Intro to Geometry (CO.2, 4, 5)
Unit 1A: Reflections – Day 1 (IC9)

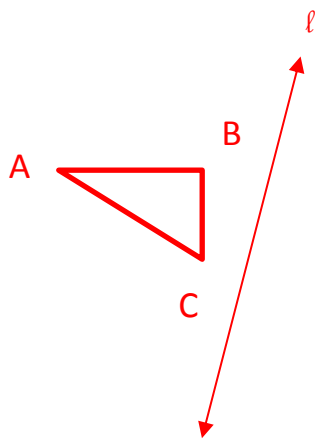
Name: _____Key_____
Date: _____ Period: _____

Reflection: (mirror image) Preimage and image points connected by a segment a) ⊥ to line of reflection b) with midpoint on line of reflection.

Using the preimages below and the given lines of reflection, reflect the preimages. Label the images appropriately.

Plane Reflection/Drawing Method:

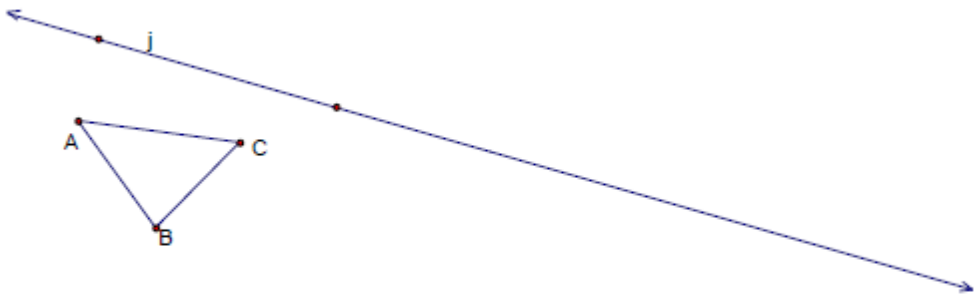
Video Example:



Notation:

$R_{\text{line } \ell}\ \Delta(ABC)$

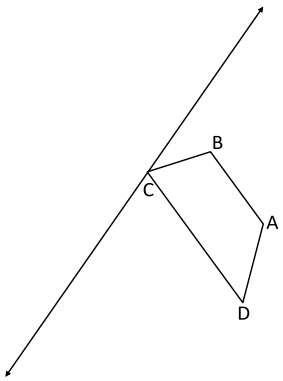
1.



Notation:

$R_{\text{line } j}\ \Delta(ABC)$

2.

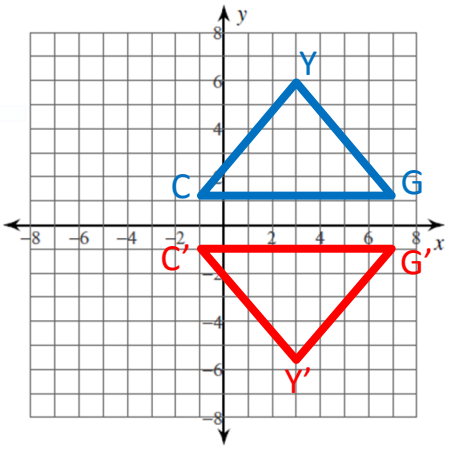


Notation:

$R_{\text{line } m}\ (ABCD)$

Coordinate Reflection Method: Demonstration Examples

a. Over the x-axis



Notation:

$R_{x\text{-axis}}$ $\Delta(GYC)$

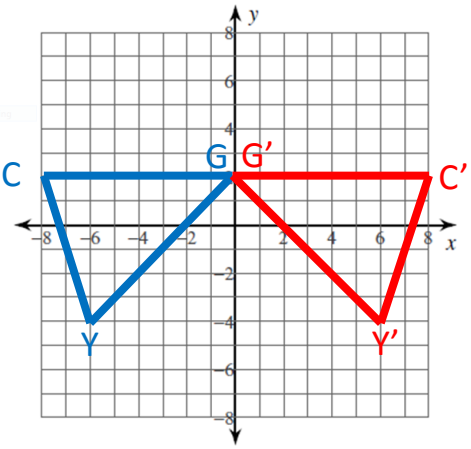
Preimage Coordinates → Image Coordinates

G: (7, 1) → G'(7, -1)

Y: (3, 5) → Y'(3, -5)

C: (-1, 1) → C'(-1, -1)

b. Over the y-axis



Notation:

$R_{y\text{-axis}}$ $\Delta(GYC)$

Preimage Coordinates → Image Coordinates

G: (0, 2) → G'(0, 2)

Y: (-6, -4) → Y'(6, -4)

C: (-8, 2) → C'(8, 2)

	Over the x-axis	Over the y-axis
Coordinate Reflection Method:	**(x, y) →** (x, -y) *Change sign on y-values	**(x, y) →** (-x, y) *Change sign on x-values