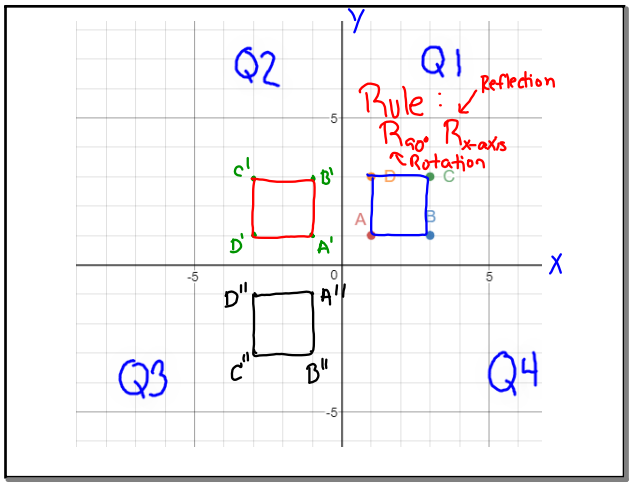
August 6, 2018

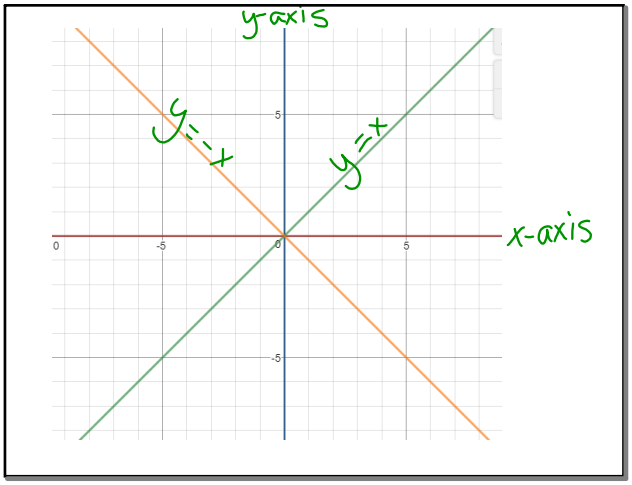
Rotate a square located at (1,1) (3,1) (3,3) and (1,3) in to quadrant 2, then reflect the square across the x-axis. Write a rule for the transformations.

Today -
geogebra reflection
find the x = y line & the x = -y line
reflect over these lines
Study Guide for tomorrow's quiz

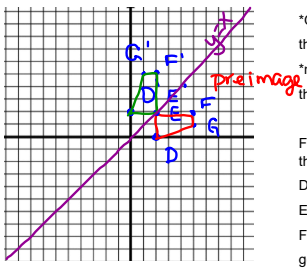
Aug 6-7:45 AM



Aug 6-11:57 AM



Aug 6-12:17 PM



*Geobegra reflections over the x-y line
*mrvoilamath reflections over the x-y line

Find the coodinate of the vertices of the image

	Image
D(2,0)	D'(0,2)
E(2,2)	E'(2,2)
F(5,2)	F'(2,5)
g(5,1)	G'(1,5)

Reflect over the y = x line.

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

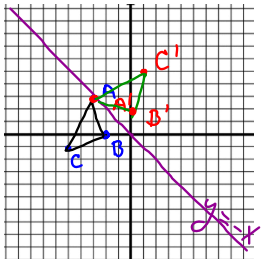
Aug 6-7:50 AM

Explain 2 Drawing Reflections on a Coordinate Plane

The table summarizes coordinate notation for reflections on a coordinate plane.

