مدارس الإمارات الوطنية
Emirates National Schools

Date: _____ **Intervention:** **Reflections**

Learning Target:
By the end of this lesson students will be able to use rigid motions to reflect figures on the coordinate plane and describe the effects of the reflections

Pre-learning



Which real-world scenario best models a reflection across the x-axis?
A) A flag waving in the wind
B) A tree and its reflection in still water
C) A bus driving in a straight line
D) A rock rolling down a hill

Reflection x axis

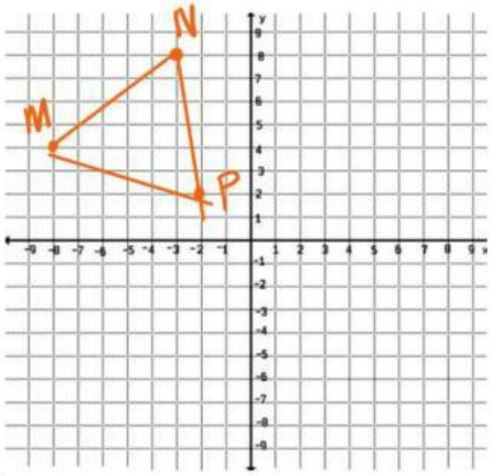
Pre-image

M(-8, 4)

N (-3, 8)

P (-2, 2)

Reflected over x-axis (__, __)



Reflection y axis

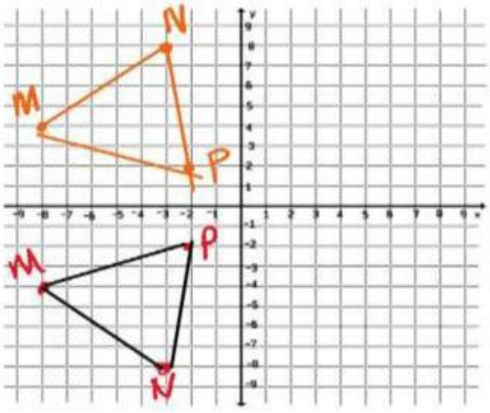
Pre-image

M(-8, 4)

N (-3, 8)

P (-2, 2)

Reflected over y-axis (__, __)

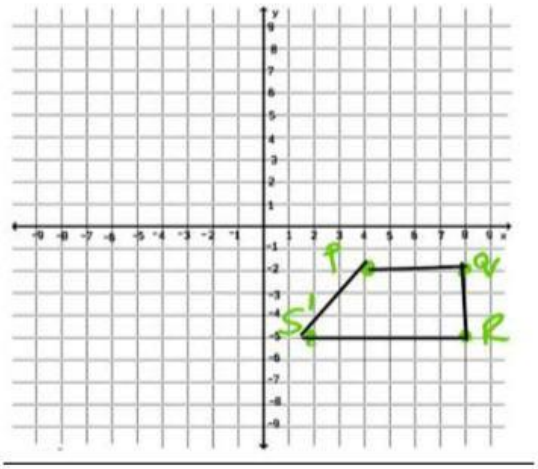


LIVEWORKSHEETS

مدارس الإمارات الوطنية
Emirates National Schools

Reflection y=x

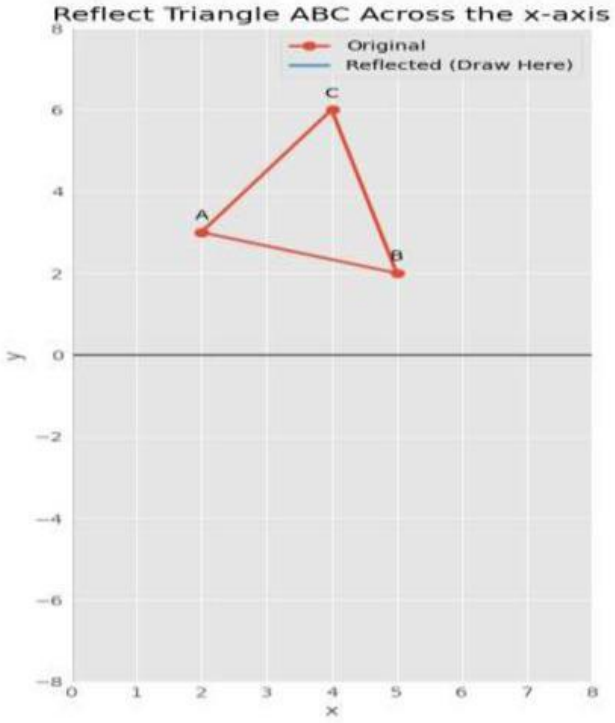
Pre-image	Reflected over y =x
P(4, -2)	
Q(8, -2)	
R(8, -5)	
S(2, -5)	



Differentiated Work:

On Average:

Reflect the triangle ABC with vertices $A(2, 3), B(5, 2), C(4, 6)$ across the **x-axis**.



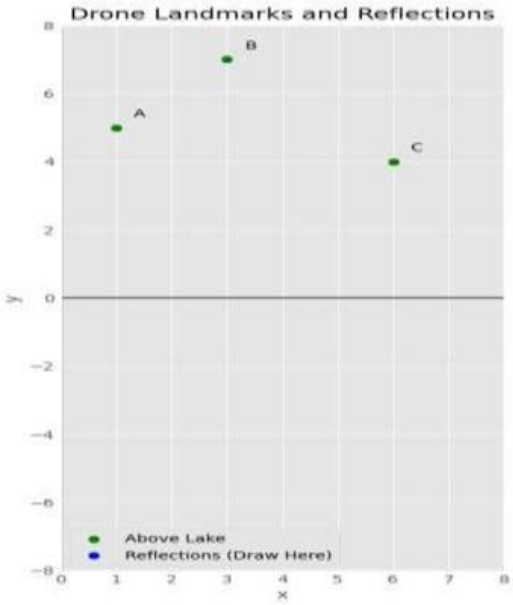
LIVEWORKSHEETS

مدارس الإمارات الوطنية
Emirates National Schools

International Baccalaureate

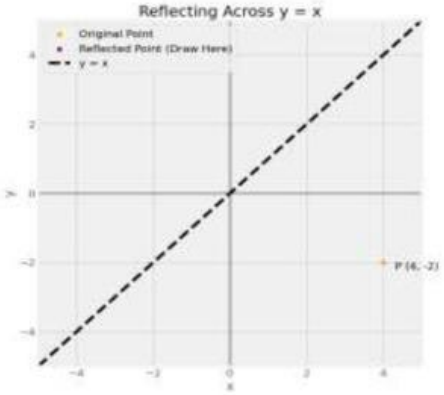
Real life Application

A drone flies over a lake and sees three objects at $(1, 5), (3, 7), (6, 4)$ .If the lake's surface is the **x-axis**, plot the original points, then plot their reflections as if you saw them in the water.

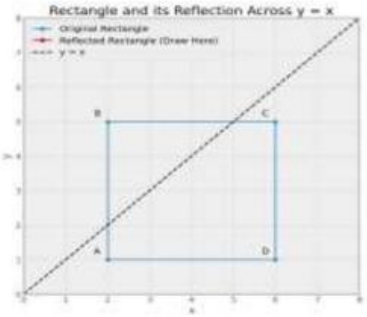


Challenge:

Reflect the point $(4, -2)$ across the line $y = x$. Plot both the original and reflected points.



Gifted and Talented



A rectangle has vertices at $(2, 1), (2, 5), (6, 5), (6, 1)$ .Reflect the rectangle across $y = x$. Plot and label both rectangles. **Plot and label the reflected rectangle as** A', B', C', D'.

LIVEWORKSHEETS