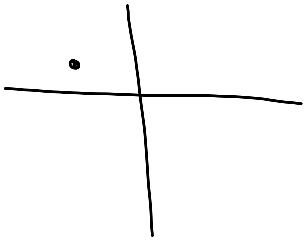
DO NOW

The coordinates of the vertices of ΔABC are $A(1,2)$, $B(-4,3)$, and $C(-3,-5)$. State the coordinates of $\Delta A'B'C'$, the image of ΔABC after a rotation of 90º about the origin.

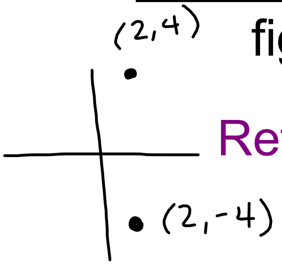
$R_{90°}: (x,y) \rightarrow (-y,x)$

$A'(-2,1)$
$B'(-3,-4)$
$C'(5,-3)$



Nov 15-10:14 AM

A **line reflection** "flips" every point of a figure over the same line



Reflection across the x-axis

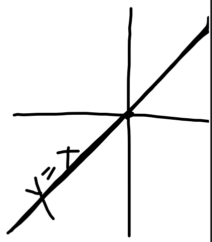
$(x,y) \longrightarrow (x,-y)$

Reflection across the y-axis

$(x,y) \longrightarrow (-x,y)$

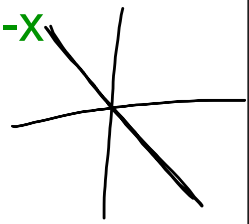
A reflection across the line y = x

$(x,y) \longrightarrow (y,x)$



A reflection across the line y = -x

$(x,y) \longrightarrow (-y,-x)$



Nov 15-10:15 AM

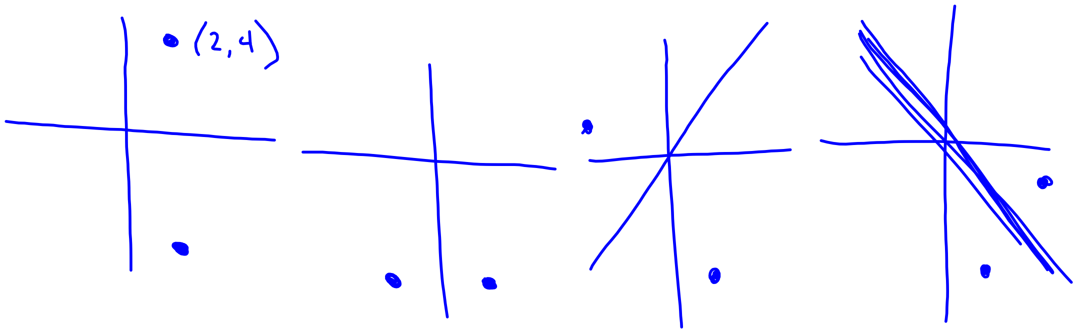
Reflect the point (2,-4) over the given lines and state the new coordinates:

a) $r_{x\text{-axis}}$ $(x,-y)$ $\boxed{(2,4)}$

b) $r_{y\text{-axis}}$ $(-x,y)$ $\boxed{(-2,-4)}$

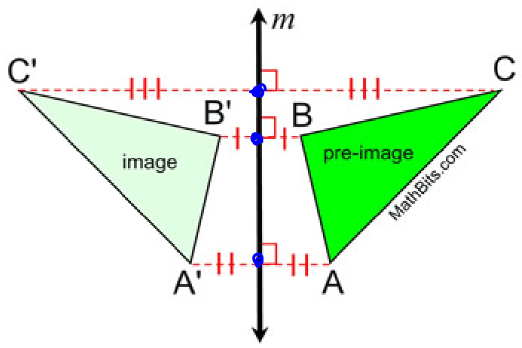
c) $r_{y = x}$ (y,x) $\boxed{(-4,2)}$

d) $r_{y = -x}$ $(-y,-x)$ $\boxed{(4,-2)}$



Nov 15-10:17 AM

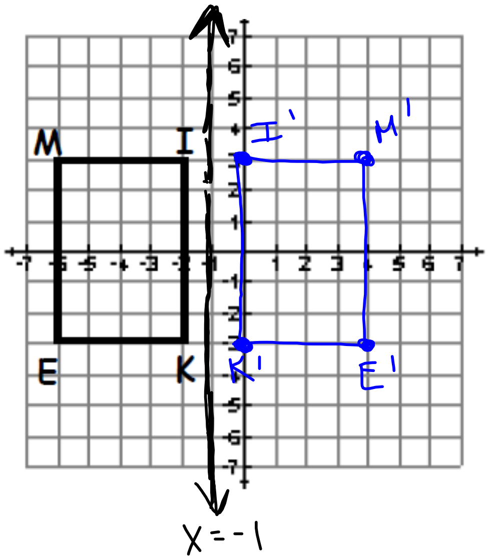
The reflection line, *m*, is the perpendicular bisector of the segments joining each point to its image.



