

I will be able to:

3.07 – Draw a geometric figure given a reflection

4.2 Exploration

#’s 1 – 4, find the line of reflection and highlight it with a colored pencil. Write the equation of the line of reflection. Find the coordinates of the reflected image and use them to write the image formula that would reflect any point (x,y) over the given reflection line.

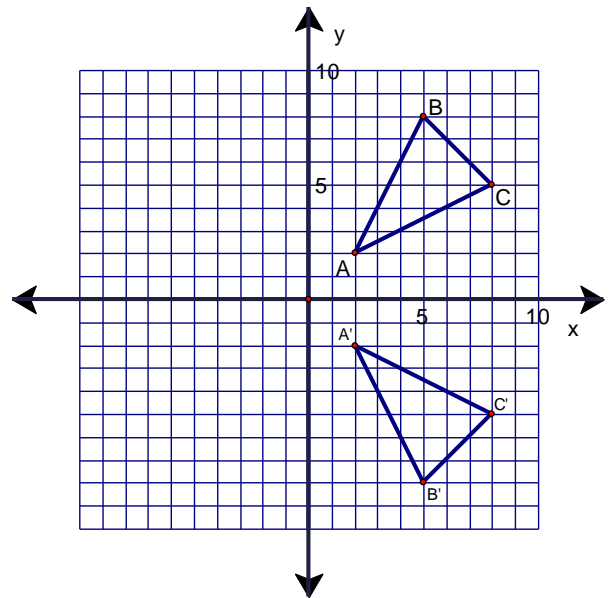
1.

A	(2, 2)	B	(5, 8)	C	(8, 5)
A'		B'		C'	

Equation of the line of reflection

Image formula for this reflection

_____ $(x, y) \rightarrow (\quad , \quad)$



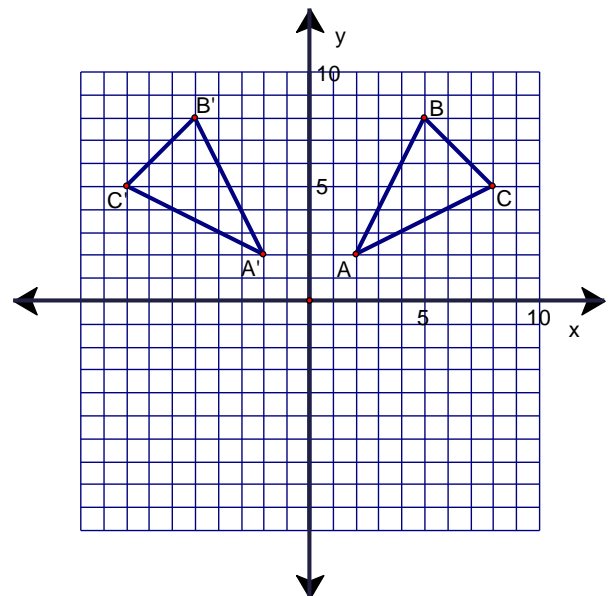
2.

A	(2, 2)	B	(5, 8)	C	(8, 5)
A'		B'		C'	

Equation of the line of reflection

Image formula for this reflection

_____ $(x, y) \rightarrow (\quad , \quad)$

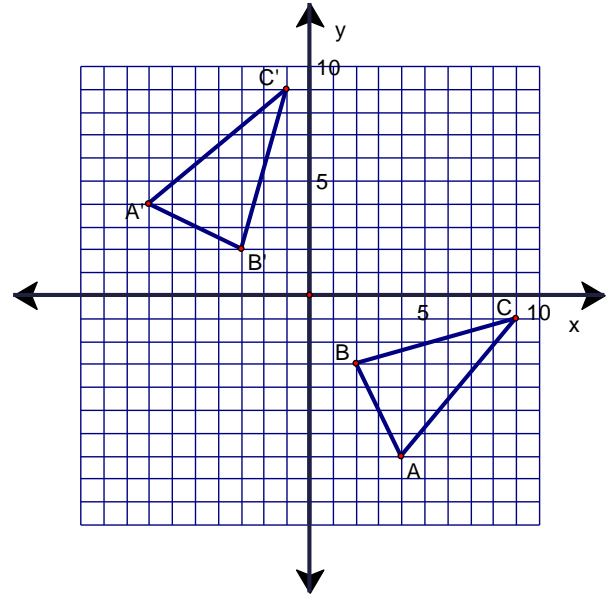


3.

A	(4, -7)	B	(2, -3)	C	(9, -1)
A'		B'		C'	

Equation of the line of reflection

Image formula for this reflection

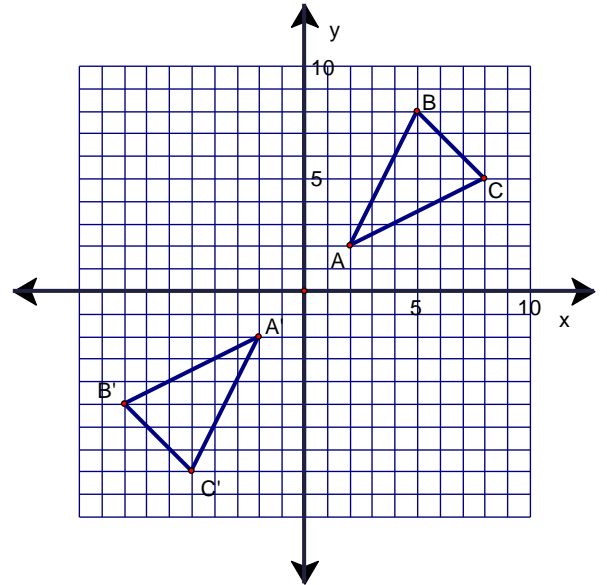


4.

A	(2, 2)	B	(5, 8)	C	(8, 5)
A'		B'		C'	

Equation of the line of reflection

Image formula for this reflection



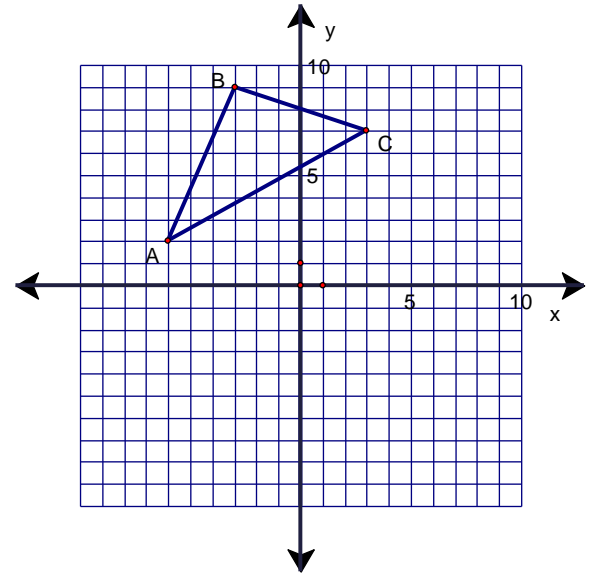
#'s 5 & 6, use the image formulas written in #'s 1 – 4 to find the new coordinates of $\triangle ABC$. Then graph the new triangle ($\triangle A'B'C'$).

5.

A	(-6, 2)	B	(-3, 9)	C	(3, 7)
A'		B'		C'	

Equation of the line of reflection: $y = x$

Image formula for this reflection



6.

A	(-6, 2)	B	(-3, 9)	C	(3, 7)
A'		B'		C'	

Equation of the line of reflection: $y = -x$

Image formula for this reflection

