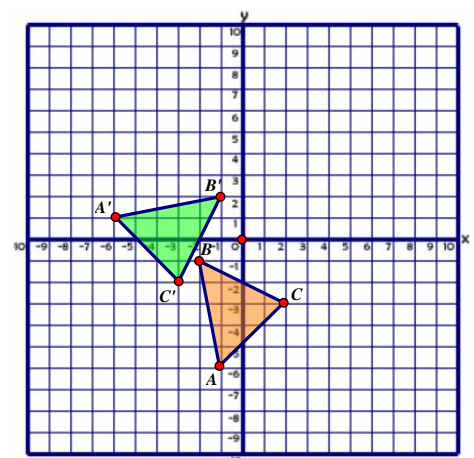
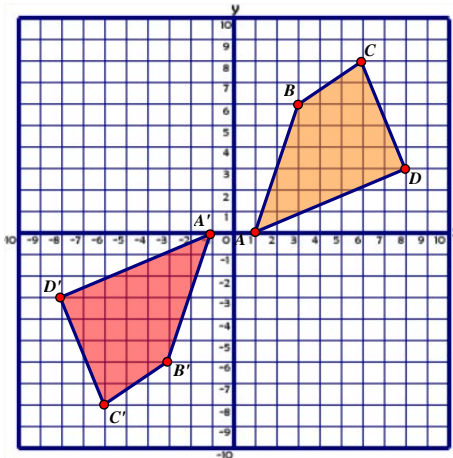
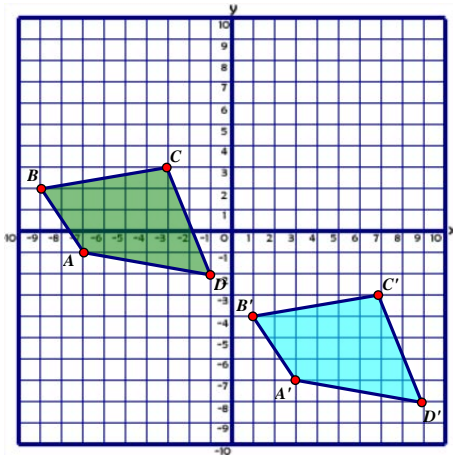


Quick Concept: Two shapes are congruent if there is a single or sequence of isometric transformations that map one onto the other.

1) Show that the given shapes are congruent by determining the isometric transformation that maps one onto the other.



a) Transformation: _____

b) Transformation: _____

c) Transformation: _____

2) Determine the coordinate rule and then determine if the triangles are congruent or not.

a) $A(-1, 4)$ $B(3, 0)$ $C(4, 3)$ $A'(1, 4)$ $B'(-3, 0)$ $C'(-4, 3)$

What is the coordinate rule that maps $\triangle ABC$ onto $\triangle A'B'C'$? $W(x, y) \rightarrow (\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$

What transformation does that represent? _____

Is $\triangle ABC$ congruent to $\triangle A'B'C'$? **Yes / No. Why?** _____

b) $A(5, -3)$ $B(-2, 2)$ $C(7, -1)$ $A'(2, -1)$ $B'(-5, 4)$ $C'(4, 1)$

What is the coordinate rule that maps $\triangle ABC$ onto $\triangle A'B'C'$? $W(x, y) \rightarrow (\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$

What transformation does that represent? _____

Is $\triangle ABC$ congruent to $\triangle A'B'C'$? **Yes / No. Why?** _____

c) $A(0, 6)$ $B(12, -5)$ $C(4, -4)$ $A'(6, 0)$ $B'(-5, -12)$ $C'(-4, -4)$

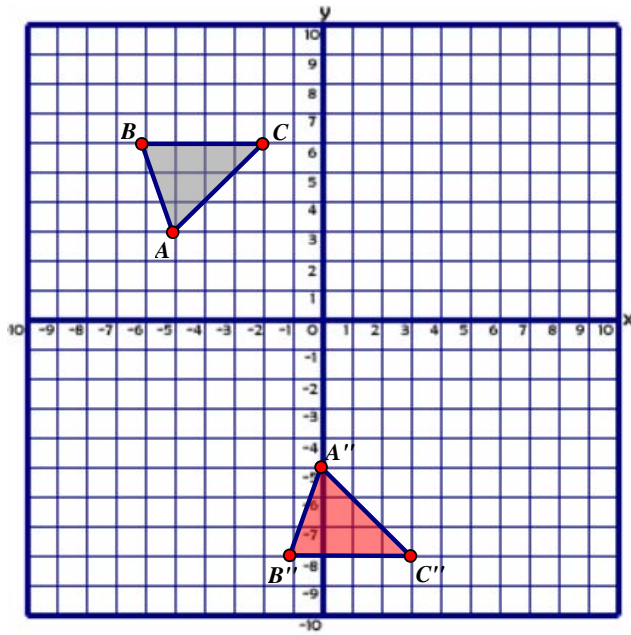
What is the coordinate rule that maps $\triangle ABC$ onto $\triangle A'B'C'$? $W(x, y) \rightarrow (\underline{\hspace{1cm}}, \underline{\hspace{1cm}})$

