Name: _____

Lesson Guide

This lesson guide accompanies the following video lesson:

Geometry Transformations: Translations

In geometry, a translation is a _____from one location to another.

A translation is NOT a change in _____ or _____.

- **Notation:**

When translating a point $P(x, y)$:

$$T_{a,b}$$

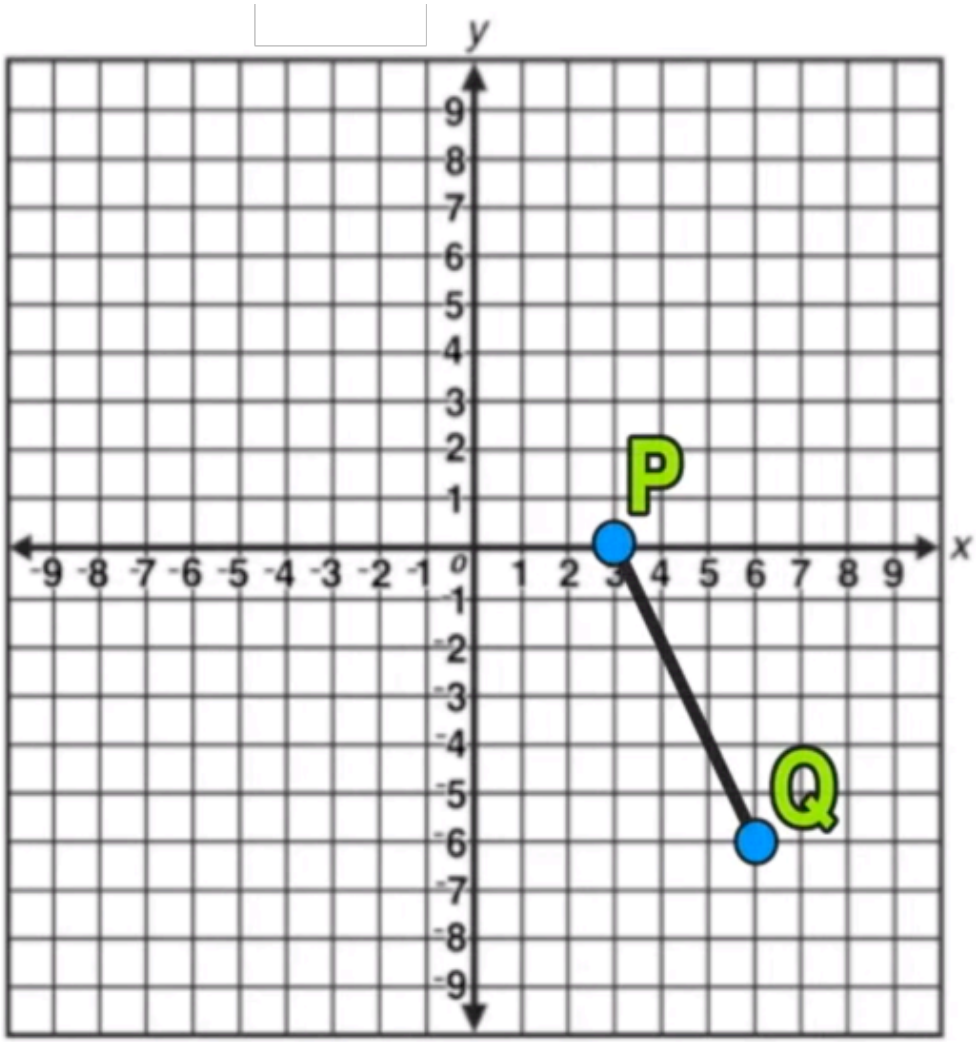
$$P(x, y) \longrightarrow P'(x\square, y\square)$$

Translate a Line Segment

Example 01:

Perform the following transformation on $\overline{PQ}$: $T_{-8,4}$

For this translation, you will be sliding the line segment _____ units (left right) and _____ units (up down).



