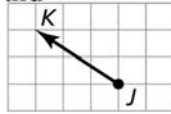


Translations

Name: _____

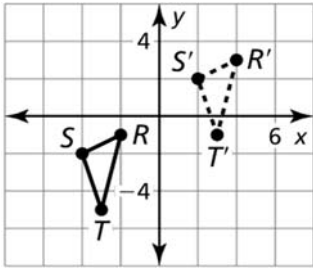
1. Name the vector and write it in rule and component form.



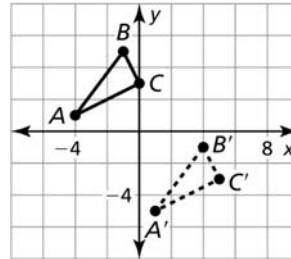
2. Name the vector that translates $A(3,-2)$ to $A'(-1,4)$ in both rule and component form.

Write a rule for the following translations in both rule and component form:

3. $\triangle RST$ to $\triangle R'S'T'$

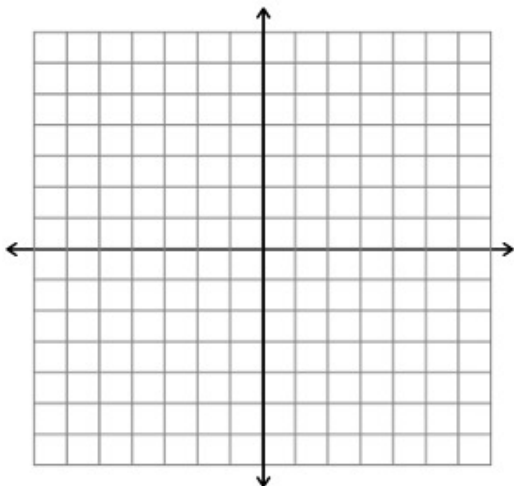


4. $\triangle ABC$ to $\triangle A'B'C'$

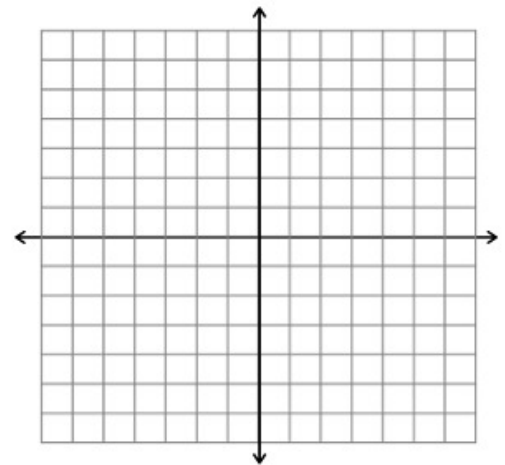


In the following problems, graph both the pre-image and the resulting image on the graph provided.

5. If $F(-2,-6)$, $G(3,0)$, and $H(1,-4)$ make $\triangle FGH$, translate $\triangle FGH$ into $\triangle F'G'H'$ using the vector $\langle -2, 7 \rangle$.



6. If the vertices of $\triangle ABC$ are $A(2,3)$, $B(-1,2)$ and $C(0,1)$ translate $\triangle ABC$ using the vector $(x,y) \rightarrow (x+1, y-4)$.

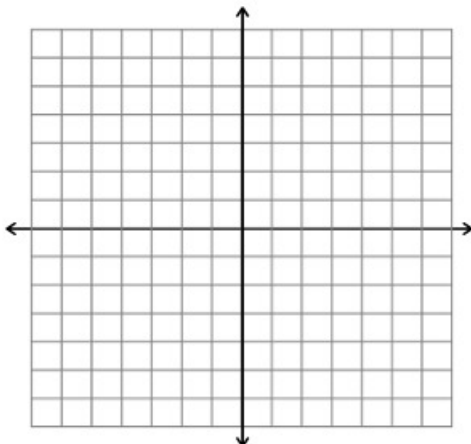


In the following problems, graph both the pre-image and the resulting images on the graph provided.

7. Graph $\triangle JKL$ with vertices $J(-2,7)$, $K(1,-3)$, and $L(5,4)$ and its images after the composition:

Translation: $(x,y) \rightarrow (x+2, y-1)$

Translation: $\langle -1, -3 \rangle$



8. Graph $\triangle CDE$ with vertices $C(-1,3)$, $D(0,-2)$, and $E(1,1)$ and its images after the composition:

Translation: $(x,y) \rightarrow (x+1, y-4)$

Translation: $\langle -2, 5 \rangle$