Rules for Reflections on a Coordinate Plane	
Reflection across the *x*-axis	$(x, y) \rightarrow (x, -y)$
Reflection across the *y*-axis	$(x, y) \rightarrow (-x, y)$
Reflection across the line $y = x$	$(x, y) \rightarrow (y, x)$
Reflection across the line $y = -x$	$(x, y) \rightarrow (-y, -x)$

Aug 6-12:20 PM

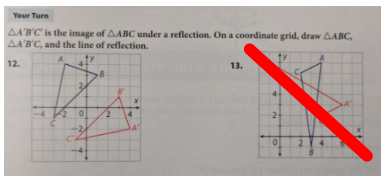


Reflect the following over the line y = -x

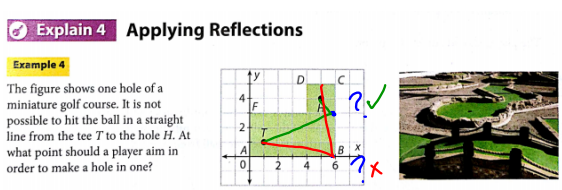
	preimage → image
A(-3,3)	A(-3,3) → (-3,3)
B(-2,0)	B(-0,-2) → (0,2)
C(-5, -1)	C(1,-5) → (1,5)

Rules for Reflections on a Coordinate Plane	
Reflection across the *x*-axis	$(x, y) \rightarrow (x, -y)$
Reflection across the *y*-axis	$(x, y) \rightarrow (-x, y)$
Reflection across the line $y = x$	$(x, y) \rightarrow (y, x)$
Reflection across the line $y = -x$	$(x, y) \rightarrow (-y, -x)$

Aug 6-7:52 AM



Aug 6-7:55 AM



Aug 6-8:00 AM

August 7, 2018

Eyeopener:

preimage

Translate point (3,-7) using rule (x - 10, y + 5).

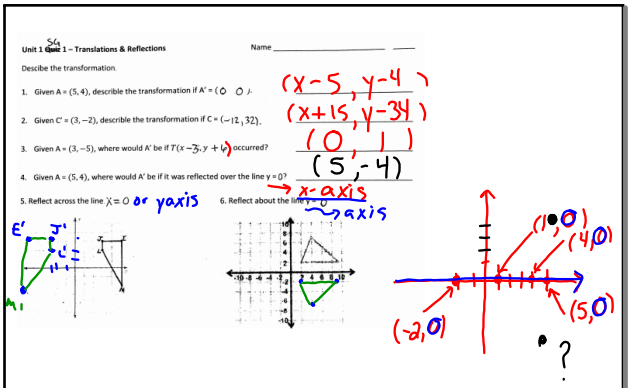
Where is the image? (3-10, -7+5) → (-7, -2)

