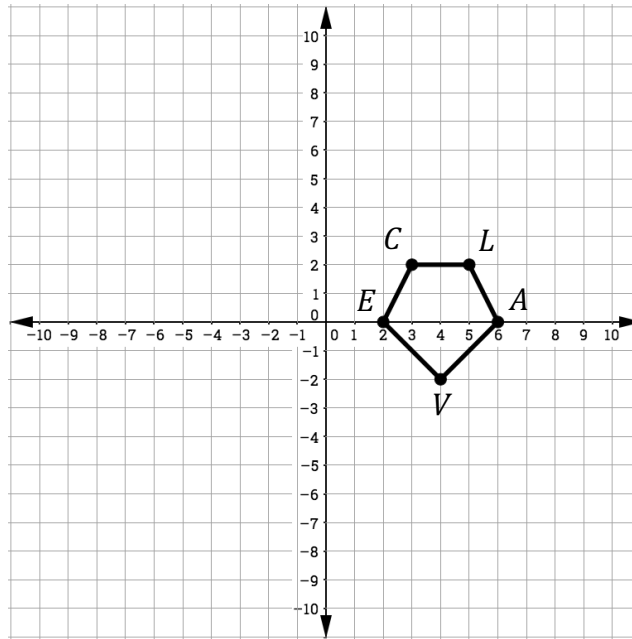


Introduction to Polygons – Part 1
Translations of Polygons
Independent Practice

1. Translate pentagon $CLAVE$ following this algebraic description $(x, y) \rightarrow (x - 4, y + 3)$. Sketch $C'L'A'V'E'$ in the coordinate plane below.

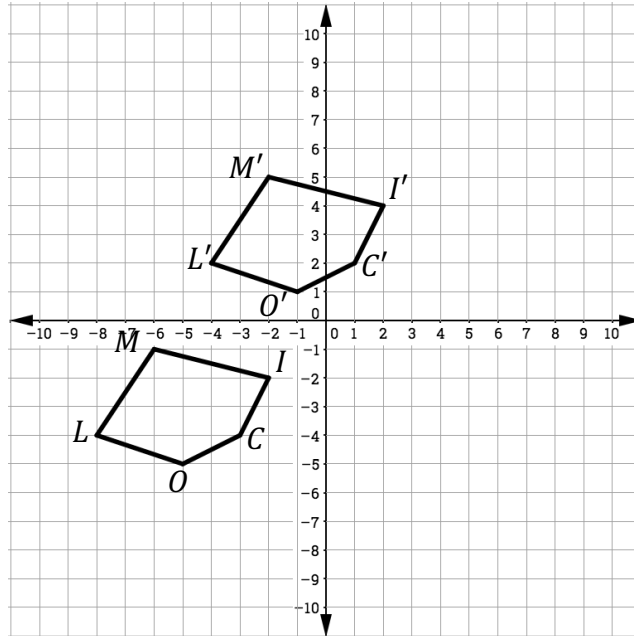


2. Quadrilateral $PUMA$ has coordinates at $P(-5, -2)$, $U(-1, 2)$, $M(4, -3)$, $A(0, -7)$ and it is transformed by $(x, y) \rightarrow (x + 5, y - 7)$.

Part A: What is the x –coordinate of U' ?

Part B: What is the y –coordinate of M' ?

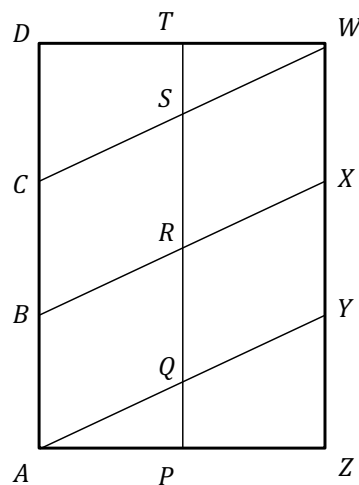
3. Consider the figure below.



Complete the algebraic description of the transformation of *MICOL*.

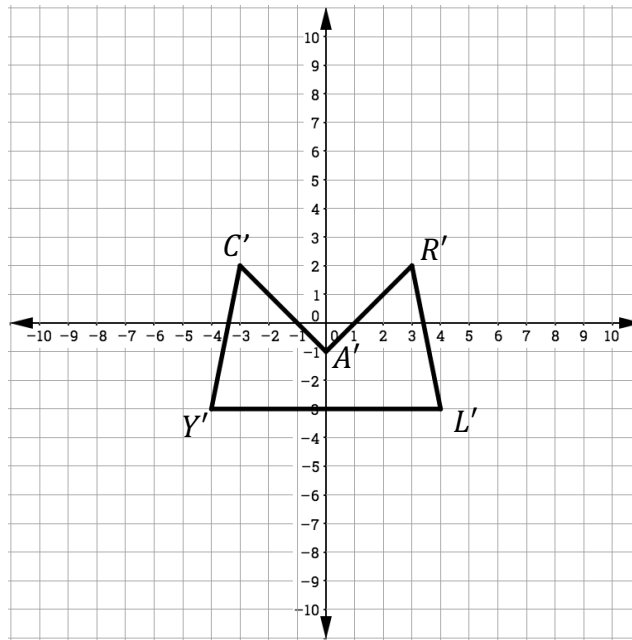
$$(x, y) \rightarrow (x + \boxed{}, y + \boxed{})$$

4. Consider the figure below.



If *W* is the image of *R* after a translation, then which point is the image of *B* under the same translation?

5. Polygon $C'A'R'L'Y'$ is the image of polygon $CARLY$ after a translation $(x, y) \rightarrow (x - 4, y - 6)$.



What are the coordinates of the vertices of polygon $CARLY$?