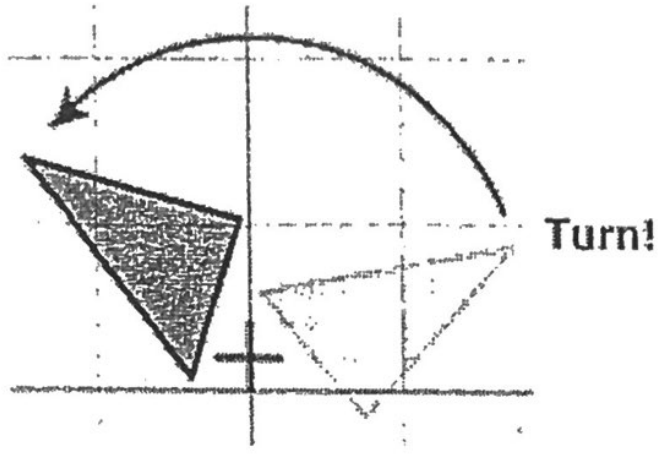


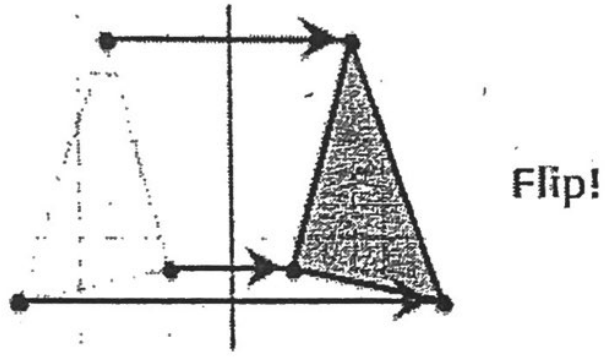
Name _____

TRANSFORMATIONS RULES

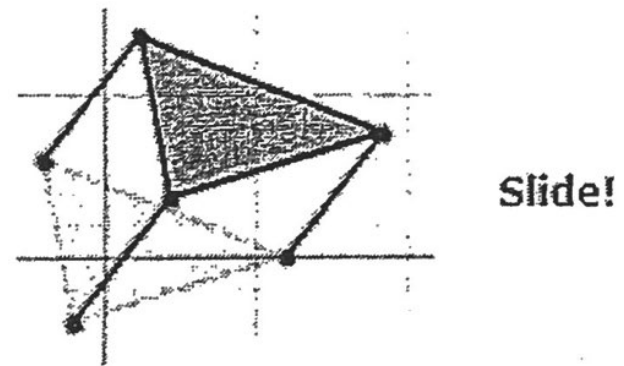
Rotation



Reflection



Translation

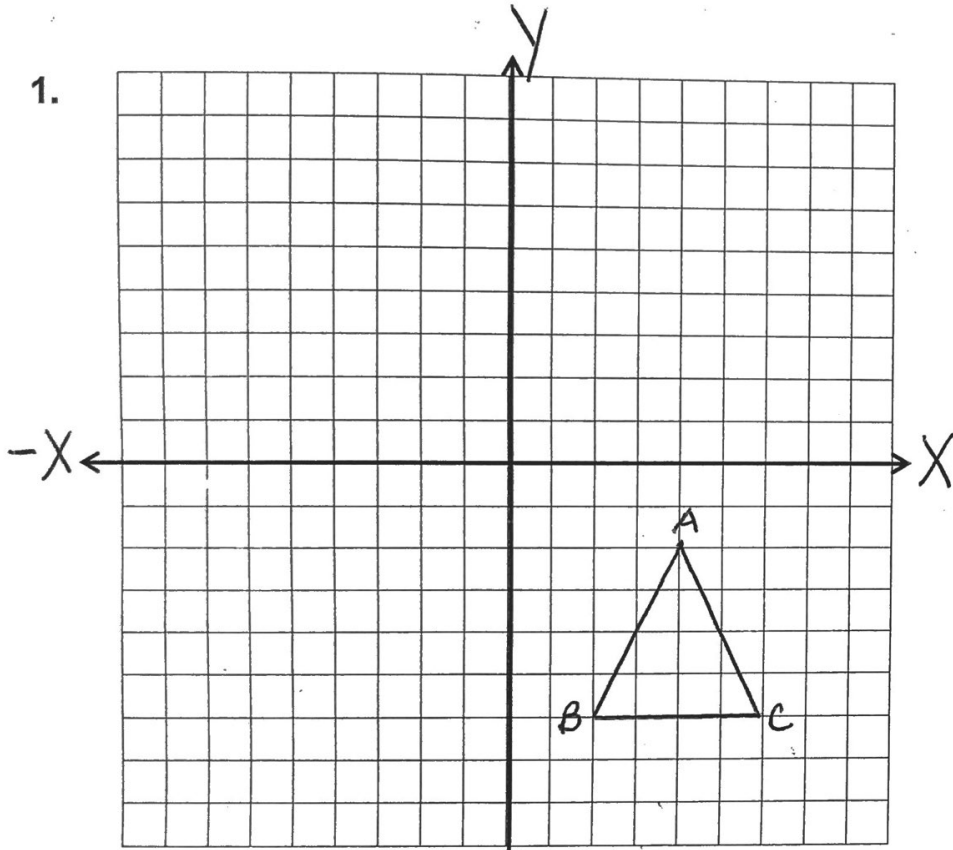