Write the vector for the mapping. ⟨-10, 5⟩

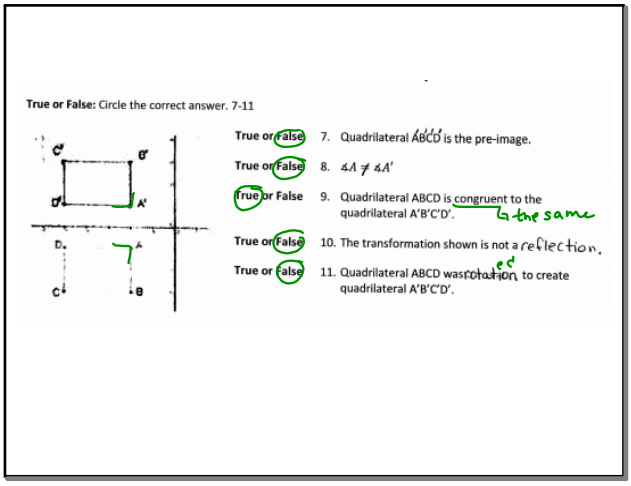
$T_{-10,5}$

Vector ⟨-10,5⟩

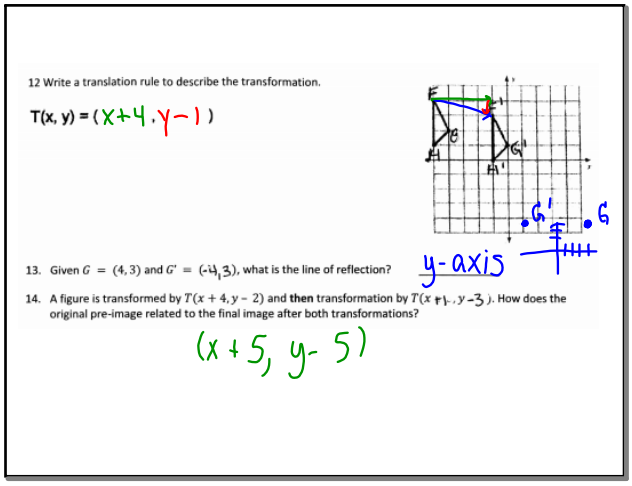
Aug 7-7:43 AM



Aug 6-1:50 PM



Aug 6-1:51 PM



Aug 6-1:52 PM

Rule (x+2, y+4)

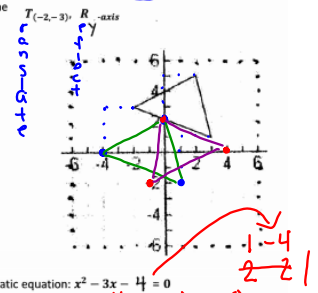
15 Point $P(2, 3)$ has been translated to $P'(4, 7)$. Where will point $Z(4, 7)$ be located after the same translation?

a. $Z'(8, 9)$ b. $Z'(6, 11)$

c. $Z'(0, 5)$ d. $Z'(11, 6)$

16. Graph the composition of transformations. 2 more movements

$T_{(-2,-3)}$ $R_{x\text{-axis}}$



5 Bonus Points: Factor and solve the following quadratic equation: $x^2 - 3x - 4 = 0$

$(x+1)(x-4)=0$

$x+1=0$ $x-4=0$

$-1\ -1$ $+4\ +4$

$x=-1$ $x=4$

Aug 6-1:52 PM

Quiz!

$x^2 + 2x + 4 = 0$

$4x$

Aug 7-7:43 AM

August 8, 2016

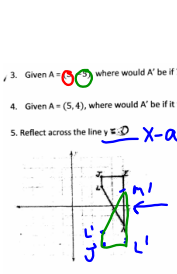
Eyopener: Highly missed problems from the quiz....try them today!

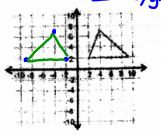
3. Given A = (5, 4), where would A' be if $T(x + 2, y - 14)$ occurred? $3+2\ \ 5-14$

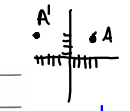
4. Given A = (5, 4), where would A' be if it was reflected over the line $x=0$? y-axis

5. Reflect across the line $y=0$ x-axis

6. Reflect about the line $x=0$ y-axis







5 -19

-5,4

yaxis!

(0,5)

(0,1)

(0,3)

X=0= yaxis

Aug 7-2:55 PM

p 78 copy into your notebooks the first 4 lines of text

Let's investigate some Geometry rotations around the 'origin.'

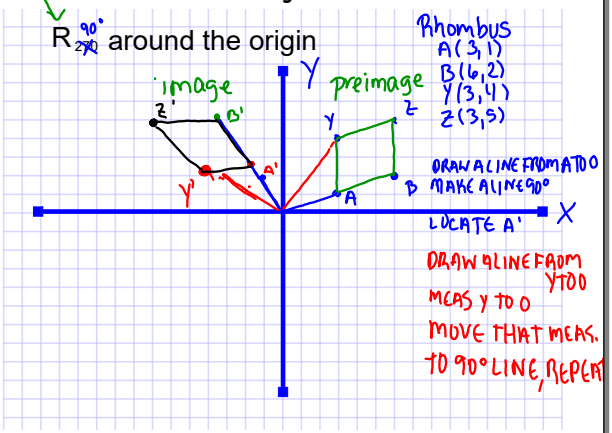
Geogebra, roatations

Aug 7-7:53 AM

Rule!

