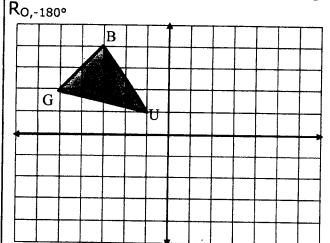
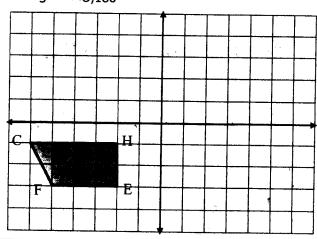
Directions: Use patty paper, Geometry software, or any other method to rotate each figure as directed. Make sure to label your image figure correctly.

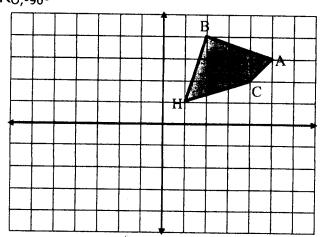
1. Rotate BUG 180° clockwise about the origin. 2. Rotate CHEF 180° counter-clockwise about



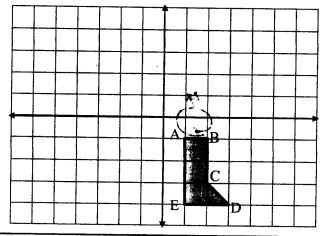
the origin. R<sub>0,180°</sub>



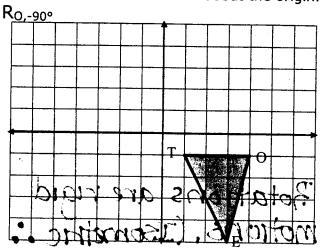
3. Rotate BACH 90° clockwise about the origin. Ro,-90°



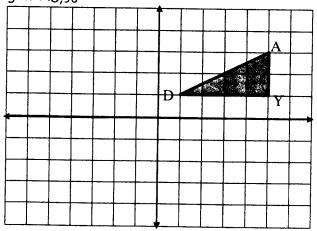
4. Rotate ABCDE 90° counter clockwise about the origin. Ro,900



5. Rotate TOE 90° clockwise about the origin.



6 Rotate DAY 90° counter- clockwise about the origin. R<sub>0,90°</sub>

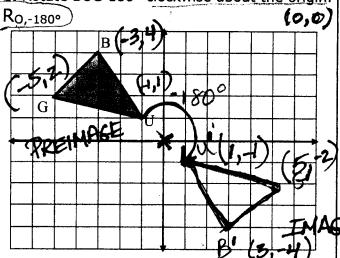


	$(\mathcal{I})_0$	45)
1	Name:Da	te: Period: Score:
! 3	<b>Directions:</b> Refer to some of the problems on about the functions of rotations about the origin	the previous page to help you make conjectures
	7. For problem 1 (180° rotation clockwise)	8. For problem 5 (90° rotation clockwise)
	What are the coordinates of the vertices of the original figure?	What are the coordinates of the vertices of the original figure?
fe ma	$g(-3, 4) \cup (-1, 1) G(-5, 2)$	T (,) O (,) E (,)
	What are the coordinates in its image?	What are the coordinates in its image?
nage	B'(3,-4) $U'(1,-1)$ $G'(5,-2)$	T' (,) O' (,) E' (,)
ji	pescribe the relationship between the original ambiguity among the coordinates in words.	Describe the relationship between the original an image coordinates in words.
	Numbers are the	
	Same/the signs are opposite	
	Describe the relationship with a function.	Describe the relationship with a function.
	$(x,y) \rightarrow (\overline{\chi} \overline{\chi} \overline{\chi})$	(x,y) → ()
	9. For problem (90° rotation counter clockwise)	<b>10.</b> Bill says if you rotate a figure 180 clockwise or counterclockwise you will get the
	What are the coordinates of the vertices of the original figure?	same image. Sally says you won't. Who is correct? Why?
C	O (,) A (,) Y (,)	rotate 180°, you
ľ	What are the coordinates in its image?	rotate 180°, you
	D' (,) A' (,) Y' (,)	will get the same
a	Describe the relationship between the original an image coordinates in words.	image.
		Bill is correct!
E	Describe the relationship with a function.	Rotations are rigid

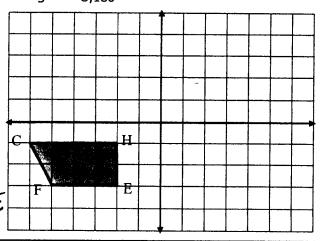
Name:	Date:	Period:	Score:
<b>Directions:</b> Refer to some of the problems or about the functions of rotations about the original contents.	n the p in.	revious page to help you	ı make conjectures
7. For problem 1 (180° rotation clockwise)	ام	or problem 5 (90° rotati	· · · · · · · · · · · · · · · · · · ·
What are the coordinates of the vertices of the original figure?	e Wha orig	at are the coordinates of inal figure?	the vertices of the
B (,) U (,) G (,)	T (_		
What are the coordinates in its image?		at are the coordinates in	
B' (,) U' (,) G' (,)	1, 6	(1)0'(4X)	E' (
Describe the relationship between the original an image coordinates in words.	Des	cribe the relationship be mage coordinates in wor	tween the original
<b>S</b>			
Describe the relationship with a function.	Des	cribe the relationship wit	h a function.
(x,y) → ()		(x,y) → (	)
<b>9.</b> For problem 5 (90° rotation counter clockwise)	clock	10. Bill says if you rotate a figure 180 clockwise or counterclockwise you will get the same image. Sally says you won't. Who is	
What are the coordinates of the vertices of the riginal figure?		correct? Why?	
D (,) A (,) Y (,)			
What are the coordinates in its image?			
D'(,) A'(,) Y'(,)			
Describe the relationship between the original an image coordinates in words.			
Describe the relationship with a function.			
(x,y) → ()			

**Directions:** Use patty paper, Geometry software, or any other method to rotate each figure as directed. Make sure to label your image figure correctly.

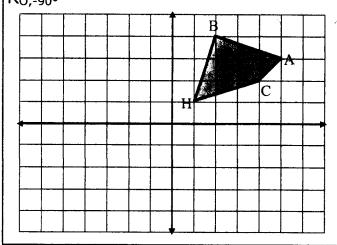
1. Rotate BUG 180° clockwise about the origin. 2. Rotate CHEF 180° counter-clockwise about



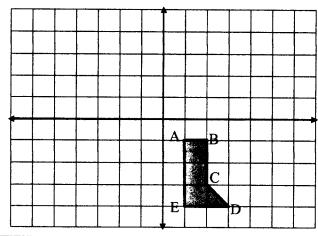
origin. | 2. Rotate CHEF 180° counter-clockwise about (0,0) | the origin. R<sub>0,180°</sub>



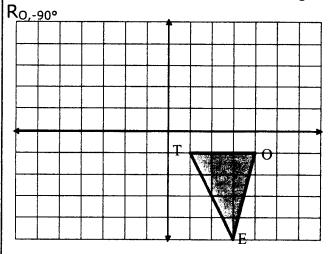
**3.** Rotate BACH 90° clockwise about the origin.  $R_{0,-90}$ °



**4.** Rotate ABCDE 90° counter clockwise about the origin. R<sub>0,90°</sub>



5. Rotate TOE 90° clockwise about the origin.



**6** Rotate DAY 90° counter- clockwise about the origin. R<sub>0.90°</sub>