Name: _____ Date: _____ Period: _____

Transformation Practice

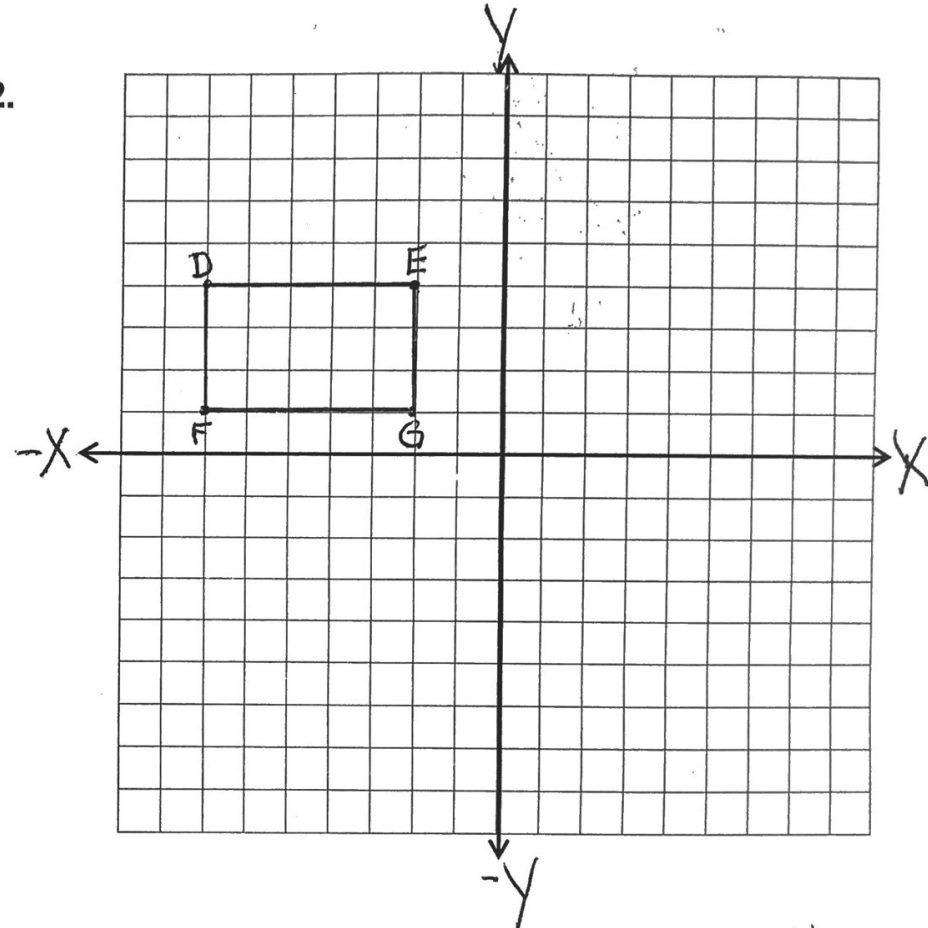
Complete the questions distributed in class using the rules for translations, reflections and rotations.