Let's rotate 2 figures.

$R_{270}^{90°}$ around the origin



Rhombus
A(3,1)
B(6,2)
Y(3,4)
Z(3,5)

DRAW A LINE FROM A TO D
MAKE A LINE 90°
LOCATE A'

DRAW A LINE FROM Y TO O
MEAS Y TO O
MOVE THAT MEAS. TO 90° LINE, REPEAT

Aug 7-7:59 AM

August 9, 2018

What is the easiest transformation for you (translation, reflection or rotation)?

Please explain why this is the easiest transformation for you.

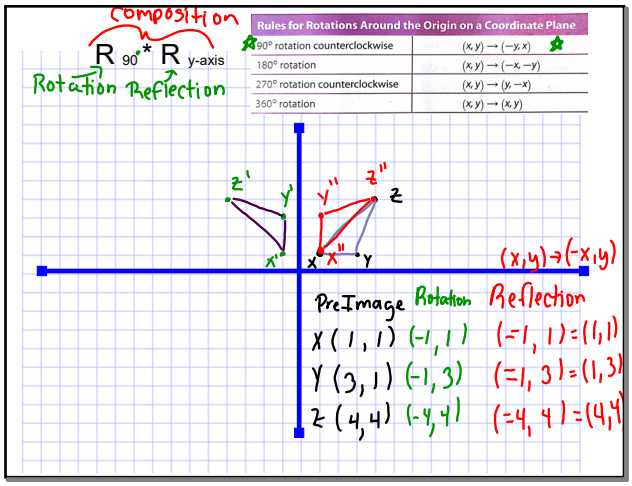
Sketch a figure (square, rectangle, triangle, etc) displaying this type of transformation.

Aug 7-8:39 AM

The table summarizes rules for rotations on a coordinate plane.

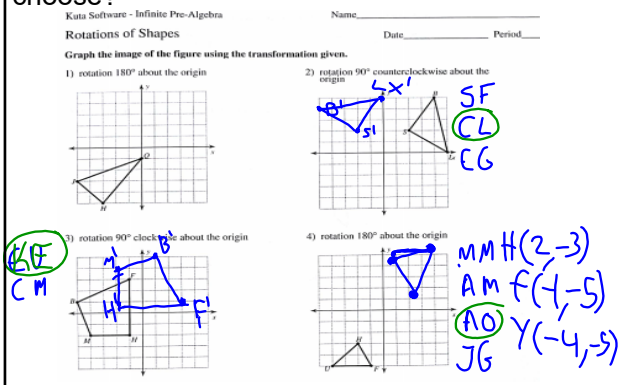
Rules for Rotations Around the Origin on a Coordinate Plane	
90° rotation counterclockwise	$(x, y) \rightarrow (-y, x)$
180° rotation	$(x, y) \rightarrow (-x, -y)$
270° rotation counterclockwise	$(x, y) \rightarrow (y, -x)$
360° rotation	$(x, y) \rightarrow (x, y)$

