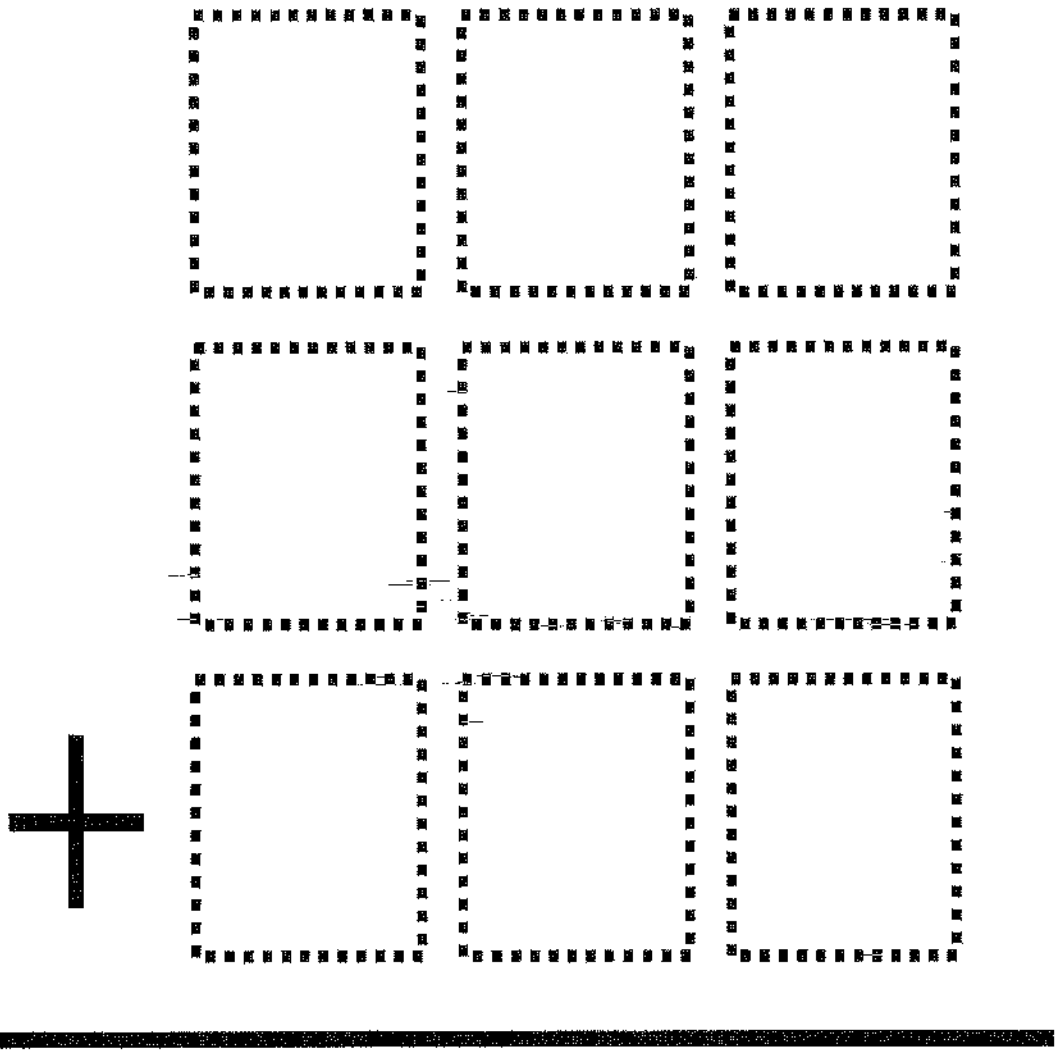
Close to 1000

Directions: Arrange the digits 1-9 into three 3-digit whole numbers. Make the sum as close to 1000 as possible.



Back to School Edition

Find Someone Who...

Directions: Walk around the room and find someone who can solve the following problems. Have the person initial the box after they solve it. Try not to repeat people!

Can list the factors of 12 Answer: _____ Initials: _____	Can find the product of 5/6 and 9 Answer: _____ Initials: _____	Can draw a right triangle Answer: _____ Initials: _____	Can find the difference of 4 5/6 - 2 1/6 Answer: _____ Initials: _____	Can use <, >, or = to compare the following decimals: 0.73 ___ 0.7 Answer: _____ Initials: _____
Can round the number to the nearest ten 3,642 Answer: _____ Initials: _____	Can divide 44 ÷ 3 Answer: _____ Initials: _____	Can name an angle that has a measure of 180 degrees Answer: _____ Initials: _____	Can find the difference of 4/9 - 2/9 Answer: _____ Initials: _____	Can complete the following pattern: 3, 6, 9, ___, ___, ___ Answer: _____ Initials: _____
Can find the sum of 5/8 + 3/8 Answer: _____ Initials: _____	Can find the area of a rectangle with the following dimensions: 13m x 20m Answer: _____ Initials: _____	Can find an equivalent fraction of 4/5 Answer: _____ Initials: _____	Can convert the following measurement: 24 in = ____ feet Answer: _____ Initials: _____	Can round 859 to the place of the underlined digit Answer: _____ Initials: _____
Can use <, >, or = to compare the following fractions: 1/2 ___ 4/5 Answer: _____ Initials: _____	Can write 0.34 as a fraction Answer: _____ Initials: _____	Can find the product of 36 x 4 Answer: _____ Initials: _____	Can write the standard form of six hundred sixty-seven Answer: _____ Initials: _____	Can write 4/10 as a decimal Answer: _____ Initials: _____
Can find the perimeter of a garden with a length and width of 8 feet Answer: _____ Initials: _____	Convert the following measurement: 14 lbs = ____ oz Answer: _____ Initials: _____	Can find the difference of 876 - 235 Answer: _____ Initials: _____	Can draw a picture to represent the fraction 5/3 Answer: _____ Initials: _____	Can draw a line segment Answer: _____ Initials: _____

Find Someone Who...