1.



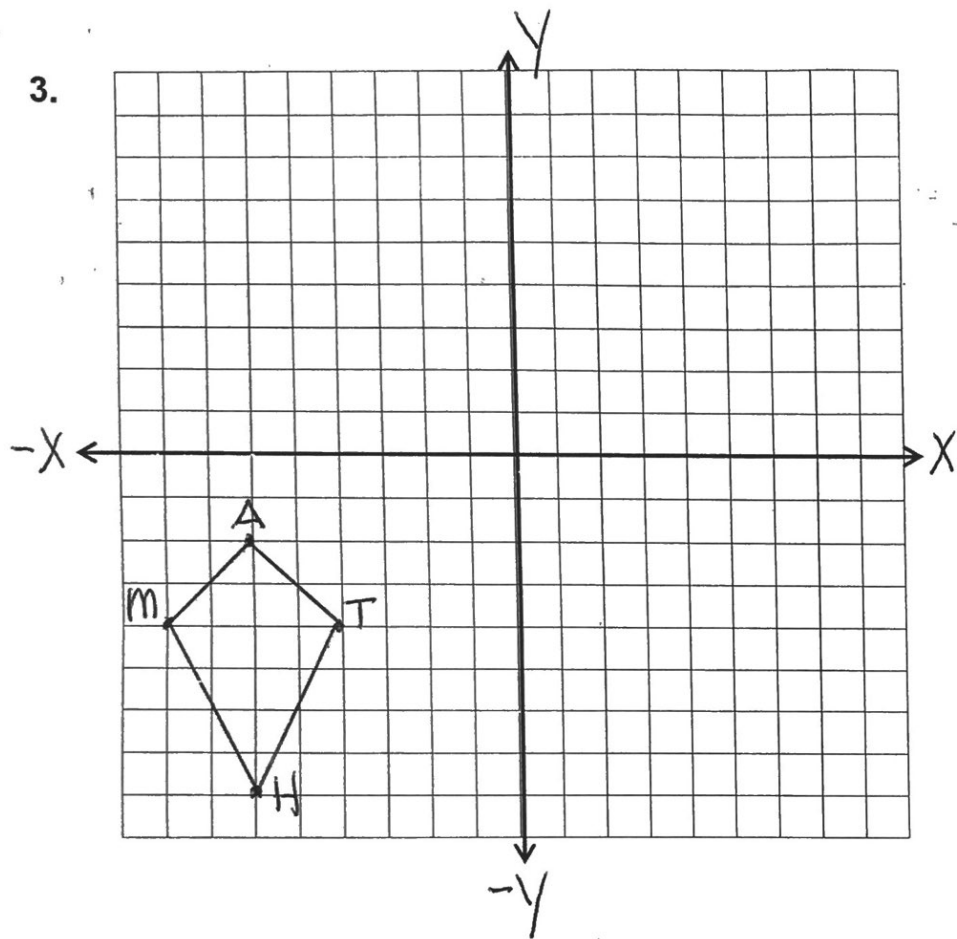
Translate $\triangle ABC$ $(x-9, y+5)$
 move (right, left) 9
 (up, down) 5
 A' () B' () C' ()

2.



Reflect $\square DEFG$ over the
 y-axis.
 D' () F' ()
 E' () G' ()

3.



