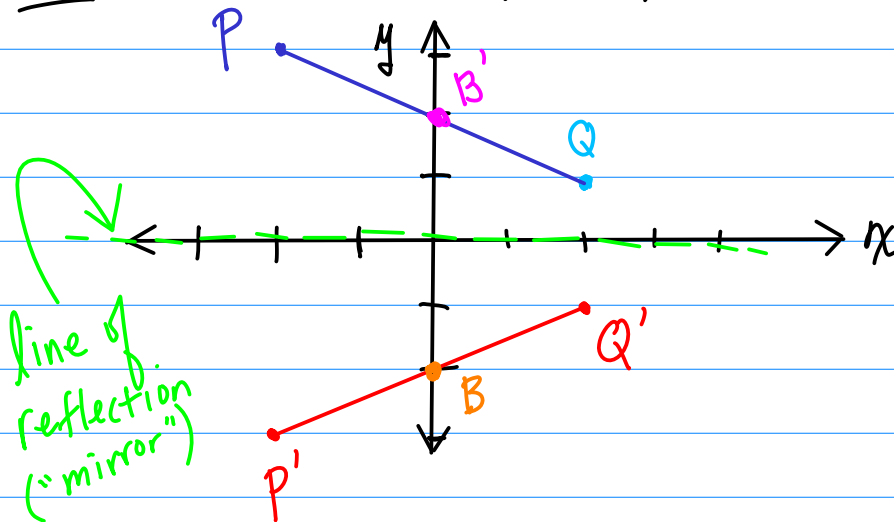


## Reflection

\* reflection: flip pts/figure over a line of reflection, giving a mirror image.

Ex: reflect  $P(-2, 3)$  in (over) the  $x$ -axis.

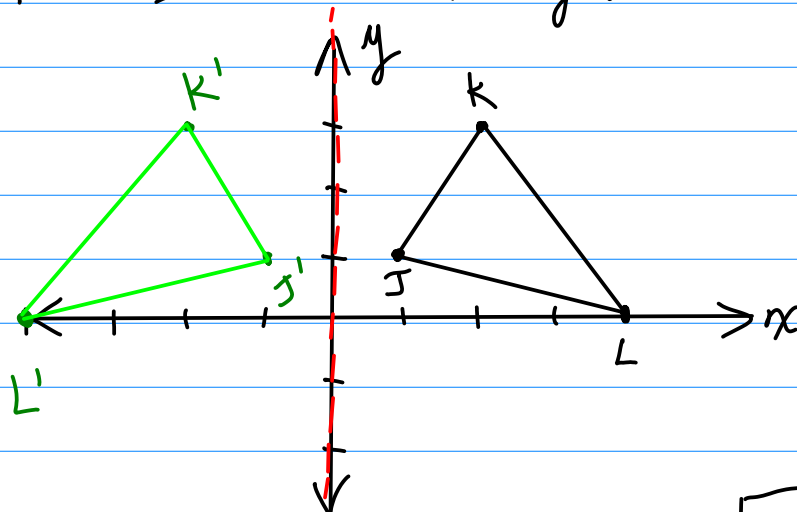


$$\begin{aligned} P(-2, 3) &\longrightarrow P'(-2, -3) \\ Q(2, 1) &\longrightarrow Q'(2, -1) \\ B(0, -2) &\longrightarrow B'(0, 2) \end{aligned}$$

\* Rule for reflecting over/in  $x$ -axis:  $(x, y) \longrightarrow (x, -y)$

Ex:

Reflect  $\triangle JKL$  in the  $y$ -axis



$$\begin{aligned} J(1, 1) &\longrightarrow J'(-1, 1) \\ K(2, 3) &\longrightarrow K'(-2, 3) \\ L(4, 0) &\longrightarrow L'(-4, 0) \end{aligned}$$

\* Rule for reflecting over/in  $y$ -axis:  $(x, y) \longrightarrow (-x, y)$

Ex: Reflect the given pts. in the x- and y-axes.

