

Name: _____ Date: _____

REFLECTIONS IN THE COORDINATE PLANE



A reflection is....

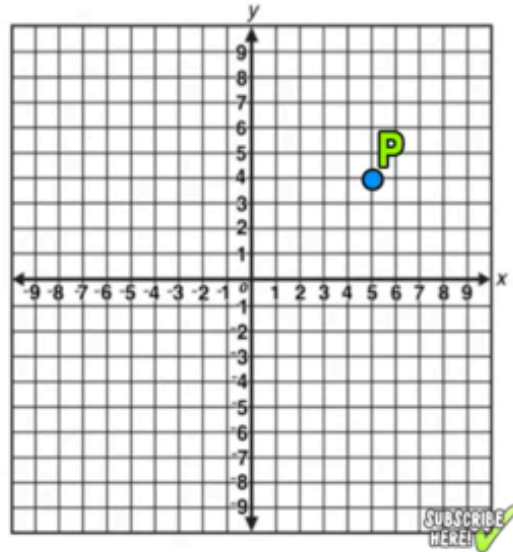
A reflection is not...

Example #1

Reflect a Point

Construct the image of P' after the following:

r
x-axis



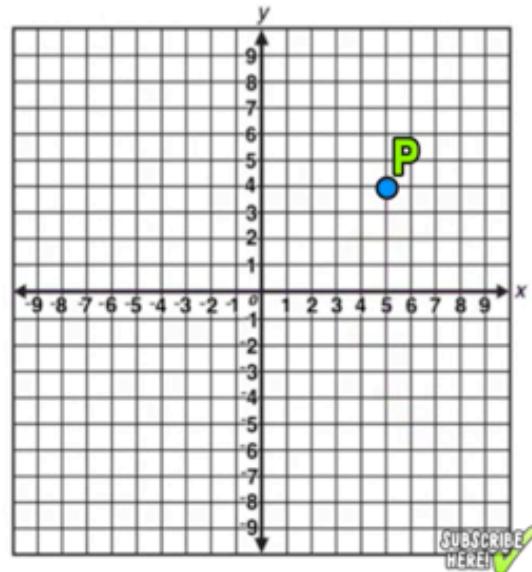
Example #2

Reflect a Point

Construct the image of P' after the following:

r
y-axis

$P(\quad , \quad) \rightarrow P'(\quad , \quad)$

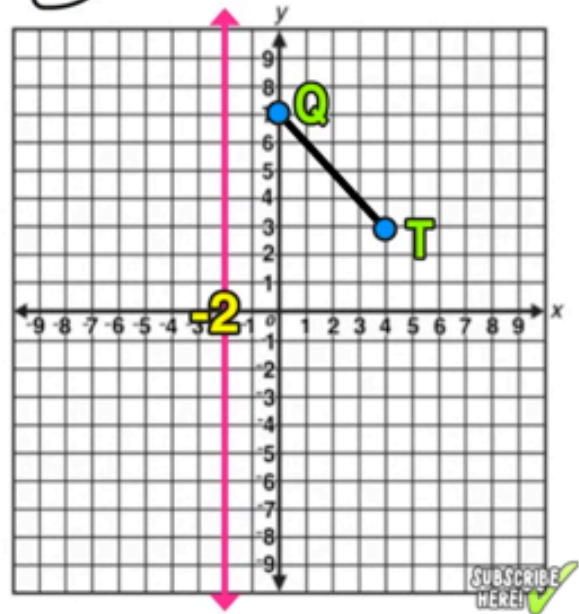


Example #3

Reflect a Segment

Construct the following transformation on \overline{QT} :

$$r_{x=-2}$$



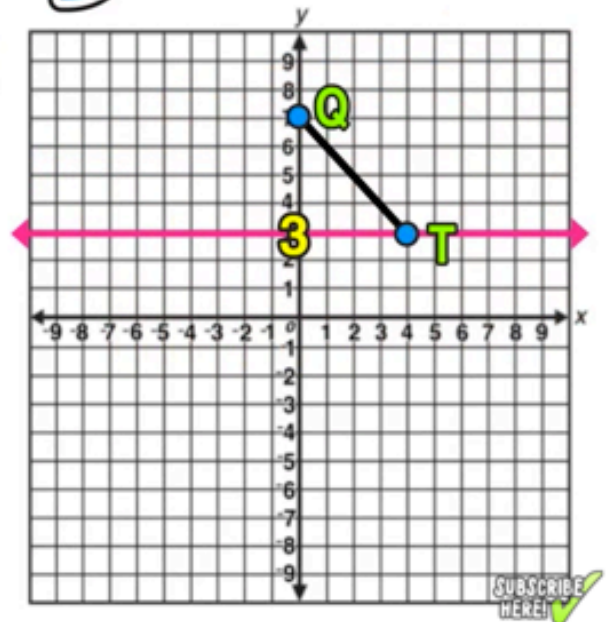
Example #4

Reflect a Segment

Construct the following transformation on \overline{QT} :

$$r_{y=3}$$

$$\begin{array}{l} Q(0, 7) \\ T(4, 3) \end{array} \longrightarrow \begin{array}{l} Q'(\quad, \quad) \\ T'(\quad, \quad) \end{array}$$



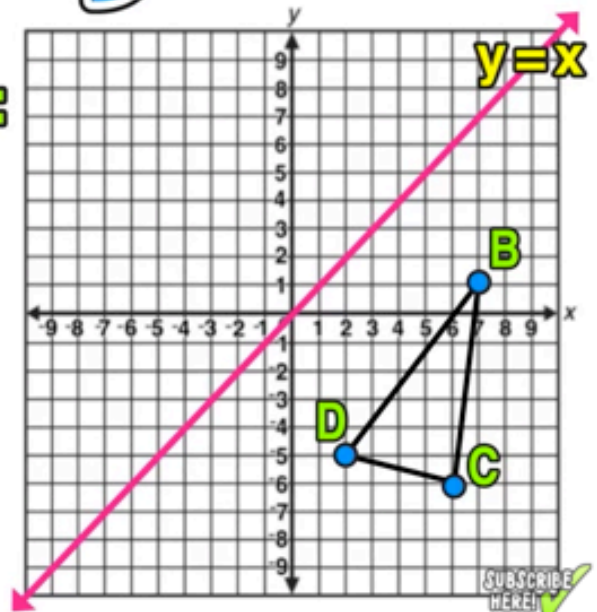
Example #5

Reflect a Figure

Construct the image of $\triangle B'C'D'$ after the following:

$$r_{y=x}$$

$$\begin{array}{l} B(7, 1) \\ C(6, -6) \\ D(2, -5) \end{array} \longrightarrow \begin{array}{l} B'(\quad, \quad) \\ C'(\quad, \quad) \\ D'(\quad, \quad) \end{array}$$



Example #6

Reflect a Figure

Construct the image of $\triangle B'C'D'$ after the following:

$$r_{y=-x}$$

$$\begin{array}{l} B(7, 1) \\ C(6, -6) \\ D(2, -5) \end{array} \longrightarrow \begin{array}{l} B'(\quad, \quad) \\ C'(\quad, \quad) \\ D'(\quad, \quad) \end{array}$$