$M(-8, -4)$

$A(-6, -2)$

$T(-4, -4)$

$H(-6, -8)$

Rotate MATH 180°

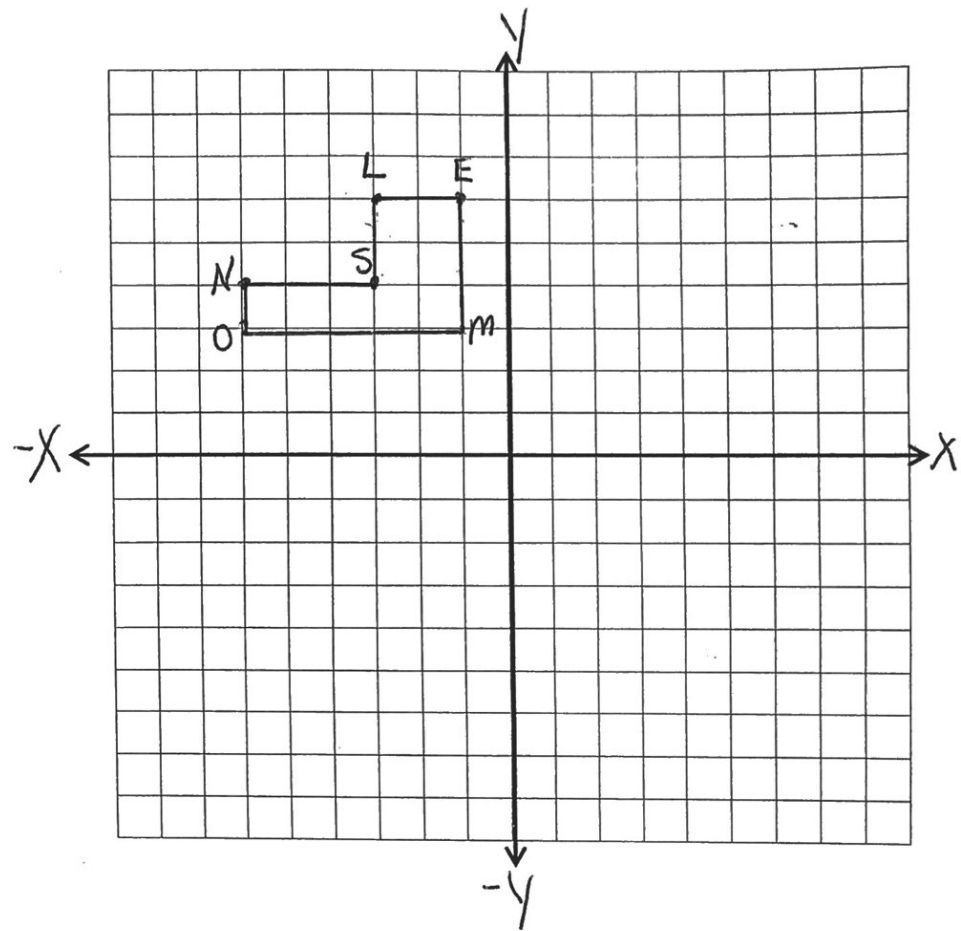
$M'(\quad)$

$A'(\quad)$

$T'(\quad)$

$H'(\quad)$

4.