What transformation does that represent? _____

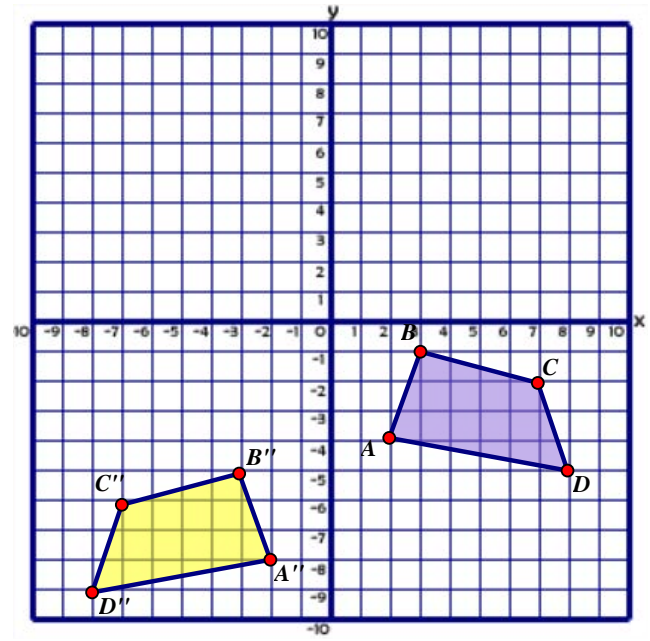
Is $\triangle ABC$ congruent to $\triangle A'B'C'$? **Yes / No. Why?** _____



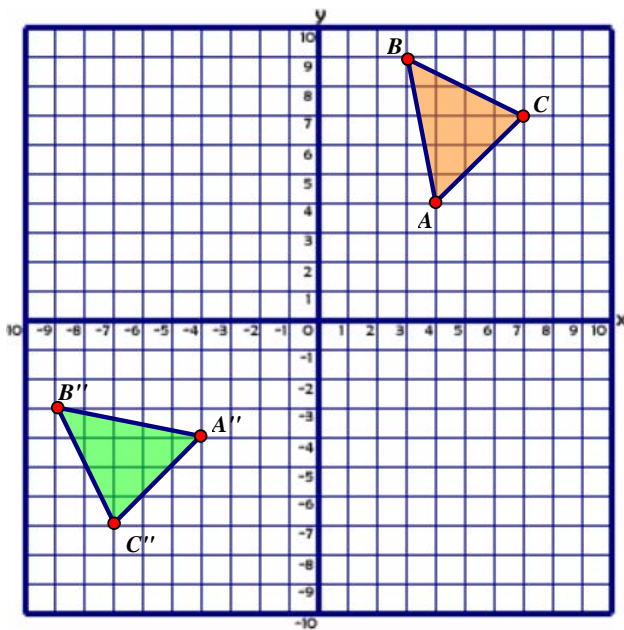
3) Show that the given shapes are congruent by determining the two isometric transformations that map one onto the other.



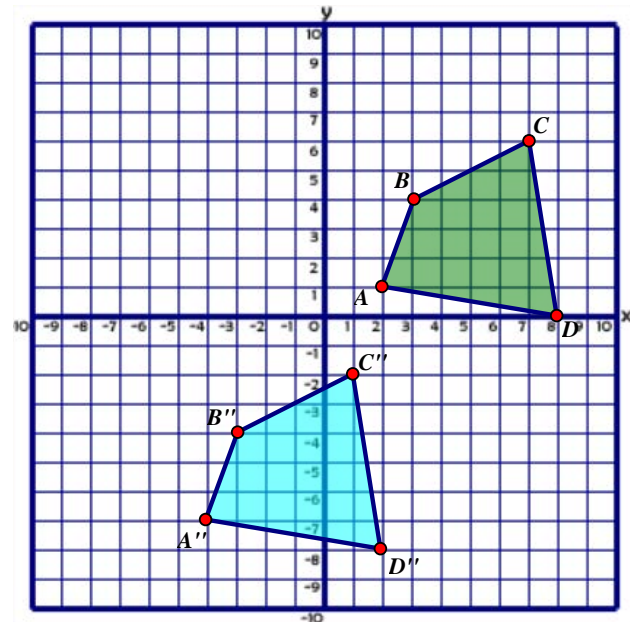
a) Transformation _____
 Followed by
 Transformation _____



b) Transformation _____
 Followed by
 Transformation _____



c) Transformation _____
 Followed by
 Transformation _____



d) Transformation _____
 Followed by
 Transformation _____