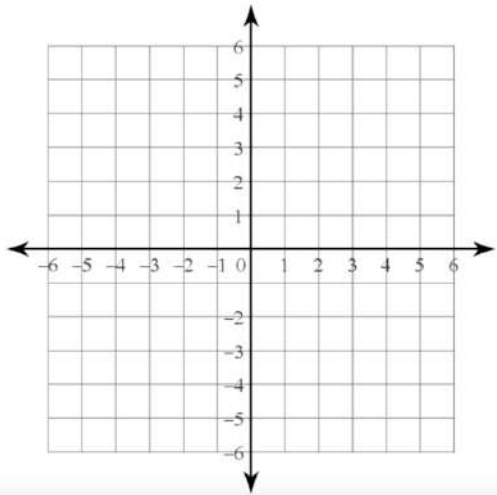


Geometry  
Composite Rigid Motion

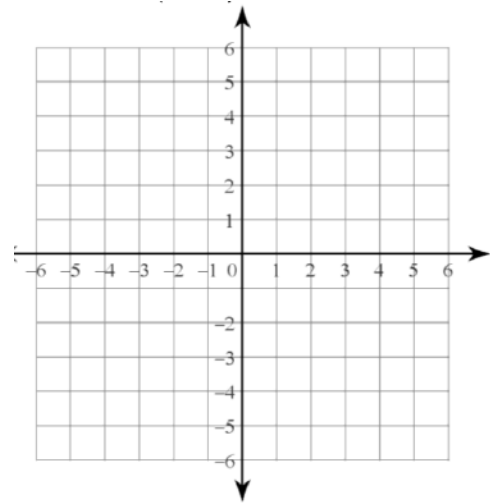
Name \_\_\_\_\_  
Date \_\_\_\_\_ Per \_\_\_\_

1) Translate  $\triangle QRS$  if  $Q(4, 1)$ ,  $R(1, -2)$ ,  $S(2, 3)$   
by the rule  $T_{\langle -3, -4 \rangle}$



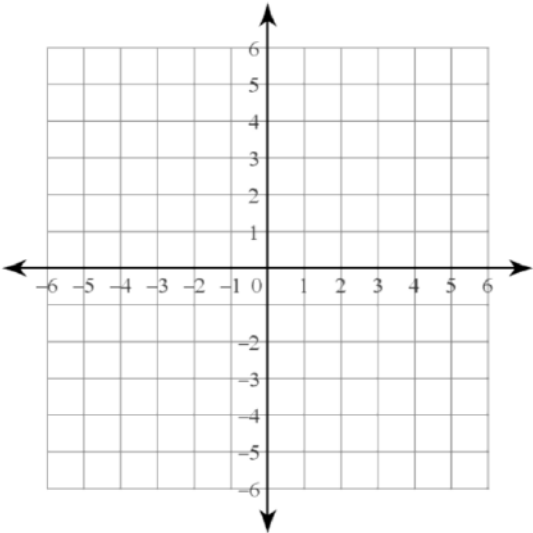
$Q'$  (\_\_\_\_, \_\_\_\_)  
 $R'$  (\_\_\_\_, \_\_\_\_)  
 $S'$  (\_\_\_\_, \_\_\_\_)

2) Use  $\triangle Q'R'S'$  from problem 1 to  
 $R_{x-axis}$



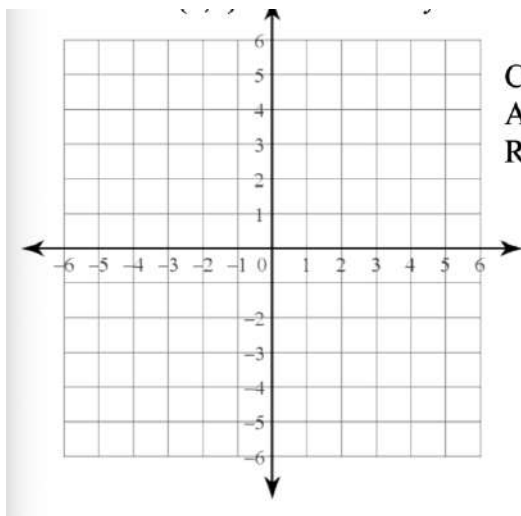
$Q''$  (\_\_\_\_, \_\_\_\_)  
 $R''$  (\_\_\_\_, \_\_\_\_)  
 $S''$  (\_\_\_\_, \_\_\_\_)

3) Rotate  $\triangle CAR$  if  $C(-1, 4)$ ,  $A(2, 3)$ ,  $R(-3, -2)$   
using the rule  $r_{(180^\circ, 0)}$



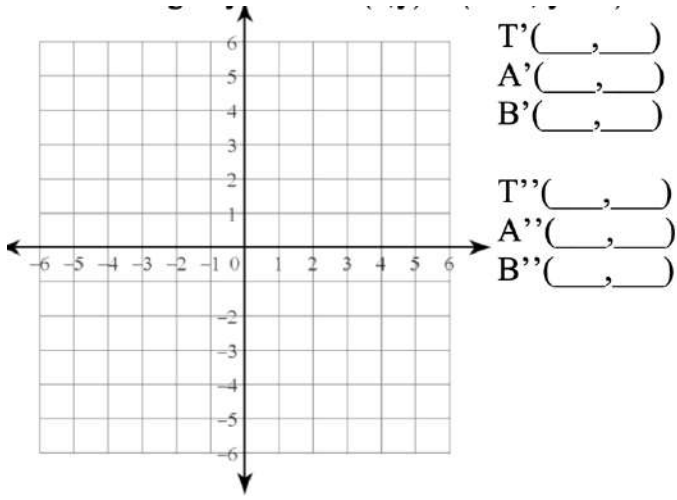
$C'$  (\_\_\_\_, \_\_\_\_)  
 $A'$  (\_\_\_\_, \_\_\_\_)  
 $R'$  (\_\_\_\_, \_\_\_\_)