Rotate 90° clockwise

$L(-3, 6)$ $L'(\quad)$

$E(-1, 6)$ $E'(\quad)$

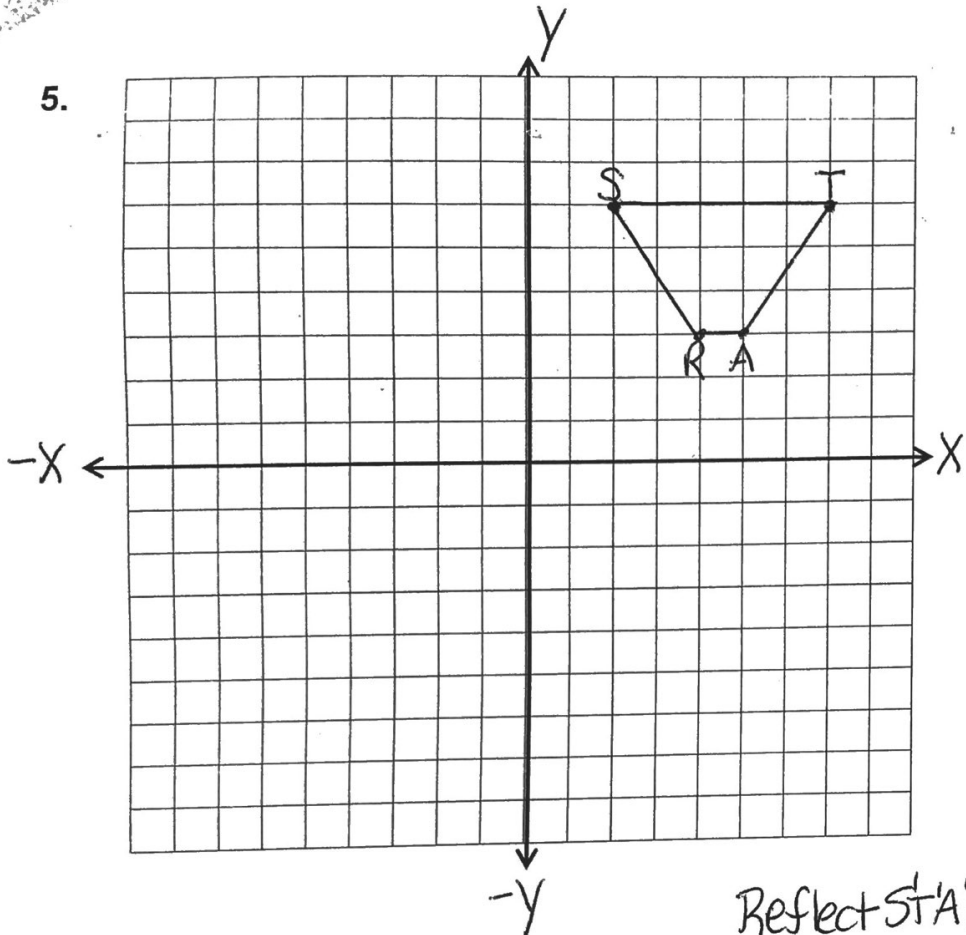
$M(-1, 3)$ $M'(\quad)$

$O(-6, 3)$ $O'(\quad)$

$N(-6, 4)$ $N'(\quad)$

$S(-3, 4)$ $S'(\quad)$

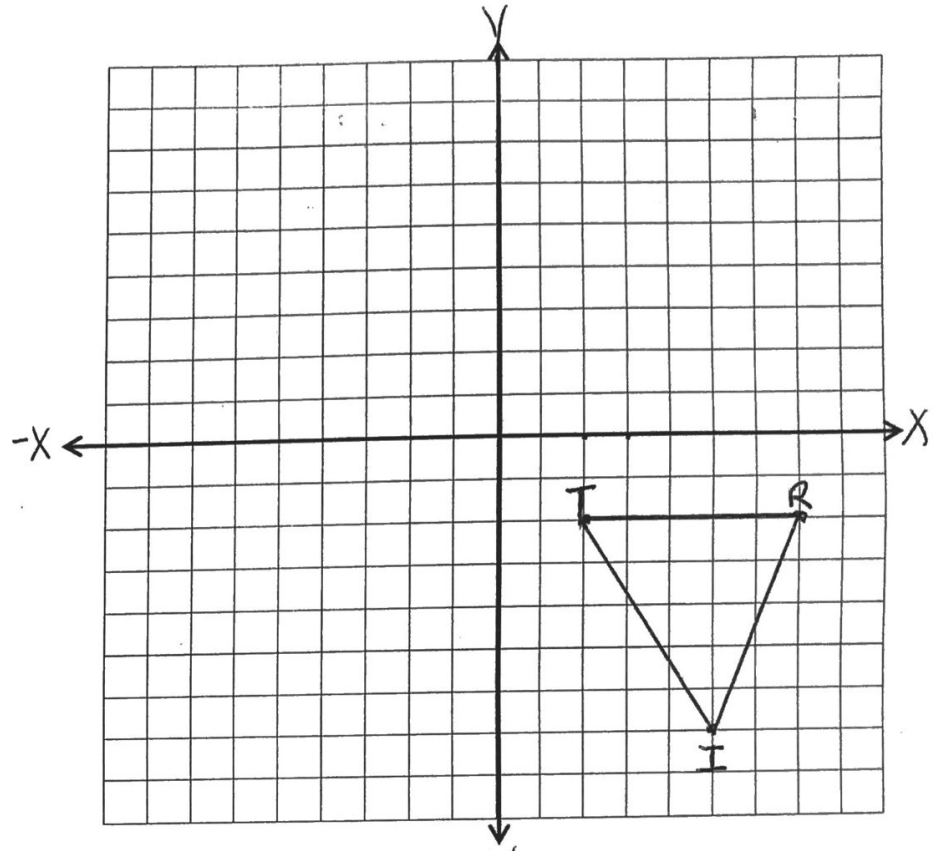
5.



