8.4 Identifying transformations
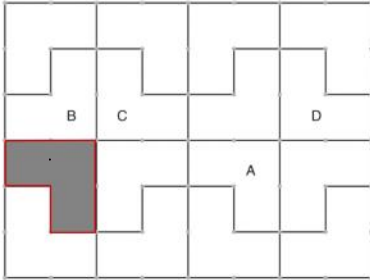
Wednesday, May 18, 2016   8:31 AM

Microsoft Word - 8.4

Topic: 8.4 Identifying Transformations	Name: _____
	Class: Math 8
	Date: _____
Questions/Main Ideas:	**Notes:**

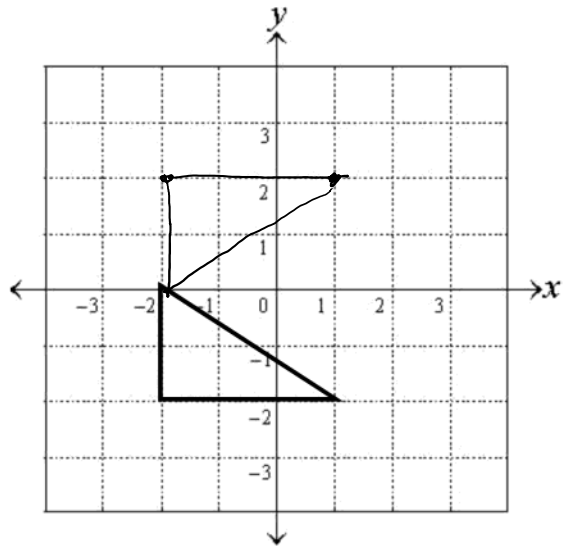| Questions/Main Ideas:	Notes:

Learning Intention:
 	
 Quick Review:
 	
 Transformation
 	
 means a change.
	Recognize transformation images.
	
	 An image can relate to its original image by a
	 • Reflection
	     ○ A shape is reflected in a *line of reflection.* This line could be horizontal or vertical (or even on an angle-diagonal)
	     ○ The reflected shape is congruent to the original.
	 • Translation
	     ○ A shape is moved to the right or left and up or down or some combination.
	     ○ The transformed shape is congruent and has the same orientation to the original. *same*
	 • Rotation
	     ○ A shape is rotated around a point. This could be clockwise or counterclockwise at 90^0, 180^0, 270^0.
	     ○ The rotated shape is congruent to the original.
	     ○ Don't forget the Point of Rotation.
	
	 Look at the shaded image. What has to happen in order for it to move to :
	
	 A: translation 2 spaces right
	 B: reflection or a rotation 90° clockwise or 270° counterclockwise.
	 C: reflect diagonally or rotate 180°
	 D: rotate 180° around the origin (middle)