Name: _____

Quietly roam around the classroom and find classmates that fit the statement. Have them write his or her name underneath. Greet each person that you meet with a handshake!

...is wearing more than four different colors.	...has an older brother.	...has an older sister.	...has a pet.	...has a pet that is not a cat or a dog.
...went on vacation this summer.	...loves pizza more than any other food.	...loves to cook or bake.	...had cereal for breakfast this morning.	...knows a language other than English.
...has lived in this state less than one year.	...was born in a month that has less than six letters.	...plays a sport.	...can sing an entire song from memory.	...swam on a swim team this summer.
...can count by 5s to 100.	...has lived in another country.	...doesn't have their own cell phone.	...is wearing shoes without laces.	...has a hair color different than yours.
...is wearing your favorite color. (Tell them!)	...is an only child.	...has seen the same movie more than 5 times.	...shares a room with a brother or sister.	...has the same favorite school subject as you.

find someone who...

Name: _____

Quietly roam around the classroom and find classmates that fit the statement. Have them write his or her name underneath. Greet each person that you meet with a handshake!

...can braid hair.	...was born in the first 6 months of the year.	...has lived in this state their entire life.	...knows how to play the piano.	...is in Boy Scouts or Girl Scouts.
...shares a room with a brother or sister.	...has spent the night in a hospital.	...has taken a ride on a boat.	...likes bugs.	...has camped in a tent.
...wants to be a teacher.	...has been inside of a cave.	...has beat an entire video game.	...can ride a skateboard well.	...grandparent's don't live in your state.
...has met somebody famous.	...knows how to sew.	...can say the alphabet backwards.	...can whistle.	...has been TO or IN a parade.
...can do the splits.	...has a trampoline in their backyard.	...does their own laundry at home.	...has been to Disney World or Land.	...can name four American Presidents.

What's the Value of Your Name?

A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*K*	*L*	*M*	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
-13	*-12*	*-11*	*-10*	*-9*	*-8*	*-7*	*-6*	*-5*	*-4*	*-3*	*-2*	*-1*	0	1	2	3	4	5	6	7	8	9	10	11	12

Part One: Using the assigned value of each letter of the alphabet:

Check off each number as you complete it

1. Print your name on the top line, one letter per space.

__ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __

__ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __ __

2. Find the value of the sum of each letter in your name by looking for the letter and its number in the chart at the top of the page.

3. Calculate the "value" of your name. Write that value here _____.

4. Find a name that is the opposite value of your name. Write the name that has the opposite value of your name here: _____.

5. Find a name that has a value of zero. Write the name that has a value of zero here: _____.

Part two:

Decorate you name plate

Extra Credit: Find the value of the difference of the each letter in your name.

Name _____ Per. _____

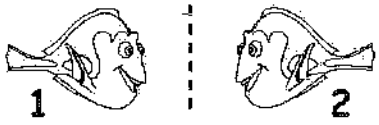
1.1 Translations → Translations

Vocabulary

Transformation: An operation that _____ or _____ a figure in some way to produce a new figure. The three transformations are _____, _____, and _____.

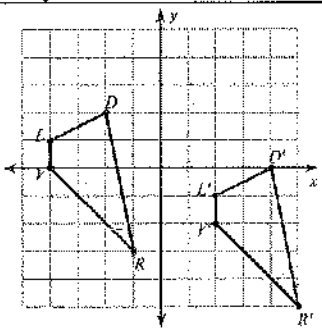
Translation:

Preimage (A) vs. Image (A')



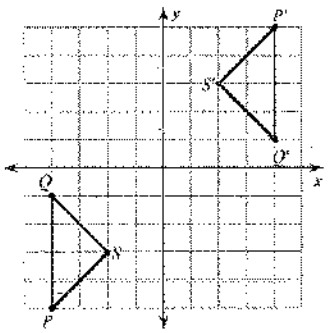
Example 1: Cross out the example that is NOT a translation. Then describe the remaining translations.

A.

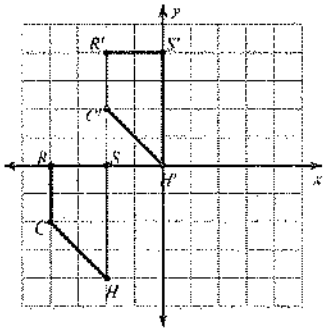


* Use one matching point to help you find the rule for the translation.

B.



C.



THE MATHEMATICAL WAY TO DESCRIBE TRANSLATIONS…

Coordinate Notation

$(x, y) \rightarrow (x \pm a, \; y \pm b)$

left/right up/down

Ex: left 3 units; up 7 units

$(x, y) \rightarrow (x - 3, y + 7)$

Example 3: Rewrite the translation "mathematically"

1. left 15 units and up 24 units

$(x, y) \rightarrow (x \quad , y \quad)$

2. right 8 units and down 4 units.

$(x, y) \rightarrow (x \quad , y \quad)$

Example 4: Find the coordinates of the image without graphing.

1. Point $G(6, -3)$ is translated 5 units to the left and 6 units up to form the point G'. What are the coordinates of G'?

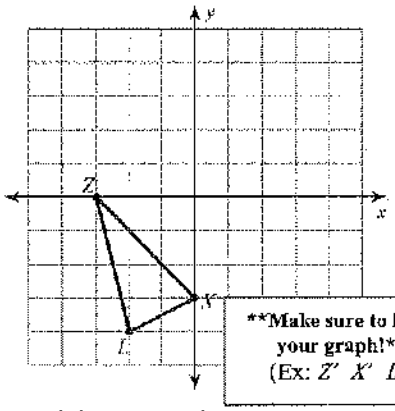
2. What is the image of $H(-2, 6)$ after the translation defined by $(x, y) \rightarrow (x + 2, y - 1)$?

3. Use the translation $(x, y) \rightarrow (x - 5, y + 1)$ to find what point $(-2, -10)$ translates to:

4. Use the translation $(x, y) \rightarrow (x - 3, y - 7)$ to find what point $(1, 4)$ translates to:

Example 5: Graph the translation using the rule given. Then list the coordinates of the image.

