

## Reflect & Turn in Assignment Sheet

	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: <u>1 - 11</u> Topic: <u>Transformation Ordered Pair Rules</u>	0   1   2	
<b>Friday</b> Date: <u>1 - 12</u> Topic: <u>Transformation Review Set A WS</u>	0   1   2	

**Warm-up:** What do you notice? Wonder?

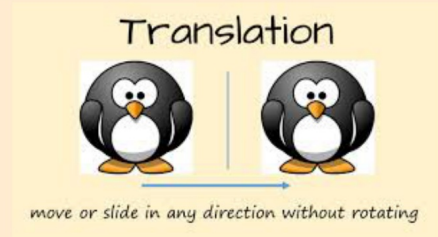


Steyn Studio's chapel frames dramatic views of South African countryside below its sinuous roof.

## Chapter 16 Transformations

### Class Plan:

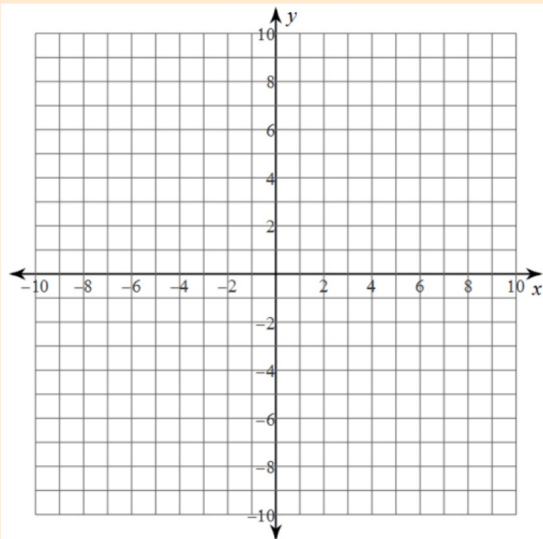
1. Warm-up
2. Transformation Task #1 -  
Translate & Reflect
3. Return 4.1 Quizzes  
-Exemplars posted on Weebly!
4. Partner Quiz Assignments
5. Exercises: Task #2, Translate/Reflect



**Transformation task:** Translate and reflect a geometric object.

Graph your shape.

Coordinates of the object:  $A(-4,3)$   $B(1,8)$   $C(2,-2)$



1) **Translation:**

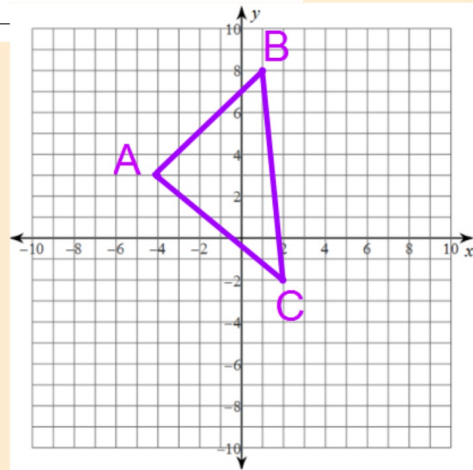
a) Description: **Translate right 2 and down 3.** Transform the object.

b) List the coordinates of the image.

Coordinates of the **image**:

c) Write a translation vector \_\_\_\_\_

d) Write an ordered pair rule \_\_\_\_\_



1) **Translation:**

a) Description: Translate right 2 and down 3. Transform the object.

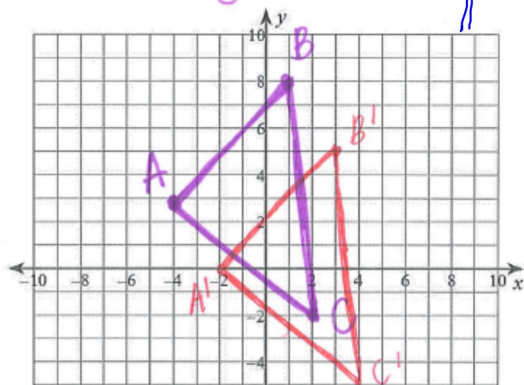
b) List the coordinates of the image.