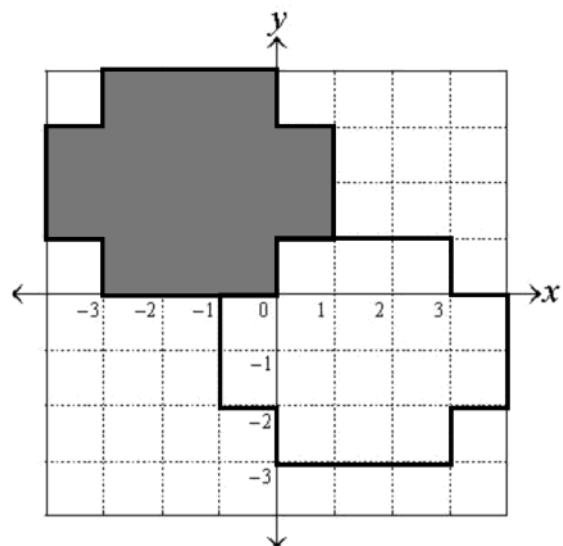| Something challenging	Graph the image of the figure using the transformation given.
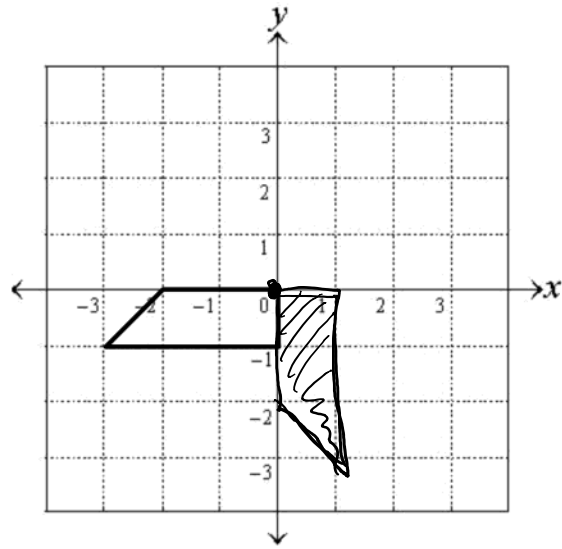
Rotate 90⁰ counterclockwise about the origin
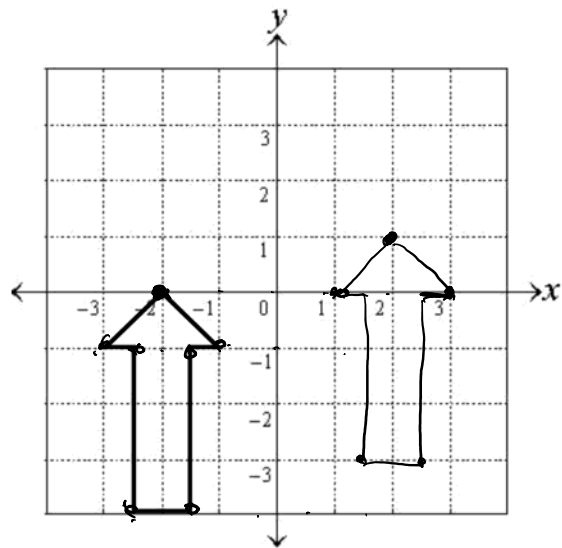
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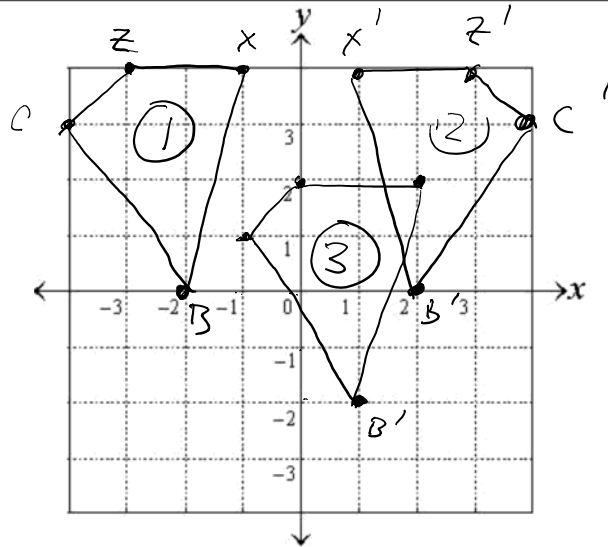Translation: 4 units right and 1 unit ~~down~~ *up*

Reflection across the *x*-axis.

Write a rule to describe the transformation. The shaded figure is the original and the non-shaded is the changed object.
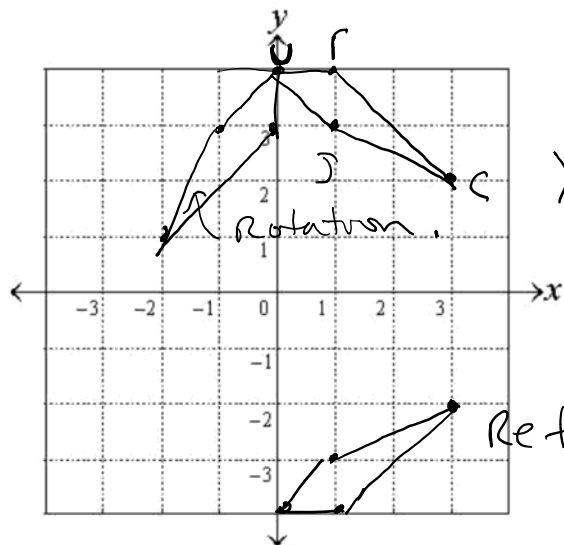
Translation: Right 3   Down 3

R 3 D 3

Graph the image of the figure using the transformation given.
- B(-2,0), C(-4,3), Z(-3,4), X(-1,4)   Reflect on the *y*-axis
- B(-2,0), C(-4,3), Z(-3,4), X(-1,4)   3 units right, 2 ~~up~~ down

YOU TRY

Rotation

Reflection

Graph the image of the figure using the transformation given.
- J(1,3), U(0,4), R(1,4), C(3,2) reflect on *x*-axis
- J(1,3), U(0,4), R(1,4), C(3,2) rotate 90° clockwise (around point U)

Cool website for ambigrams. Here is John Langdon's website for more ambigrams. He did work on DaVinci Code and Angels & Demons movies.

Next Step:	p 460 # 5, 6, 7, 8, 11

before you leave.