4) Reflect  $\triangle C'A'R'$  using the rule  
 $R_{y=x}$

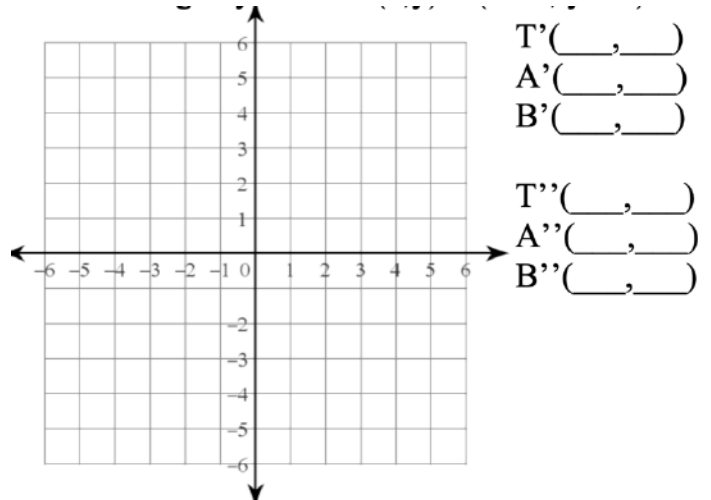


$C''$  (\_\_\_\_, \_\_\_\_)  
 $A''$  (\_\_\_\_, \_\_\_\_)  
 $R''$  (\_\_\_\_, \_\_\_\_)

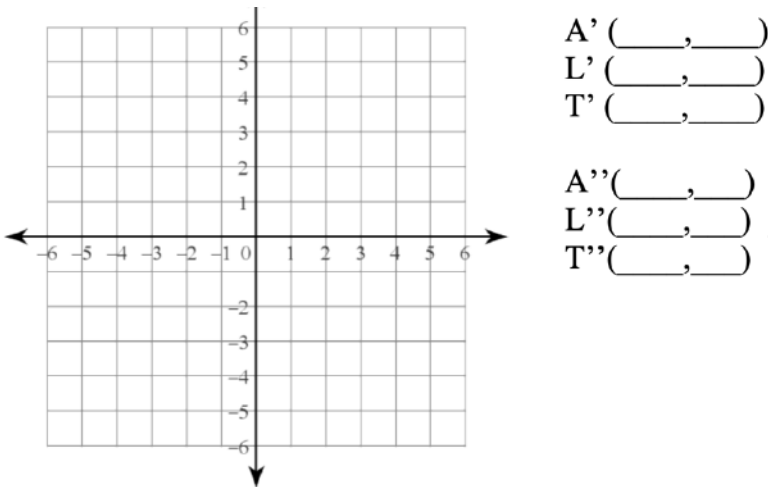
5) Given  $\triangle TAB$  where  $T(2, 3)$ ,  $A(1, 1)$ ,  $B(4, -3)$  using the following transformation  $(R_{x\text{-axis}} \circ r_{(270^\circ, 0)})$



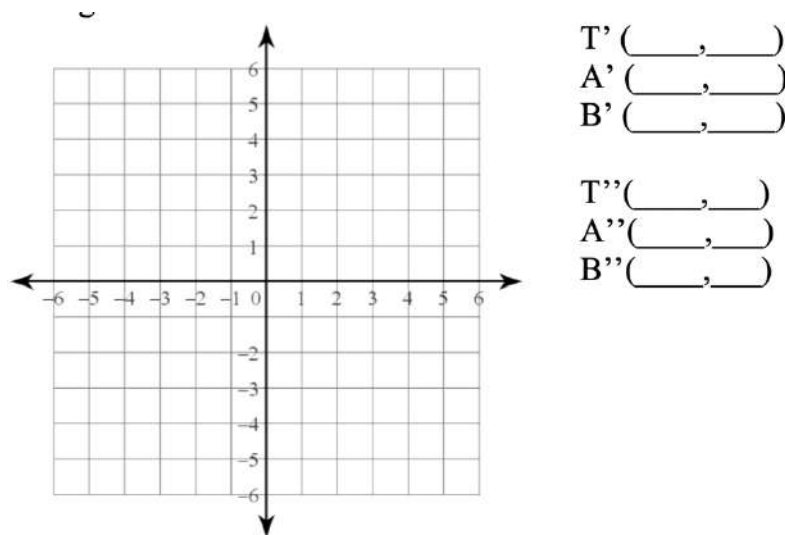
6. Given  $\triangle TAB$  where  $T(2, 3)$ ,  $A(1, 1)$ ,  $B(4, -3)$  using the following Transformation  $(T_{(-2, -1)} \circ R_{y=2})$



7) Given  $\triangle ALT$  where  $A(-5, -1)$ ,  $L(-3, -2)$ ,  $T(-3, 2)$  using the following transformation  $(R_{y=-x} \circ r_{(90^\circ, 0)})$



8) Given  $\triangle TAB$  where  $T(2,3)$ ,  $A(1, 1)$ ,  $B(2, 0)$  using the following translation  $(R_{y=1} \circ R_{y=-1})$



Write a single translation rule for the transformation from problem 8.

9) Identify the transformation(s) and if possible write the rule for the transformation