1. 5 units right and 3 unit up



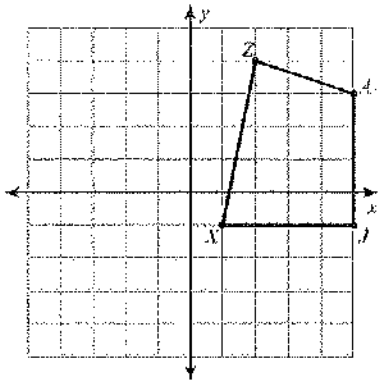
Make sure to label your graph!
(Ex: Z' X' L')

Z' (,)

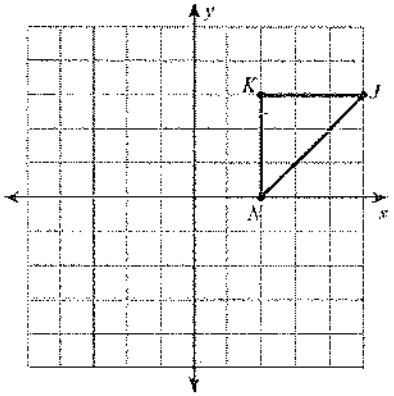
X' (,)

L' (,)

2. $(x, y) \rightarrow (x - 3, y - 2)$

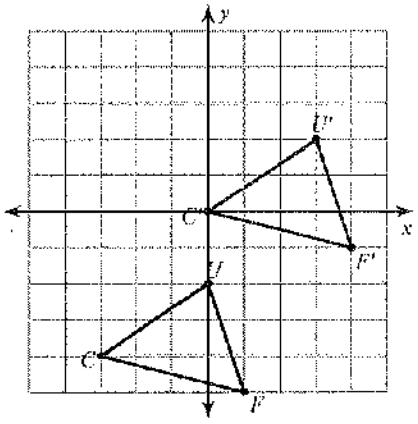


3. $(x, y) \rightarrow (x - 6, y)$

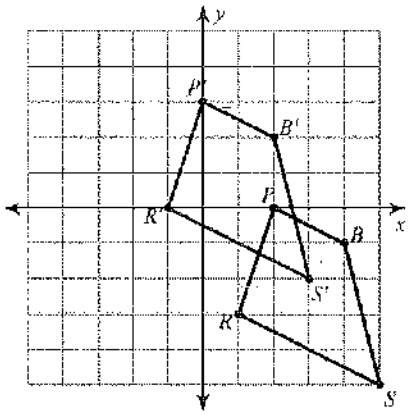


Example 6: Describe the transformation using coordinate notation.

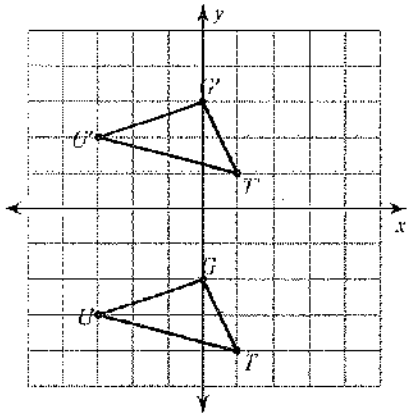
1.



2.

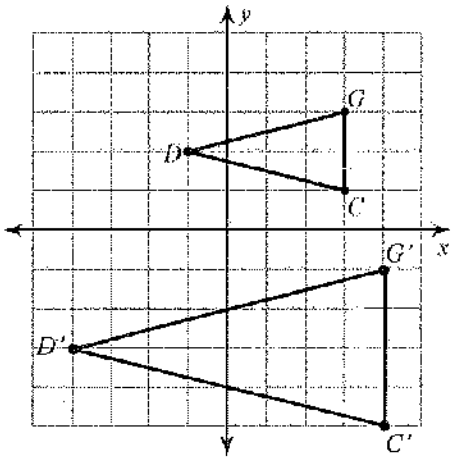


3.

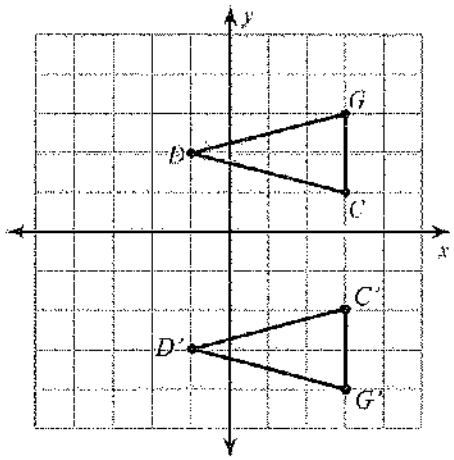


Critical thinking: Partner up and discuss!

1. Is the following a translation? Why or why not?



2. Is the following a translation? Why or why not?



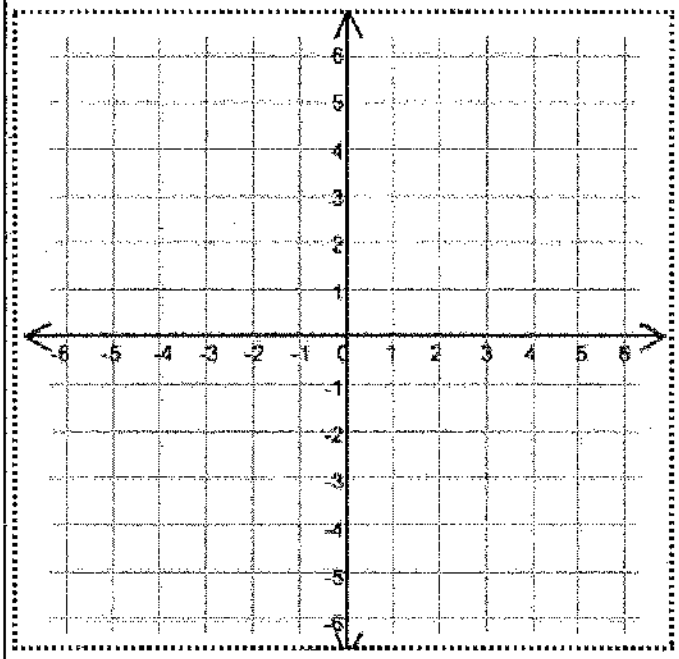
Translations

#1

Translate figure MNP according to the rule

$< x+3, y-2 >$

M (1,2) N (1,4) P (2,3)



