#### GEOMETRY 9-1 NOTES, Reflections

A reflection is \_\_\_\_\_





**IMPORTANT TERMS**:

PREIMAGE:

IMAGE:

PRIME MARKS:

**ISOMETRY or CONGRUENCE TRANSFORMATION:** 

### LINE OF SYMMETRY or LINE OF REFLECTION:



### POINT of SYMMETRY:



#### **<u>Rules for Reflections on a Coordinate Plane</u>:**

There are 4 common rules when reflecting a figure in a coordinate plane:

• Line of Reflection over the x-axis (y=0):

 B(_	3 1)	
		A(2, 3)
	0	x
3'(-3	-1) A'	(2, -3)

• Line of Reflection over the y-axis (x=0):

A'(-	3,	2)	y A(3	3, 2)
		0	1	x
B'(	1, -	-2)	B(1, -	-2)

• Point of Reflection over the origin (0, 0):

B'(-3, 1)	A(3, 2)
-	x
A'(-3, -2	B(3, -1)

• Line of Reflection over the line y=x (inverse):



# Basic Constructions of Reflections In Class

Reflect the given figure over the given line.



# Basic Constructions of Reflections Individual Practice

Reflect the given figure over the given line





1.