Aug 7-7:58 AM

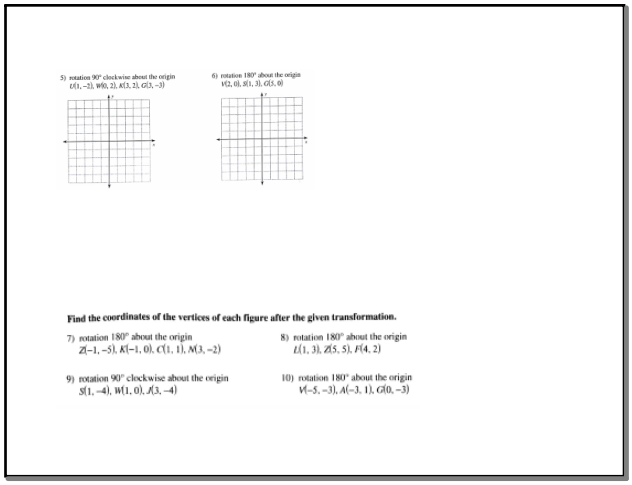


Aug 7-7:59 AM

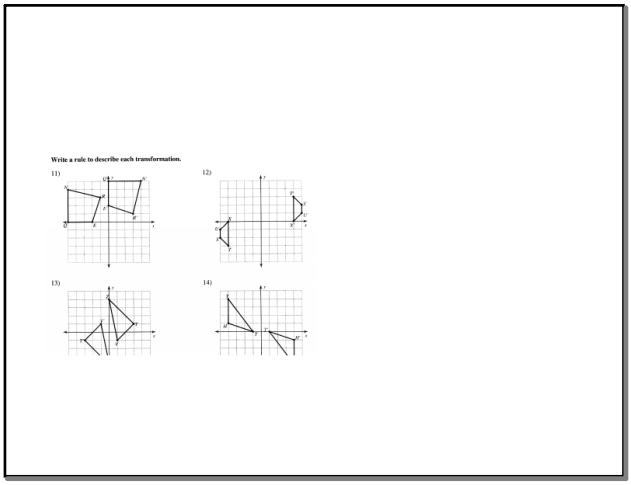
Protractor vs Rules....which one will you choose?