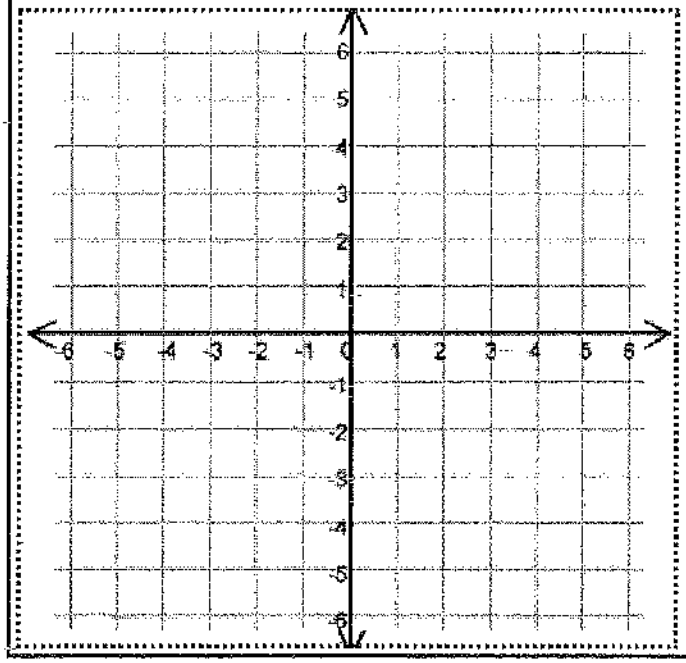
Pre-Image	Image
M (,)	M' (,)
N (,)	N' (,)
P (,)	P' (,)

#2

Translate figure XYZ according to the rule

$< x+2, y-1 >$

X(2,-1) Y(-4,-3) Z(3,2)



Pre-Image	Image
X (,)	X' (,)
Y (,)	Y' (,)
Z (,)	Z' (,)

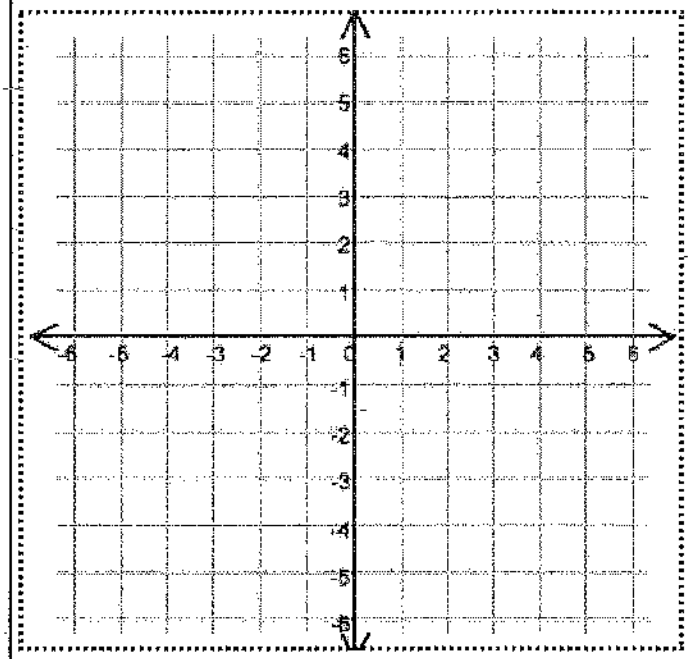
Translations

#3

Translate figure DEFG according to the rule

< x-3,y+0 >

D (2,0) E(2,2) F(5,2) G(5,1)



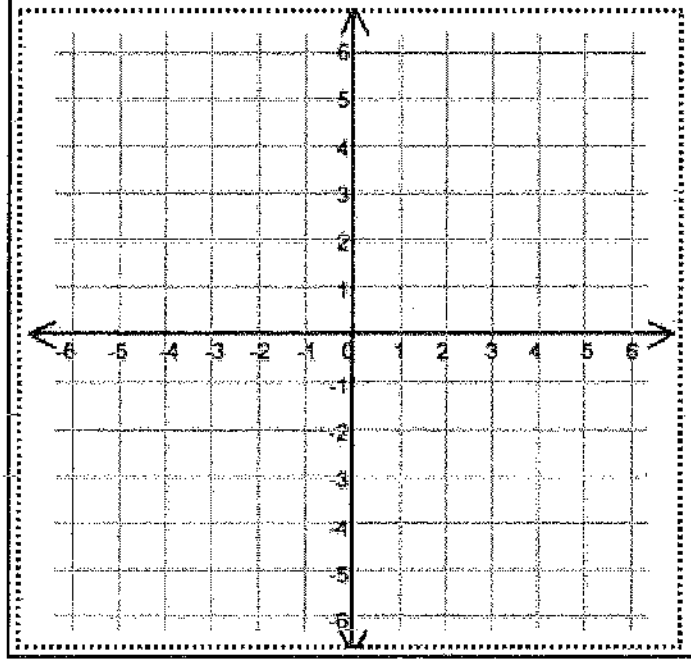
Pre-Image	Image
D(,)	D'(,)
E(,)	E'(,)
F(,)	F'(,)
G(,)	G'(,)

#4

Translate figure RST according to the rule

< x+0, y+3 >

R (2,-2) S(5,0) T(3,-1)



Pre-Image	Image
R(,)	R'(,)
S(,)	S'(,)
T(,)	T'(,)

