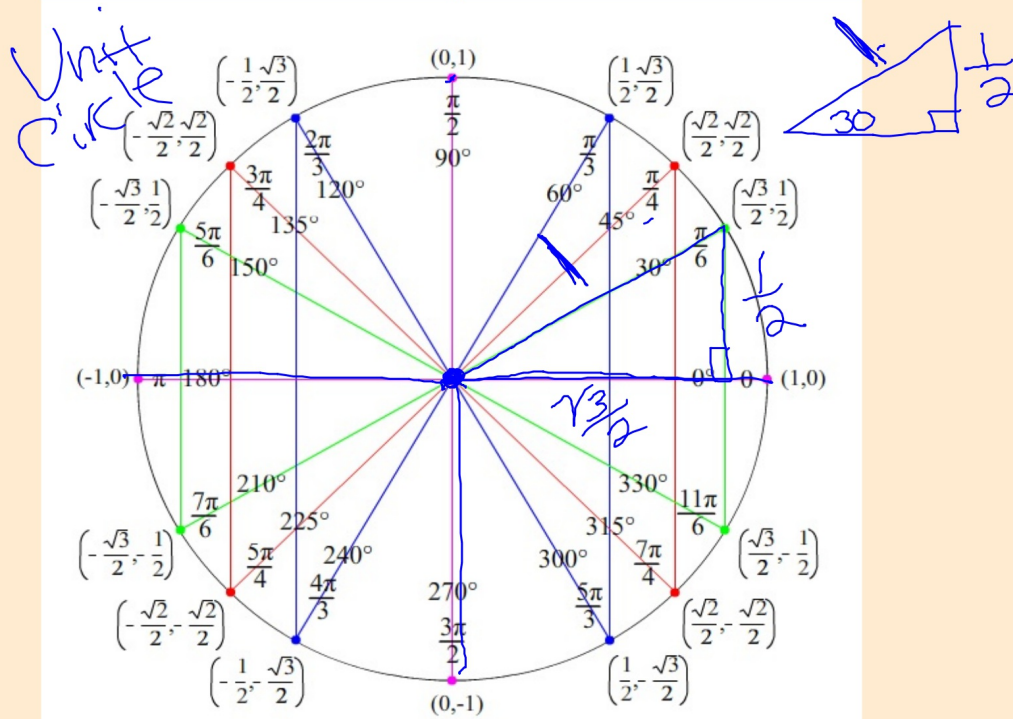


## Welcome Back MYP Math 9!

	Assignment Effort Grade (Circle One)	Comments (What was interesting or challenging?)
<b>Monday</b> Date: <u>1 - 8</u> Topic: <u>No homework over break :)</u>	0   1   2	
<b>Tuesday</b> Date: <u>1 - 9</u> Topic: <u>16A Translations</u>	0   1   2	
<b>Wednesday</b> Date: <u>1 - 10</u> Topic: <u>16B Reflections</u>	0   1   2	
<b>Thursday</b> Date: _____ Topic: _____	0   1   2	
<b>Friday</b> Date: _____ Topic: _____	0   1   2	

Warm-up: What do you notice? Wonder?



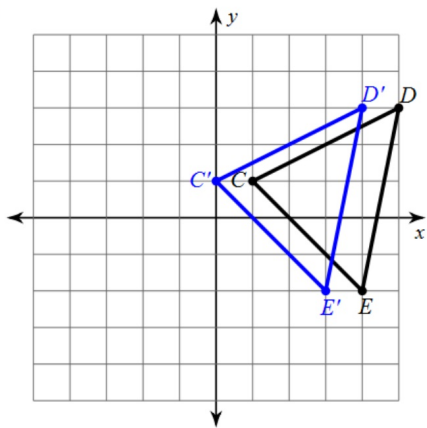
## Chapter 16 Transformations

### Class Plan:

1. Warm-up -  
Review Reflection
2. Writing Rules for translations  
and reflections
3. Practice writing rules

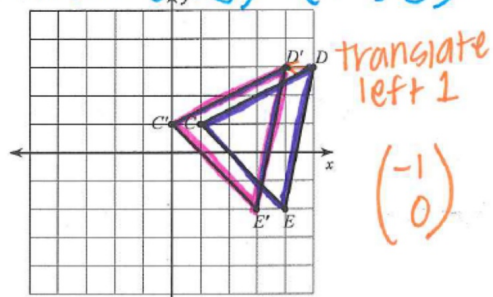
List the ordered pairs of the original triangle and the image.  
#1-4: Write the translation vector.  
#1-8: Write the ordered pair rule.

