

Translations

Translations: moves every point the same distance in the same direction
** add/subtract to x & y*

Example: Translation T is defined as $(x, y) \rightarrow (x - 4, y + 3)$. Find the image of $(7, -3)$ under translation T.

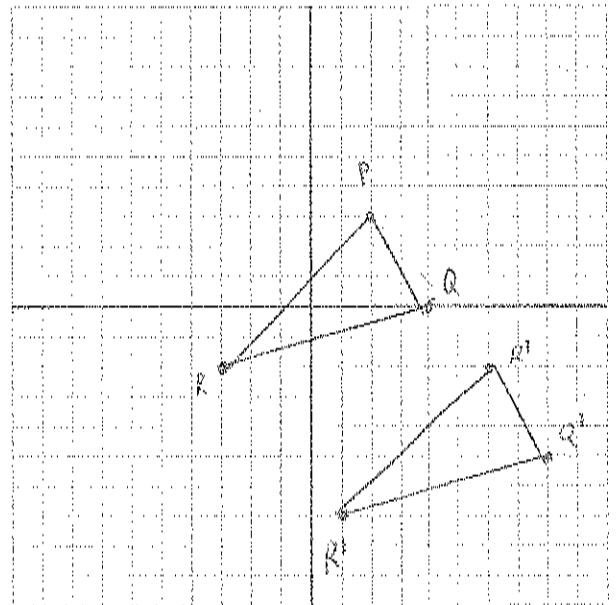
$$(7, -3) \xrightarrow{T_{-4, 3}} (3, 0)$$

Example: If the coordinates of $\triangle PQR$ are $P(2, 3)$, $Q(4, 0)$ and $R(-3, -2)$, graph the image of $\triangle PQR$ under $T_{4, -5}$

$$P'(6, -2)$$

$$Q'(8, -5)$$

$$R'(1, -7)$$



Try:

Given $\triangle ABC$ with $A(0, -9)$, $B(3, 0)$, and $C(6, -9)$. Graph and state the coordinates of $\triangle A'B'C'$, the image of $\triangle ABC$ after the translation of $T_{3, 4}$

$$A'(5, -5)$$

$$B'(8, 4)$$

$$C'(9, -5)$$