Rotate 180° Reflect STAR' over x-axis

$S(2, 6)$	$S'(\quad)$	$S''(\quad)$
$T(7, 6)$	$T'(\quad)$	$T''(\quad)$
$A(5, 3)$	$A'(\quad)$	$A''(\quad)$
$R(4, 3)$	$R'(\quad)$	$R''(\quad)$

6.

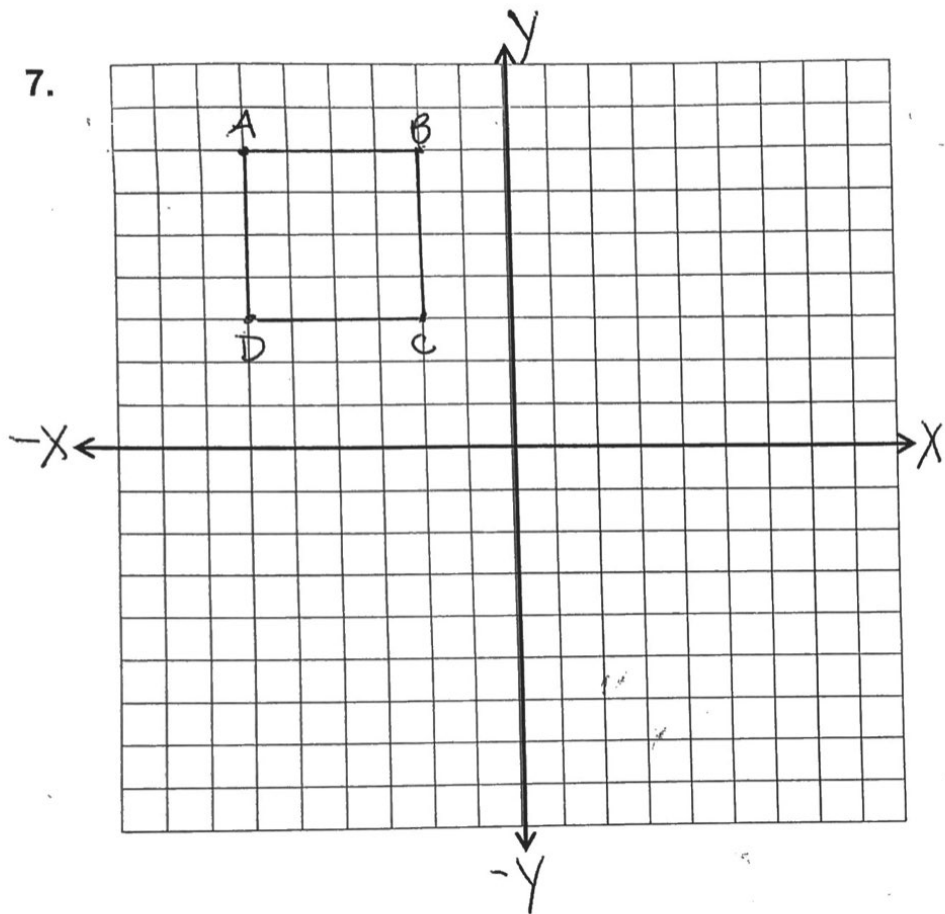


Rotate 90° clockwise Reflect x-axis

$T(2, -2)$	$T'(\quad)$	$T''(\quad)$
$R(6, -2)$	$R'(\quad)$	$R''(\quad)$
$I(5, -7)$	$I'(\quad)$	$I''(\quad)$