1)



List the ordered pairs of the original triangle and the image.  
#1-4: Write the translation vector.  
#1-8: Write the ordered pair rule.

1) Rule:  $(x, y) \rightarrow (x-1, y)$

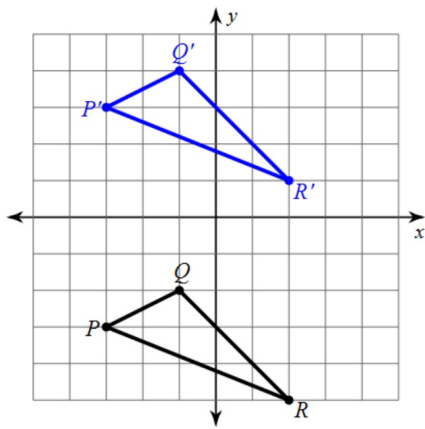


<u>OBJECT</u>	<u>image</u>
C (1,1)	C' (0,1)
D (5,3)	D' (4,3)
E (4,-2)	E' (3,-2)

SOLUTION

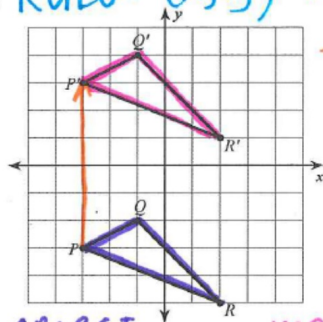
List the ordered pairs of the original triangle and the image.  
#1-4: Write the translation vector.  
#1-8: Write the ordered pair rule.

2)



List the ordered pairs of the original triangle and the image.  
#1-4: Write the translation vector.  
#1-8: Write the ordered pair rule.

2) **RULE:**  $(x, y) \rightarrow (x, y+6)$



translate  
VP 6

$\begin{pmatrix} 0 \\ +6 \end{pmatrix}$

object

P(-3, -3)

Q(-1, -2)

R(2, -5)

image

P'(-3, 3)

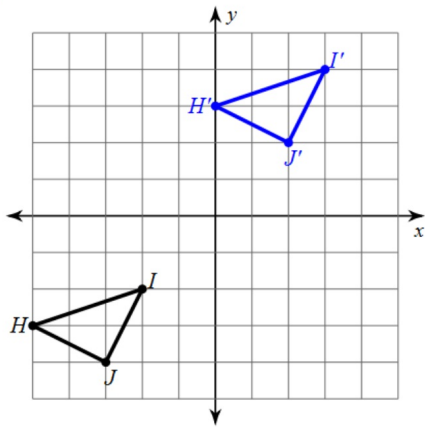
Q'(-1, 4)

R'(2, 1)

# SOLUTION

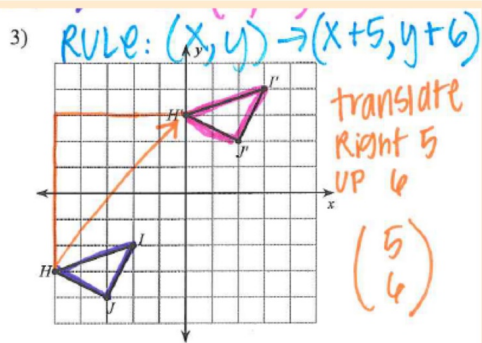
List the ordered pairs of the original triangle and the image.  
#1-4: Write the translation vector.  
#1-8: Write the ordered pair rule.

3)





List the ordered pairs of the original triangle and the image.  
 #1-4: Write the translation vector.  
 #1-8: Write the ordered pair rule.

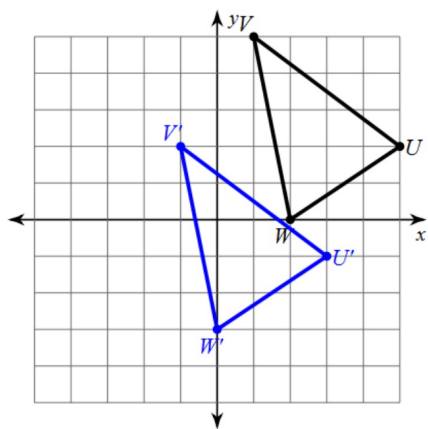


<u>OBJECT</u>	<u>Image</u>
H (-5, -3)	H' (0, 3)
I (-2, -2)	I' (3, 4)
J (-3, -4)	J' (2, 2)