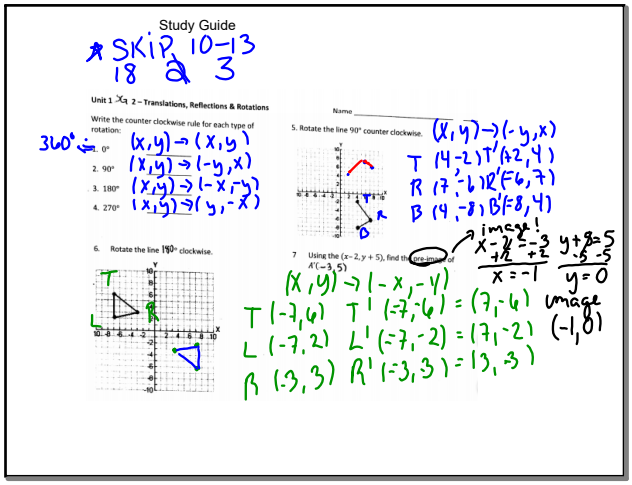
Aug 7-3:12 PM



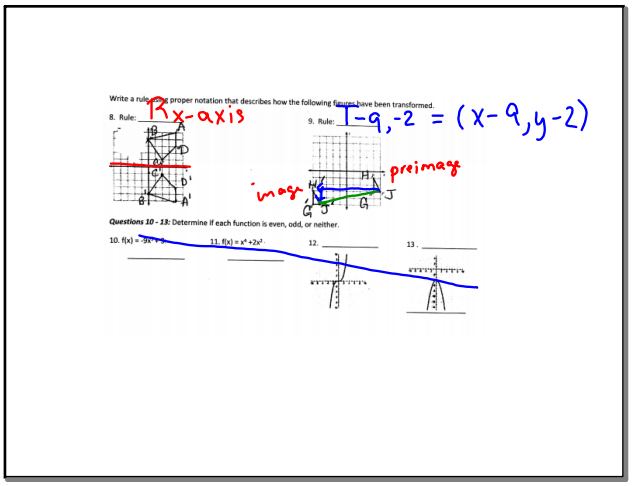
Aug 7-3:14 PM



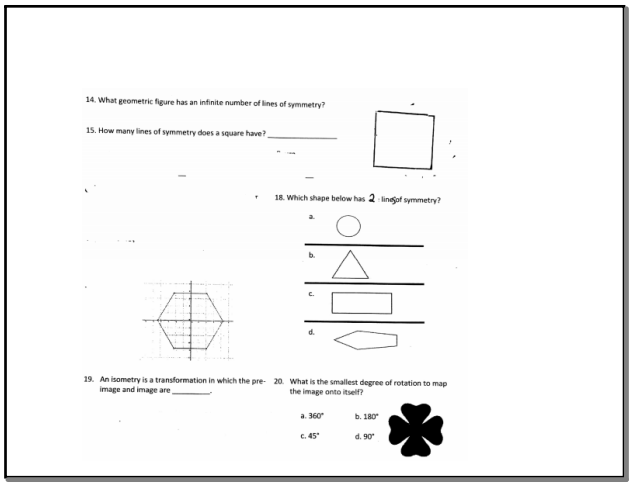
Aug 7-3:15 PM



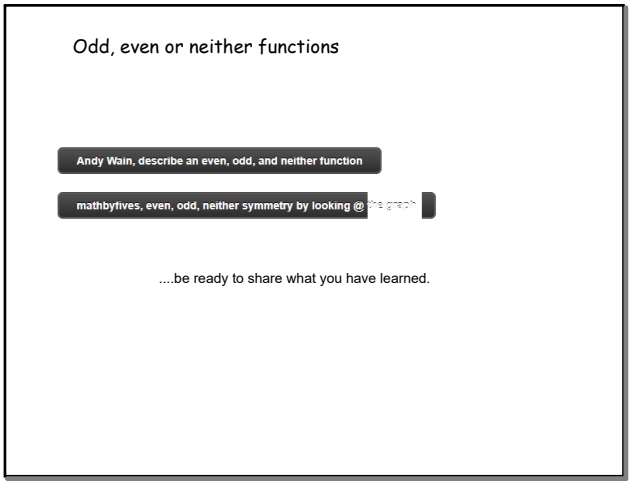
Aug 9-11:41 AM



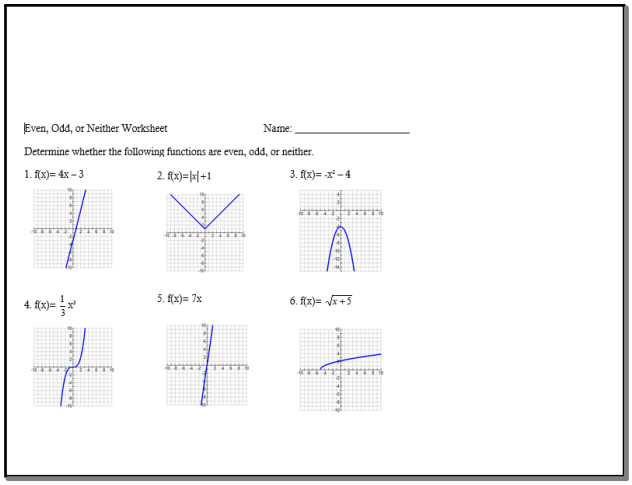
Aug 9-11:41 AM



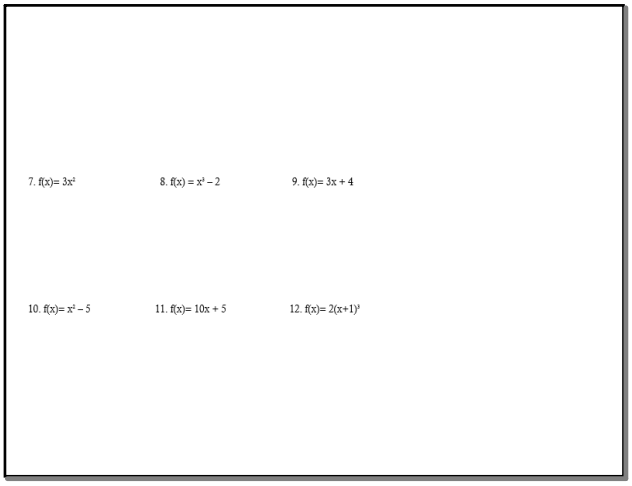
Aug 9-11:41 AM



Aug 7-8:40 AM



Aug 7-3:07 PM



Aug 7-3:08 PM