Coordinates of the image:

$A'(-2, 0) B'(3, 5) C'(4, -5)$

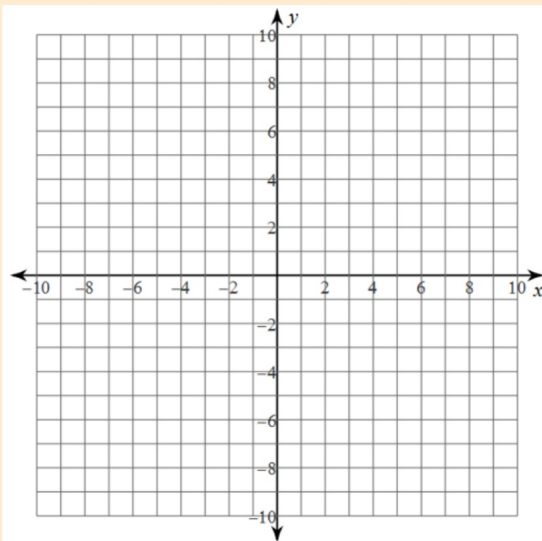
c) Write a translation vector  $\begin{pmatrix} x \\ y \end{pmatrix} = \begin{pmatrix} 2 \\ -3 \end{pmatrix}$

d) Write an ordered pair rule  $(x, y) \rightarrow (x+2, y-3)$



Redraw the original shape on the graph below.

Coordinates of the object:  $A(-4,3)$   $B(1,8)$   $C(2,-2)$



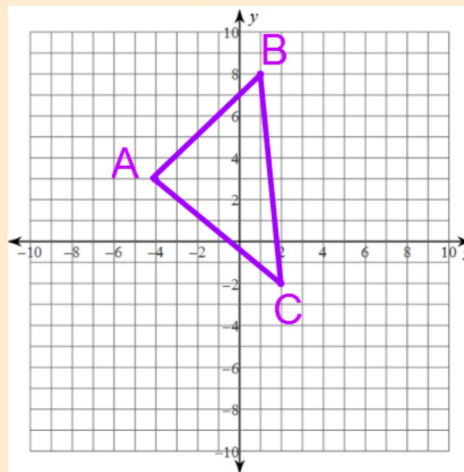
2) **Reflection:**

a) Description: **Reflect over the y-axis.** Transform the object.

b) List the coordinates of the image.

Coordinates of the **image**:

c) Write an ordered pair rule \_\_\_\_\_





2) Reflection:

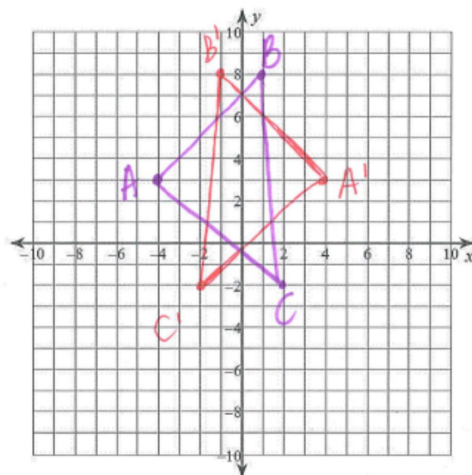
a) Description: Reflect over the y-axis. Transform the object.

b) List the coordinates of the image.

Coordinates of the image:

$A'(4,3)$   $B'(-1,8)$   $C'(-2,-2)$

c) Write an ordered pair rule  $(x,y) \rightarrow (-x,y)$



## Partner Quiz 4.2 Wednesday 1-17

Do: Silently choose a partner to take your transformation assessment with.

Done? One partner sign up on clipboard (Both names please!)

<u>Group #</u>	<u>Names</u>
1	
2	
3	
4	
5	

## Partner Quiz 4.2 Wednesday 1-17

### Expectations:

- 1) Both partner names on both quizzes.
- 2) Each pair turns in 2 completed quizzes.  
(Each student must contribute and use their own handwriting to complete their quiz.)
- 2) Pairs collaborate **ONLY** within the pair.
- 3) Staple both quizzes, turn in.
- 4) Teacher will roll die to determine which quiz will be assessed.



*(No Retakes for Partner quiz)*

Exercises...

DO: Transformation Task #2



Work Together!

Done? Help others!