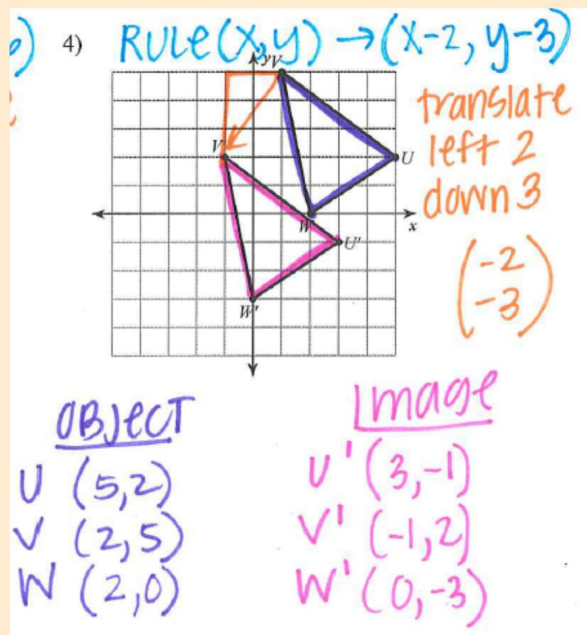
## SOLUTION

List the ordered pairs of the original triangle and the image.  
#1-4: Write the translation vector.  
#1-8: Write the ordered pair rule.

4)



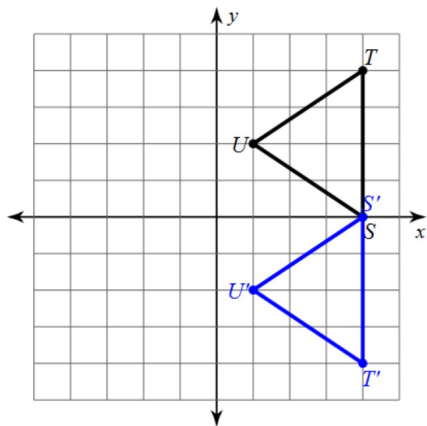
List the ordered pairs of the original triangle and the image.  
#1-4: Write the translation vector.  
#1-8: Write the ordered pair rule.



SOLUTION

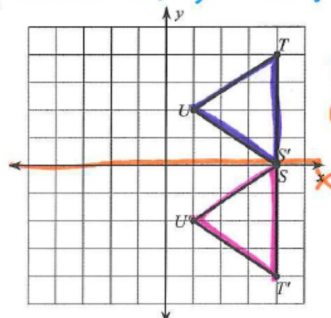
List the ordered pairs of the original triangle and the image.  
#1-4: Write the translation vector.  
#1-8: Write the ordered pair rule.

5)



List the ordered pairs of the original triangle and the image.  
 #1-4: Write the translation vector.  
 #1-8: Write the ordered pair rule.

5) RULE:  $(x, y) \rightarrow (x, -y)$



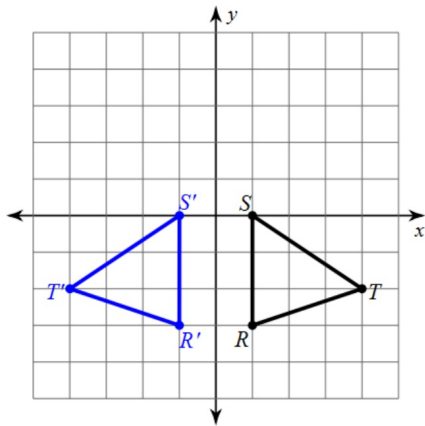
Reflected over x-axis

<u>OBJECT</u>	<u>Image</u>
S (4, 0)	S' (4, 0)
T (4, 4)	T' (4, -4)
U (2, 2)	U' (2, -2)

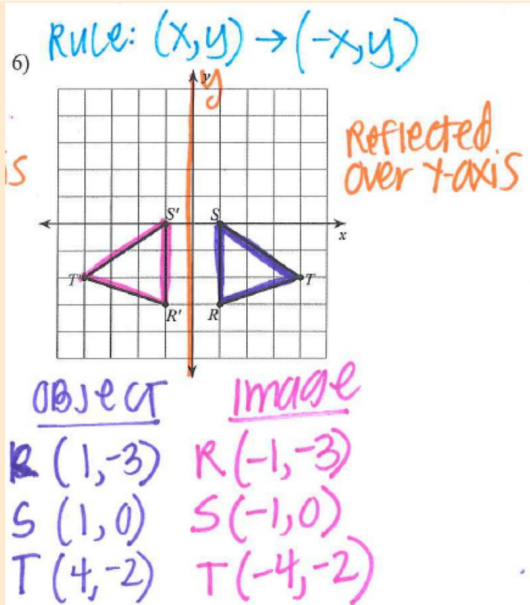
## SOLUTION

List the ordered pairs of the original triangle and the image.  
#1-4: Write the translation vector.  
#1-8: Write the ordered pair rule.