Translations

Translations

Task

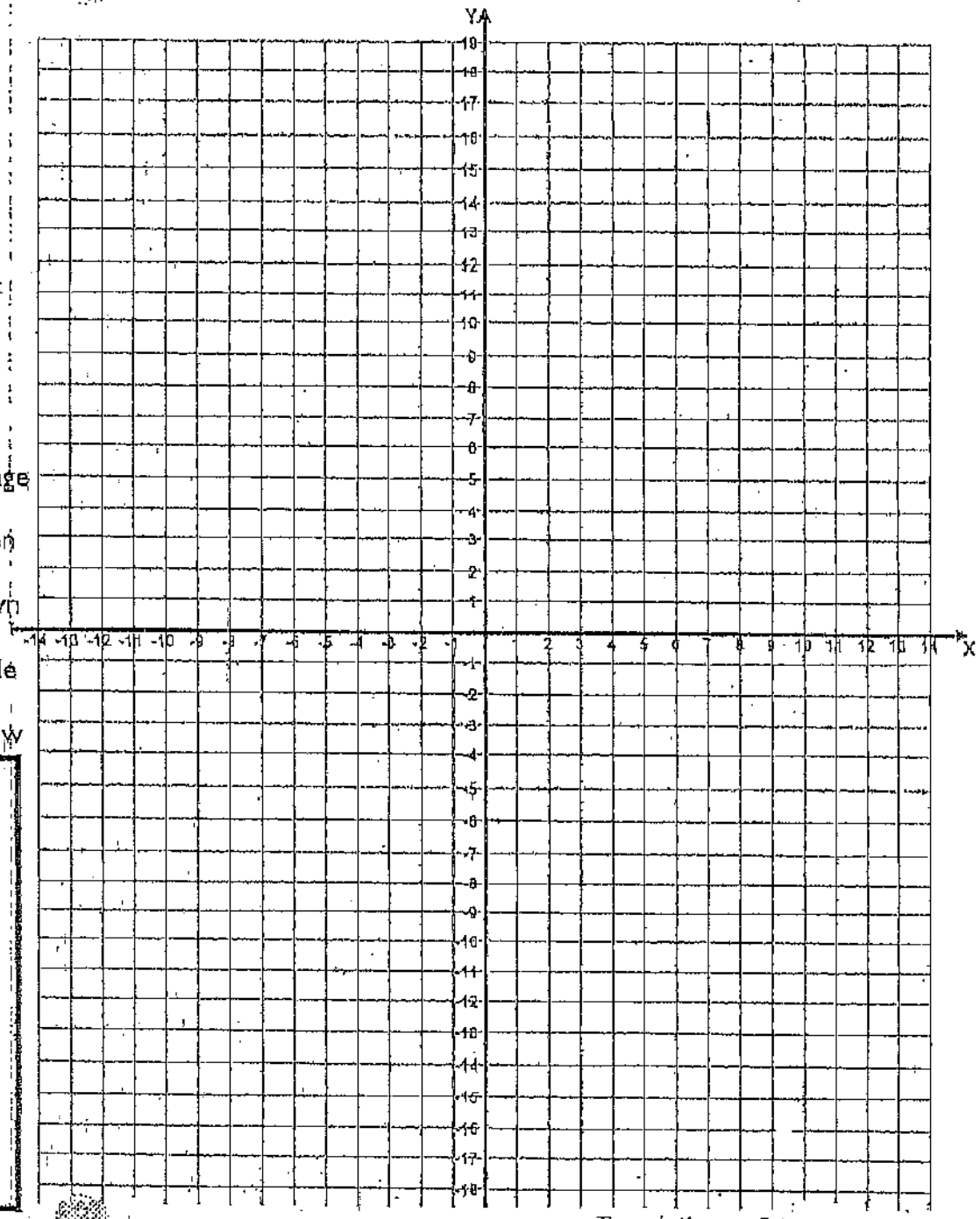
1. Draw polygon ABCD with A(1, 0) B(5, 4) C(6, 1) D(4, -1)
2. Translate #1 up 14 units
3. Translate #2 left 10 units
4. Translate #3 down 10 units and left 2 units
5. Translate #4 right 19 units and down 11 units
6. Translate #5 left 4 units and down 6 units
7. Translate #6 up 3 units and left 11 units
8. Translate #7 up 10 units and right 8 units

Color:

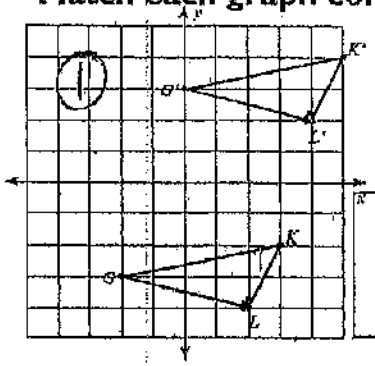
1. Black
2. Red
3. Blue
4. Orange
5. Green
6. Brown
7. Purple
8. Yellow

What are your newly transformed coordinates?

1. A(1, 0) B(5, 4) C(6, 1) D(4, -1)
2.
3.
4.
5.
6.
7.
8.

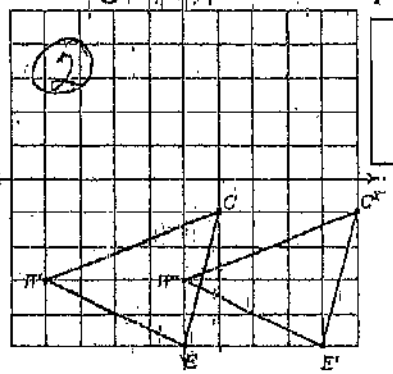


Match each graph containing the image and pre-image with its corresponding transformation.



