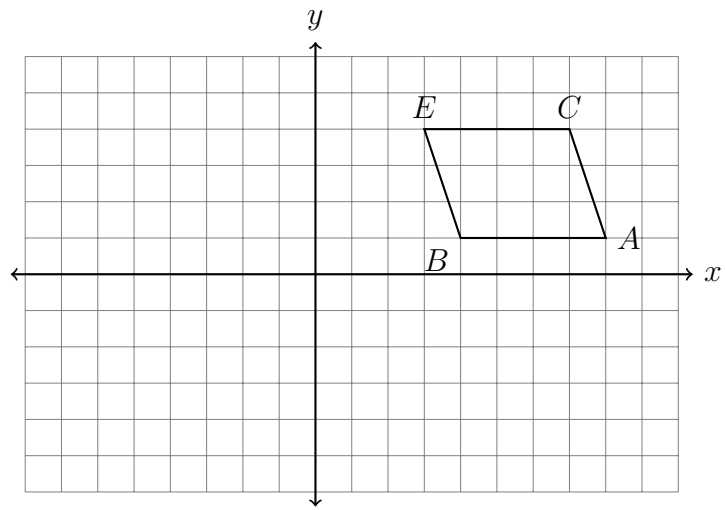
T   F   A slide six units to the right, up two



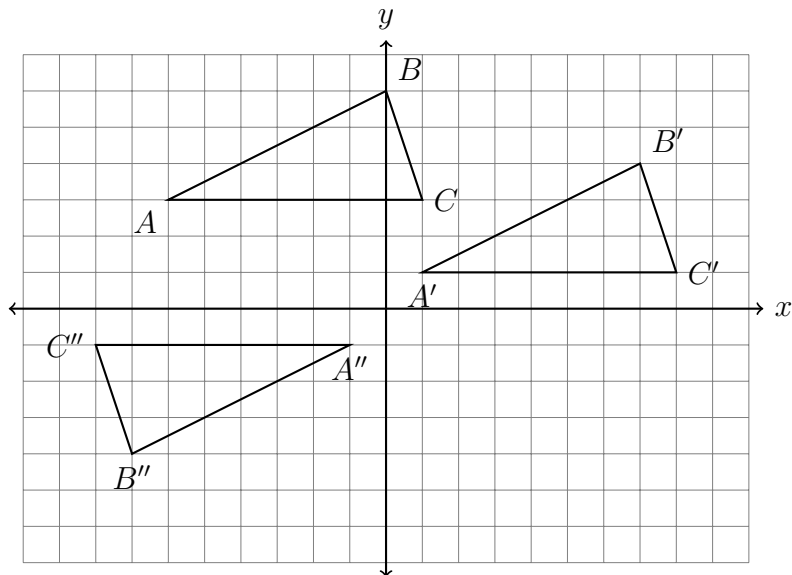
2. Determine and state the transformation mapping  $\triangle ABC$  onto  $\triangle DEF$ . Also, make a mapping table of the coordinate pairs.



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



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



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