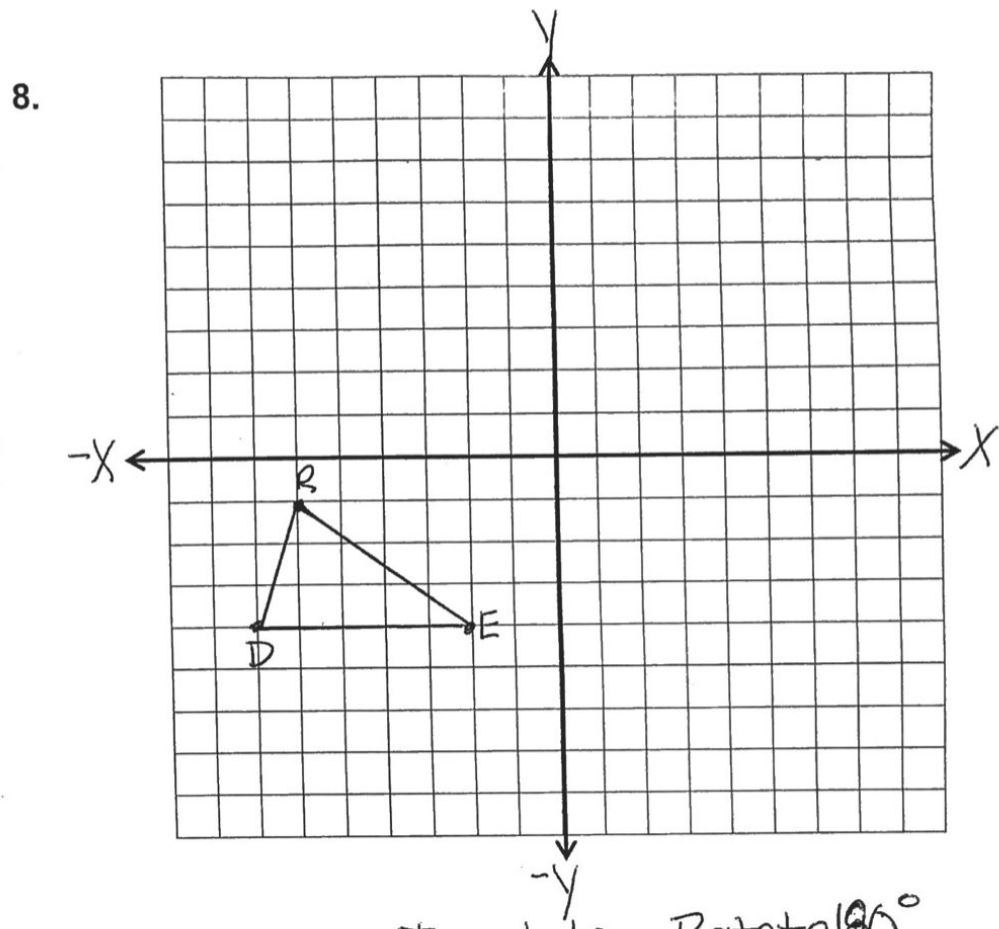
Translate $(x+8, y+1)$

$T'''(\quad)$	$I'''(\quad)$
$R'''(\quad)$	



Rotate 90°
counter clockwise Reflect over
y-axis

$A(-6, 7)$	$A' (\quad)$	$A'' (\quad)$
$B(-2, 7)$	$B' (\quad)$	$B'' (\quad)$
$C(-2, 3)$	$C' (\quad)$	$C'' (\quad)$
$D(-6, 3)$	$D' (\quad)$	$D'' (\quad)$



Translate Rotate 180°

$R(-6, -1)$ $(x+1, y-3)$

$E(-2, -4)$ $R' (\quad)$ $R'' (\quad)$

$D(-7, -4)$ $E' (\quad)$ $E'' (\quad)$

$D' (\quad)$ $D'' (\quad)$

Reflect over x-axis

$R''' (\quad)$ $D''' (\quad)$

$E''' (\quad)$