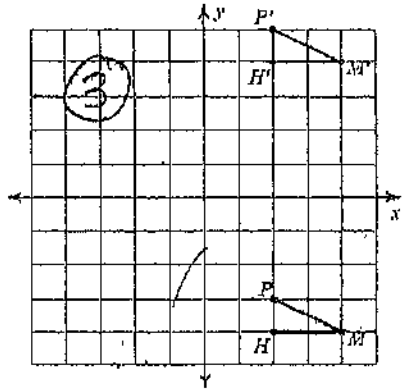
2 units left and 5 units down

Red



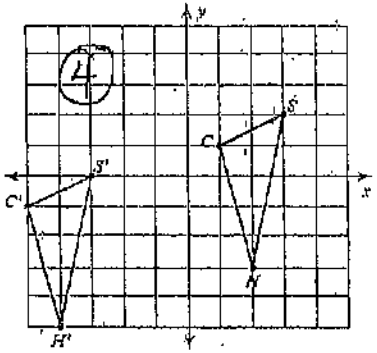
3 units down

Brown



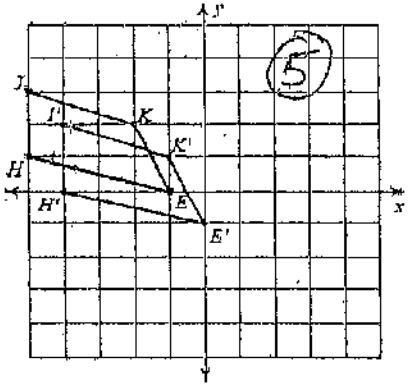
8 units up

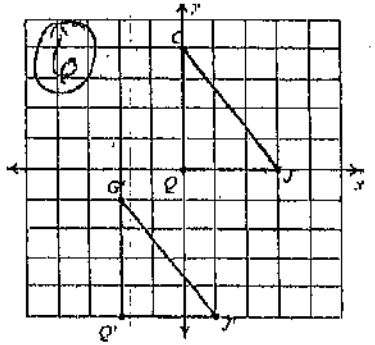
Black



6 units left and 2 units down

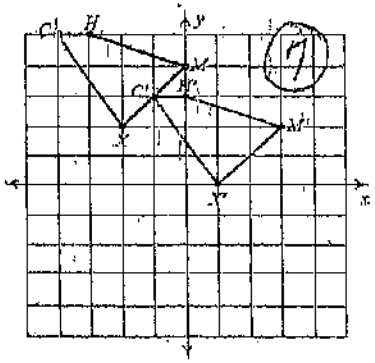
Purple

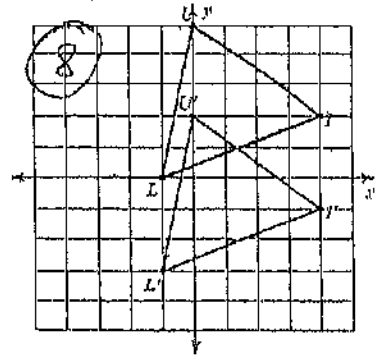




4 units right

Green





2 units right and 6 units up

Orange

3 units right and 2 units down

Yellow

1 unit right and 1 unit down

Blue

Kuta Software - Infinite Geometry

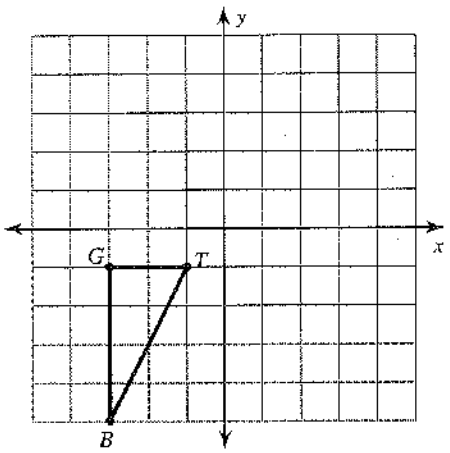
Name_____

Translations

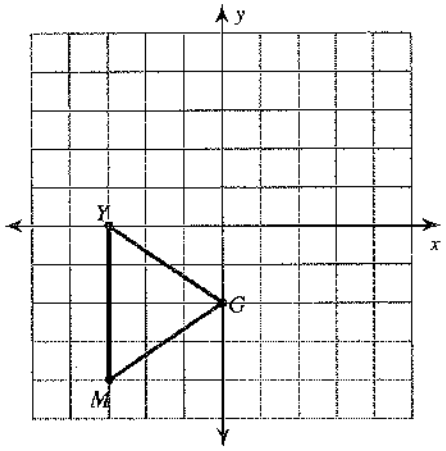
Date_____ Period____

Graph the image of the figure using the transformation given. (Write the algebraic Rule)

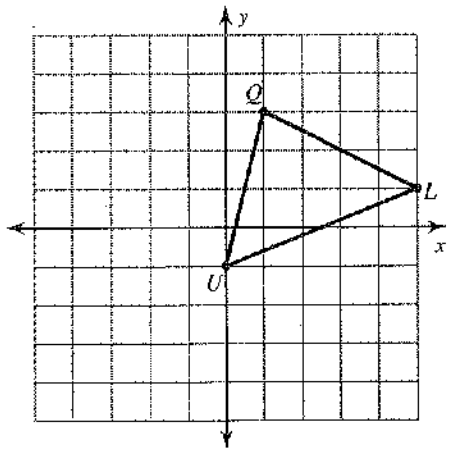
1) translation: 5 units right and 1 unit up



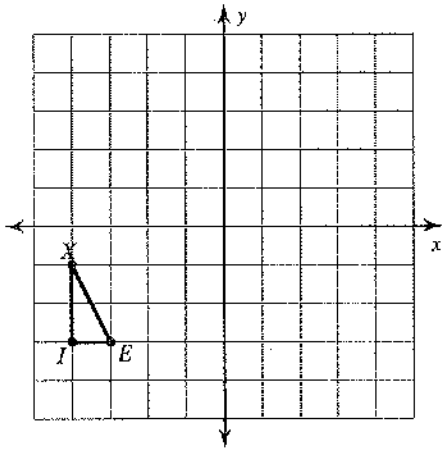
2) translation: 1 unit left and 2 units up



