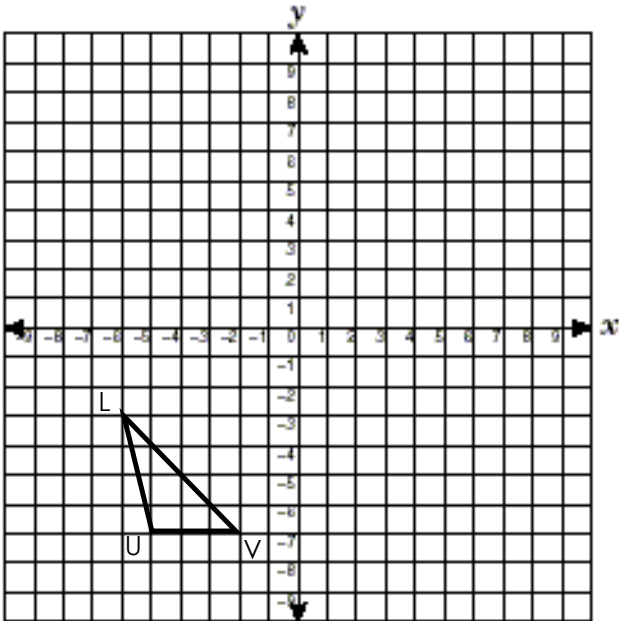


Independent Practice



$\triangle LUV$ is translated 7 units up and 8 to the right.
What is the coordinate of $\triangle L'U'V'$?

$$L(-6, -3) \longrightarrow L'(2, 4)$$

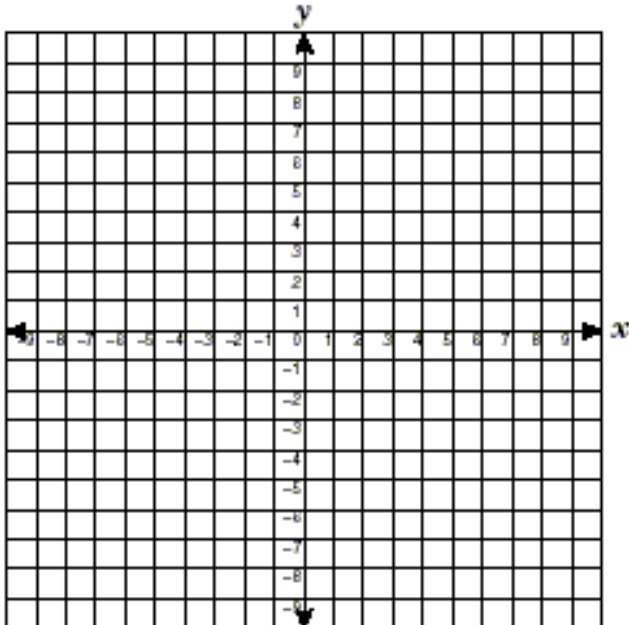
$$U(-5, -7) \longrightarrow U'(3, 0)$$

$$V(-2, -7) \longrightarrow V'(6, 0)$$

Is $\triangle LUV \cong \triangle L'U'V'$? Explain using the properties of rigid motions.

Yes, because a translation is a rigid transformation and rigid transformations preserve side lengths and angle measures

Given $\square ABCD$ with $A(3,-4)$, $B(4,2)$, and $C(7,-4)$, $D(8,2)$. A translation of $(x,y) \rightarrow (x-5, y+2)$ is applied to $\square ABCD$. What are the coordinates of $\square A'B'C'D'$?



$$A(3,-4) \longrightarrow A'(-2,-2)$$

$$B(4,2) \longrightarrow B'(-1,4)$$

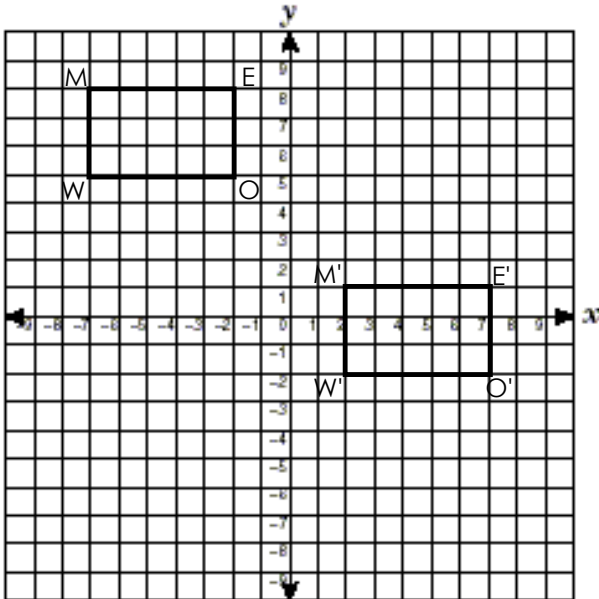
$$C(7,-4) \longrightarrow C'(2,-2)$$

$$D(8,2) \longrightarrow D'(3,4)$$

Is $\square ABCD \cong \square A'B'C'D'$? Explain using the properties of rigid motions.

Yes, because a translation is a rigid transformation and rigid transformations preserve side lengths and angle measures

Describe a transformation that maps rectangle MEOW onto rectangle M'E'O'W'

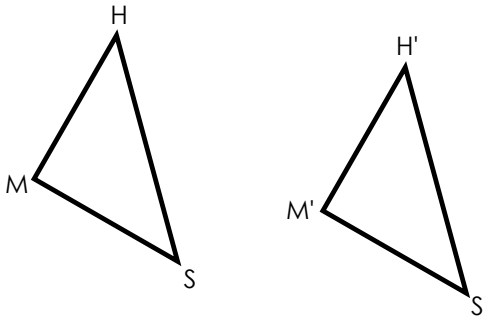


A translation 7 units down and 9 units to the right maps rectangle MEOW onto rectangle M'E'O'W'

Using the properties of rigid motions, explain how you know rectangle MEOW is congruent to rectangle M'E'O'W'

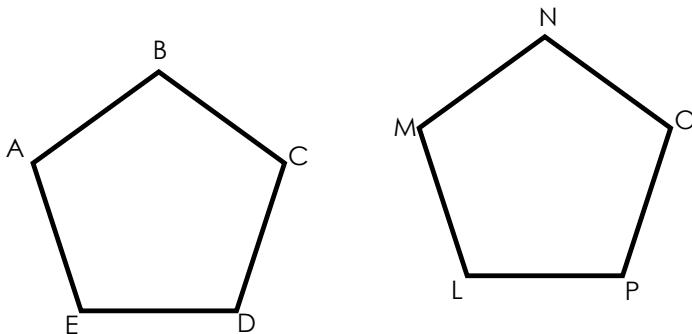
A translation 7 units down and 9 units to the right maps rectangle MEOW onto rectangle M'E'O'W'. A translation is a rigid transformation and rigid transformations preserve the lengths of sides and angle measures.

Describe a translation that maps $\triangle SMH$ onto $\triangle S'M'H'$



A translation
 along line $\overline{HH'}$
 will map $\triangle SMH$ onto $\triangle S'M'H'$.

Describe a translation that maps pentagon ABCDE onto MNOPL



A translation along \overline{AM} will
 map pentagon ABCDE onto
 pentagon MNOPL

Use the template from the last example!