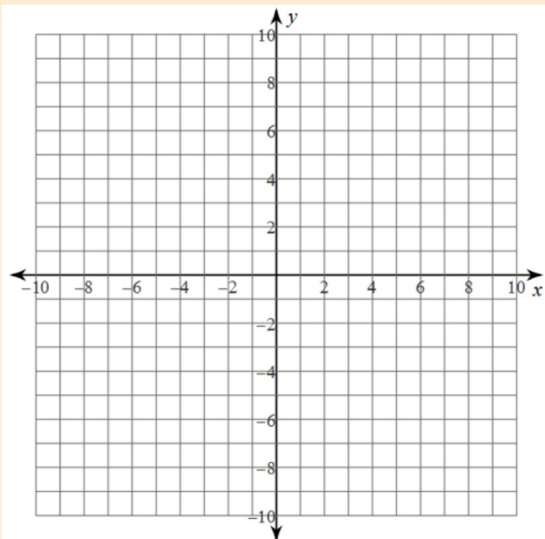
Finals  $\frac{1-23}{2}$   $\frac{1-24}{5}$  ✓  
3  
4  
6  
7

Reflection?! :) <3

**Transformation task:** Translate and reflect a geometric object.

Graph your shape.

Coordinates of the object:  $C(-1,9)$   $D(2,3)$   $E(8,4)$



1) **Translation:**

a) Description: **Translate left 3 and down 5.** Transform the object.

b) List the coordinates of the image.

Coordinates of the **image**:

c) Write a translation vector \_\_\_\_\_

d) Write an ordered pair rule \_\_\_\_\_

1) Translation:

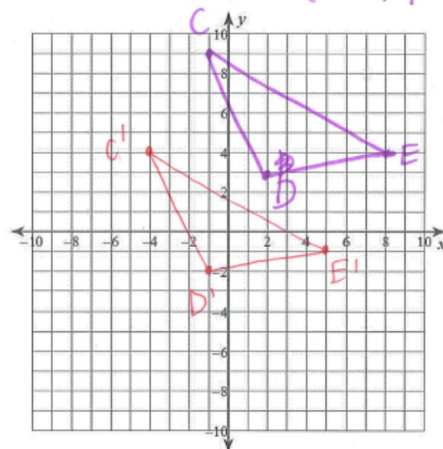
a) Description: **Translate left 3 and down 5.** Transform the object.

b) List the coordinates of the image.

Coordinates of the image:  $C'(-4,4)$   $D'(-1,-2)$   $E'(8,-1)$

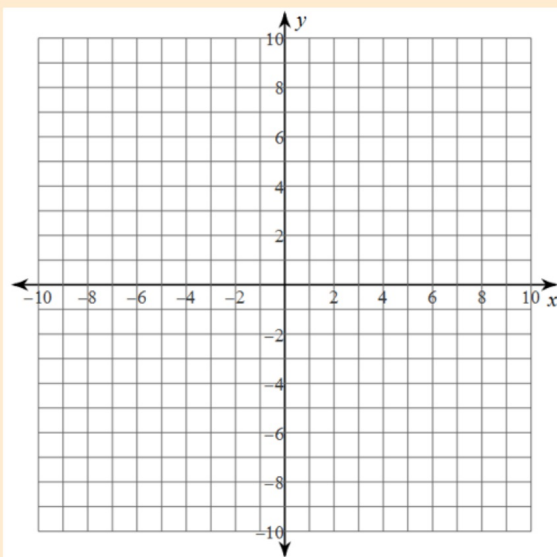
c) Write a translation vector  $\begin{pmatrix} x \\ y \end{pmatrix} = \begin{pmatrix} -3 \\ -5 \end{pmatrix}$

d) Write an ordered pair rule  $(x,y) \rightarrow (x-3, y-5)$



Redraw the original shape on the graph below.

Coordinates of the object:  $C(-1,9)$   $D(2,3)$   $E(8,4)$





2) **Reflection:**

a) Description: **Reflect over the x-axis.** Transform the object.

b) List the coordinates of the image.

Coordinates of the image:

c) Write an ordered pair rule \_\_\_\_\_

2) Reflection:

a) Description: **Reflect over the x-axis.** Transform the object.

b) List the coordinates of the image.

Coordinates of the image:

$C'(-1, -9)$   $D'(2, -3)$   $E'(8, -4)$

c) Write an ordered pair rule  $(x, y) \rightarrow (x, -y)$