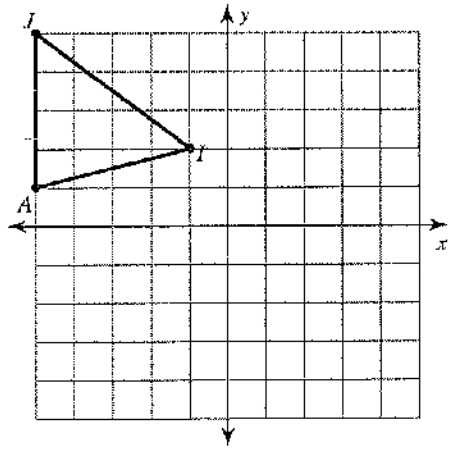
3) translation: 3 units down



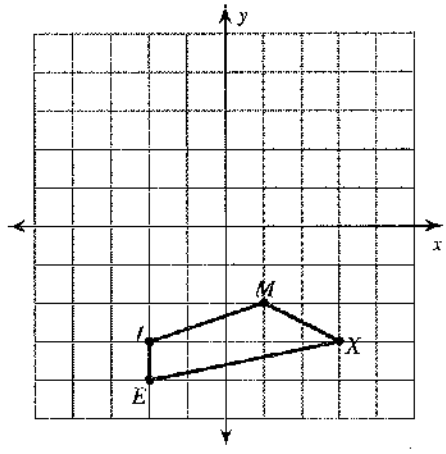
4) translation: 5 units right and 2 units up



5) translation: 4 units right and 4 units down

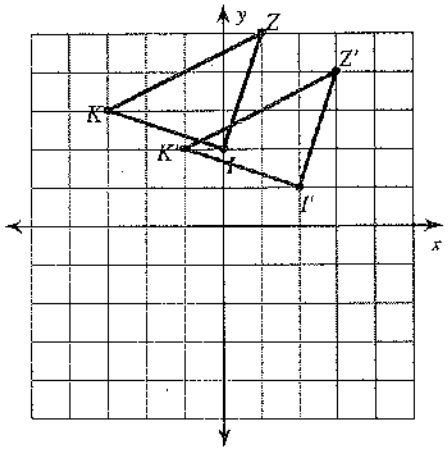


6) translation: 2 units right and 3 units up

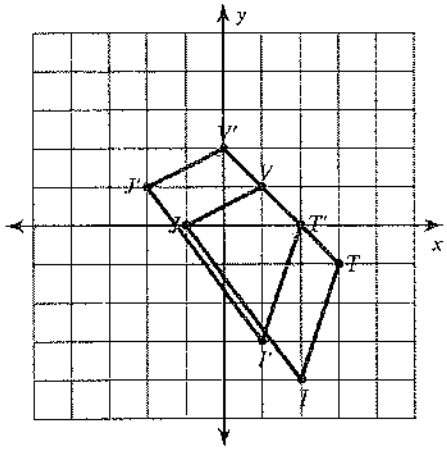


Write a rule to describe each transformation.

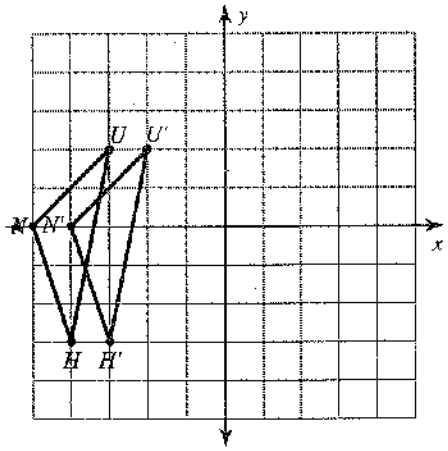
7)



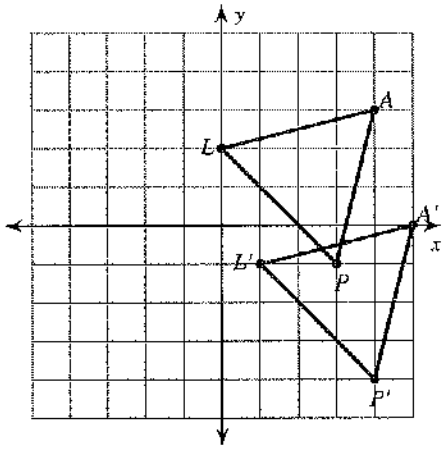
8)



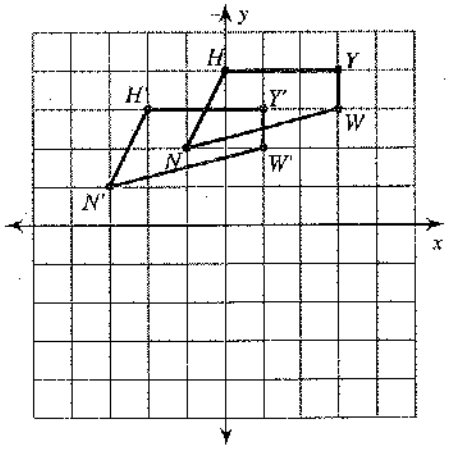
9)



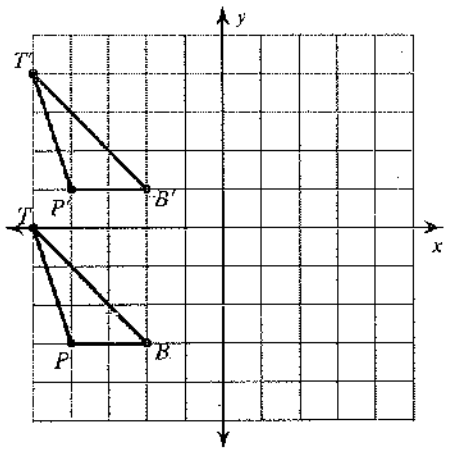
10)