6)



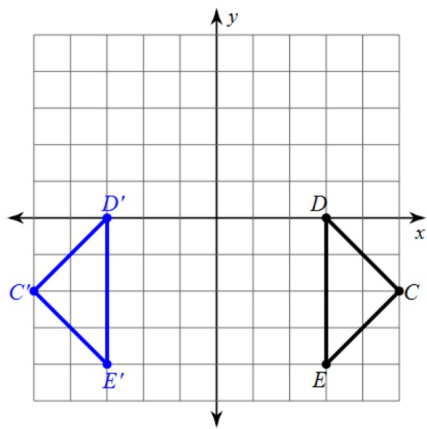
List the ordered pairs of the original triangle and the image.  
#1-4: Write the translation vector.  
#1-8: Write the ordered pair rule.



SOLUTION

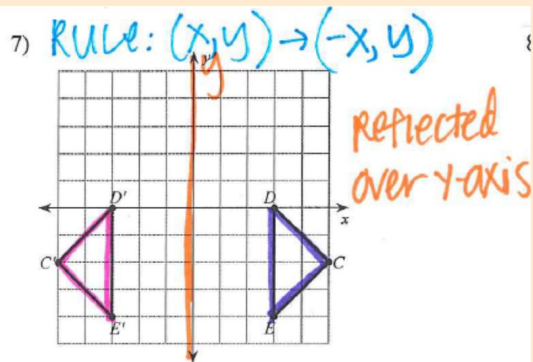
List the ordered pairs of the original triangle and the image.  
#1-4: Write the translation vector.  
#1-8: Write the ordered pair rule.

7)





List the ordered pairs of the original triangle and the image.  
#1-4: Write the translation vector.  
#1-8: Write the ordered pair rule.

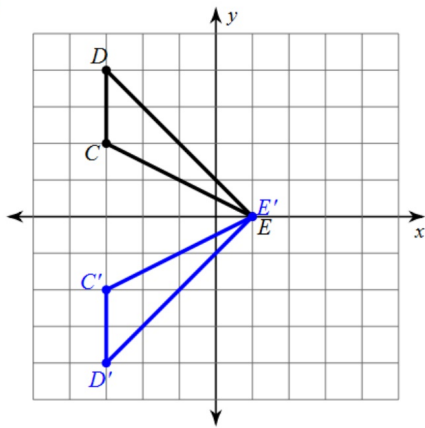


## SOLUTION

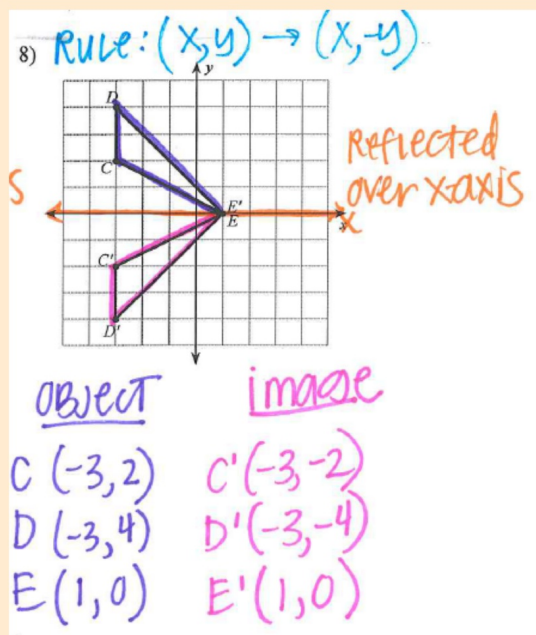
<u>Object</u>	<u>Image</u>
D(3,0)	D'(-3,0)
C(5,-2)	C'(-5,-2)
E(3,-4)	E'(-3,-4)

List the ordered pairs of the original triangle and the image.  
#1-4: Write the translation vector.  
#1-8: Write the ordered pair rule.

8)



List the ordered pairs of the original triangle and the image.  
#1-4: Write the translation vector.  
#1-8: Write the ordered pair rule.



SOLUTION

# Exercises...

Writing Rules for  
Translations/Reflections Worksheet