$P(3,0) \rightarrow P'(3,0)$

$Q(6,-6) \rightarrow Q'(6,-6)$

P' (_____, _____)

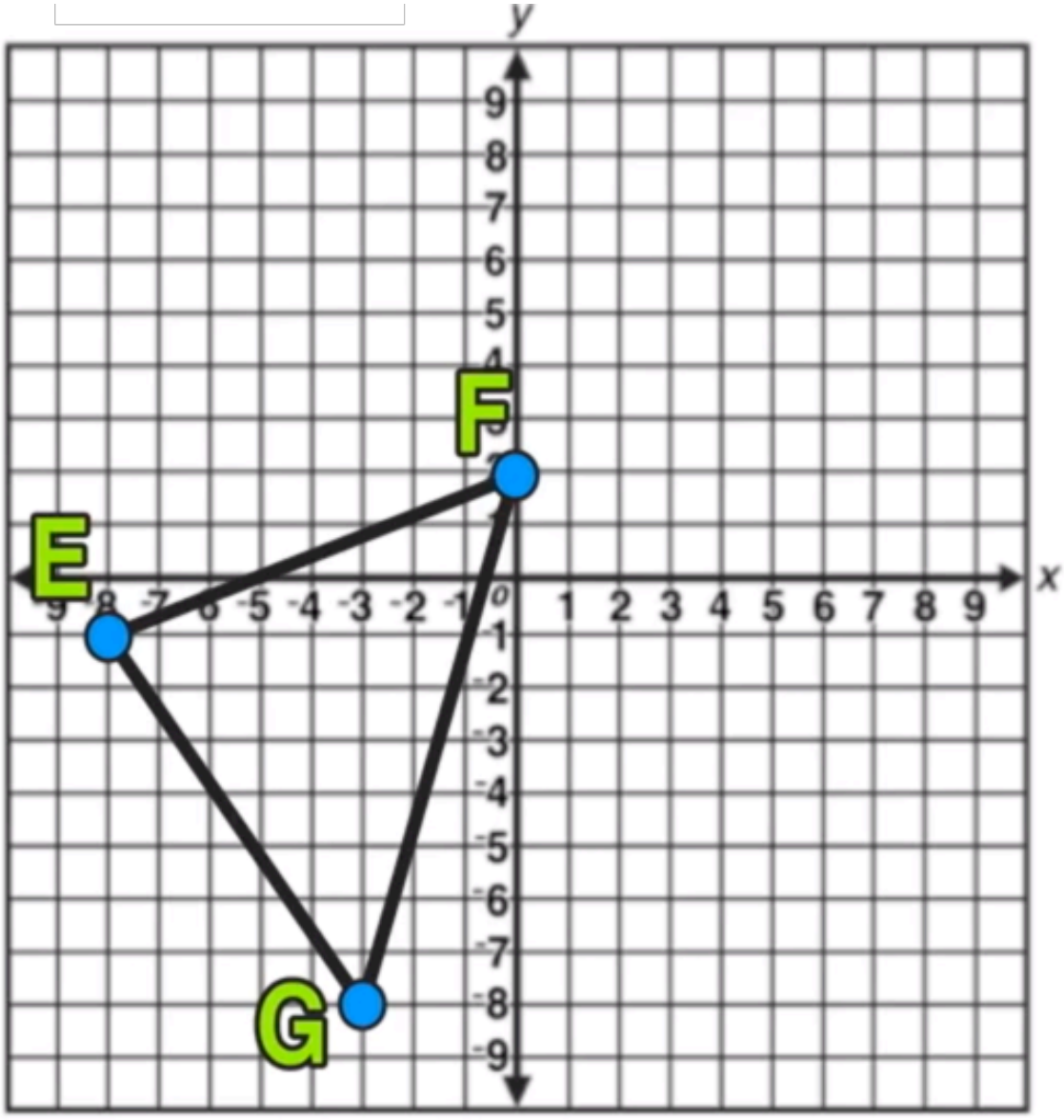
Q' (_____, _____)

Translate a Figure

Example 01:

Construct the image of $\Delta E'F'G'$ after the following transformation: $T_{6,-1}$

For this translation, you will be sliding the line segment _____ units (left right) and _____ units (up down).



E(-8,-1) F(0,2) G(-3,-8)

E'(,) F'(,) G'(,)

E' (_____, _____)

F' (_____, _____)

G' (_____, _____)