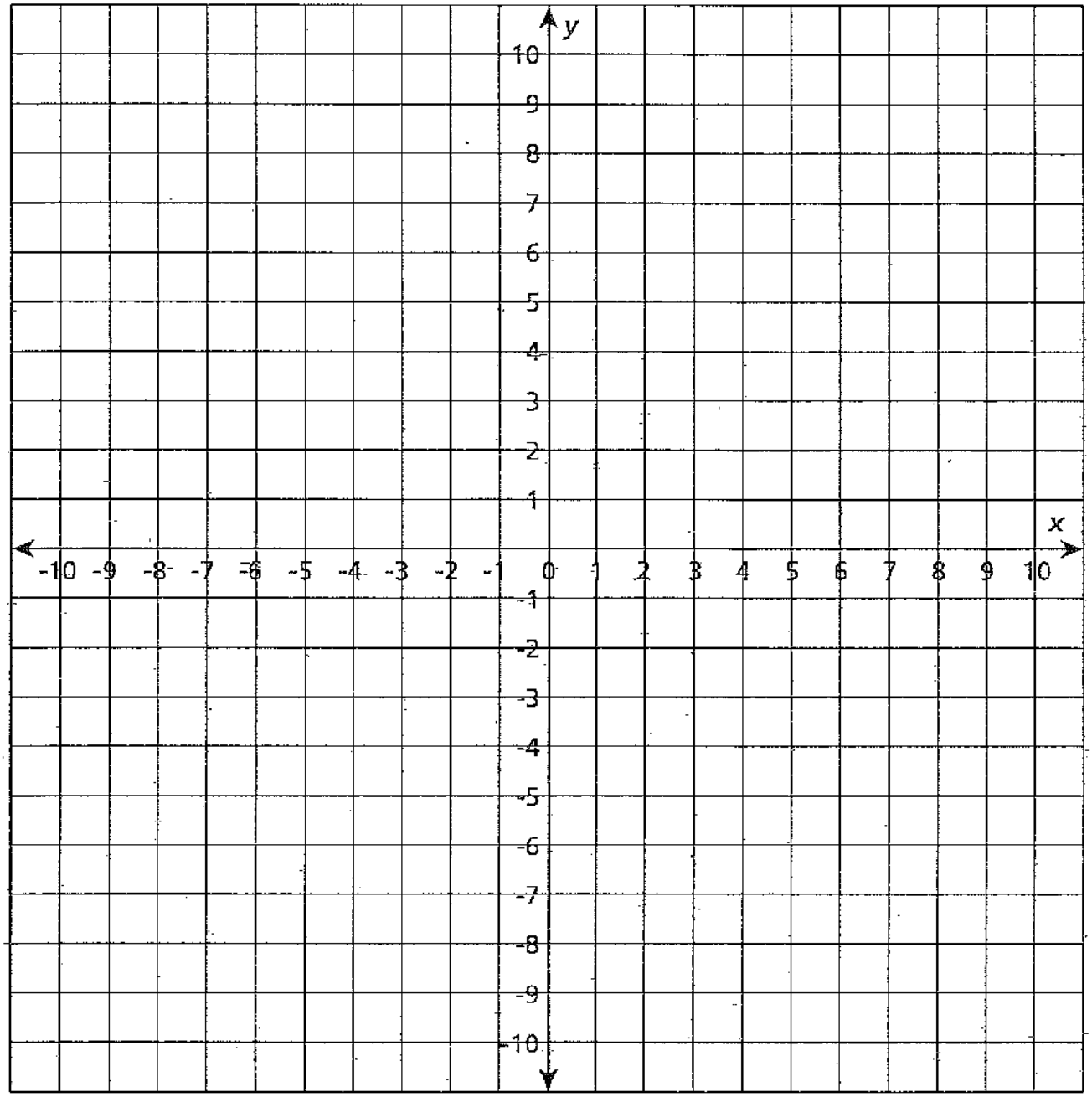
11)



12)



Name _____ Date _____



SE TASK: Coordinating Translations

Your task is to plot any creative polygon you want on the coordinate plane, and then create polygons congruent to the one you designed using the three translations described below.

1. Translate the original polygon right 5 units. For each vertex of your original polygon in the form (x, y), what is its image's coordinates? What is the general form for the image's vertices?

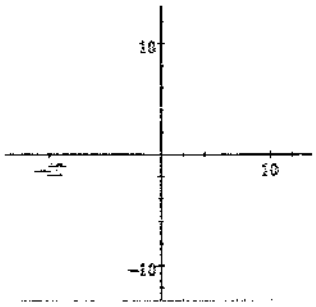
2. Translate the original polygon down 4 units. For each vertex of your original polygon in the form (x, y), what is its image's coordinates? What is the general form for the image's vertices?

3. Translate the original polygon left 4 units and up 2 units. For each vertex of your original polygon in the form (x, y), what is its image's coordinates? What is the general form for the image's vertices?

Differentiation

Provide a description of each of the following translations, where h and k can represent any number.

1. $(x + h, y + k)$



KIM Chart for Vocabulary Words

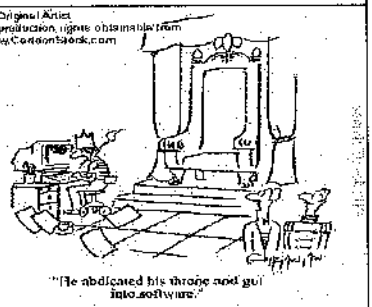
K= Key Idea or Term/ Vocabulary Word/Part of Speech/Synonyms

I= Information that goes along with the word

M= Memory Clue

(This is anything that will help you remember the word. It could be a picture, sentence, etc.)

Your chart will look as follows:

K Key Idea/Vocabulary Word	I Information/ Definition	M Memory Clue
Abdicate (Verb) Synonyms- resign, renounce, relinquish	To give up formally, as an office, duty, power, or claim.	
Unit One – Transformations, Congruence and Similarity		
1. Translation		
2. Reflection		

3. Line of Reflection		
4. Rotation		
5. Center of Rotation		
6. Dilation		
7. Scale Factor		

8. Enlargement		
9. Reduction		
10. Pre-image		
11. Image		
12. Rigid Transformation		

13. Congruent		
14. Similar		
15. Transformation		