Oct 10-9:39 AM

Reflect the figure across the line x = -1

line of reflection

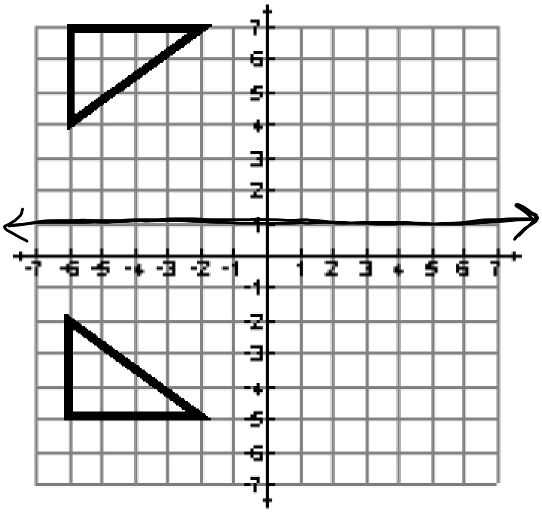


M' (4,3)
I' (0,3)
K' (0,-3)
E' (4,-3)

Oct 10-8:37 AM

Draw and name the line of reflection for the figure.

y = 1

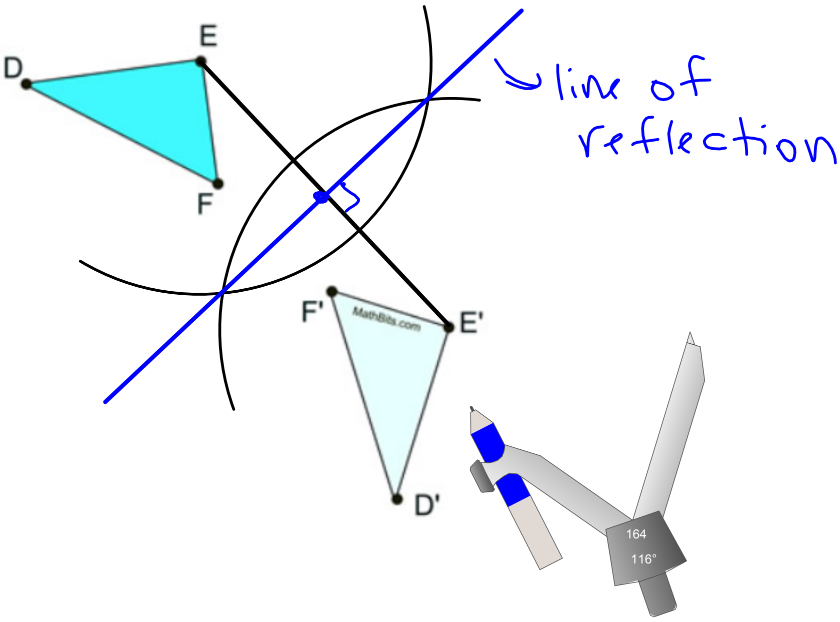


Oct 10-8:35 AM

Given a figure and its reflection, **construct** the line of reflection

Connect any vertex of ΔDEF to its image (E to E').

Construct the perpendicular bisector of the segment formed.



Oct 19-1:02 PM

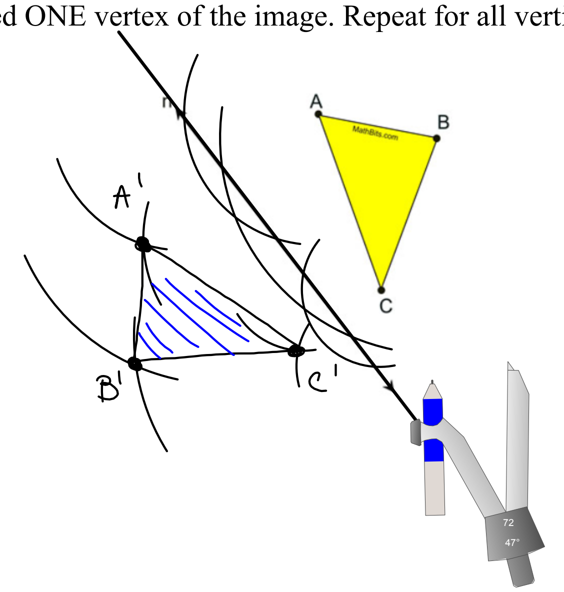
Given a figure and line of reflection, **construct** the reflected image

Construct a perpendicular from A to the line of reflection.

Measure the length from A to the intersection point.

Copy this length on the perpendicular bisector starting at the intersection point to find A'.

You have located ONE vertex of the image. Repeat for all vertices.



Oct 19-1:03 PM