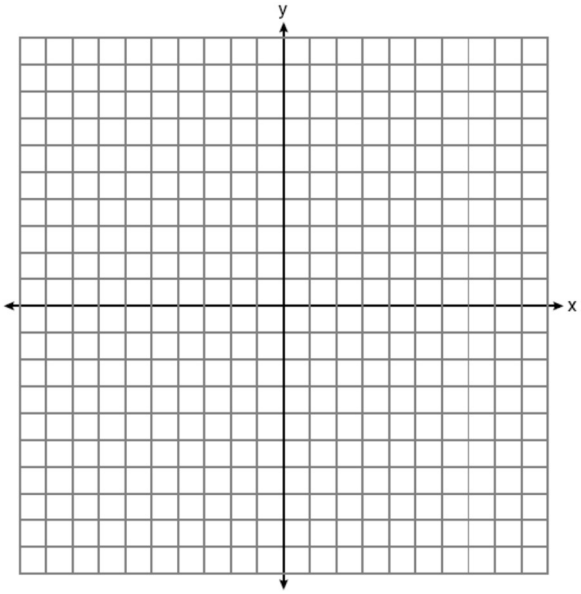
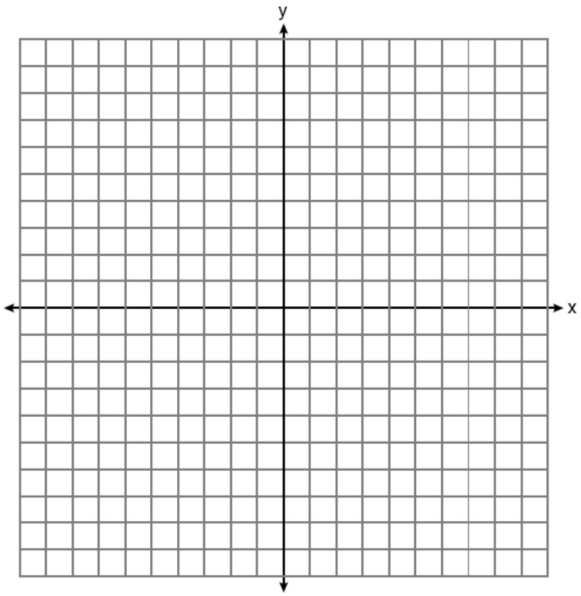
Name_____ Date_____
Mr. Schlansky Geometry

Rotations

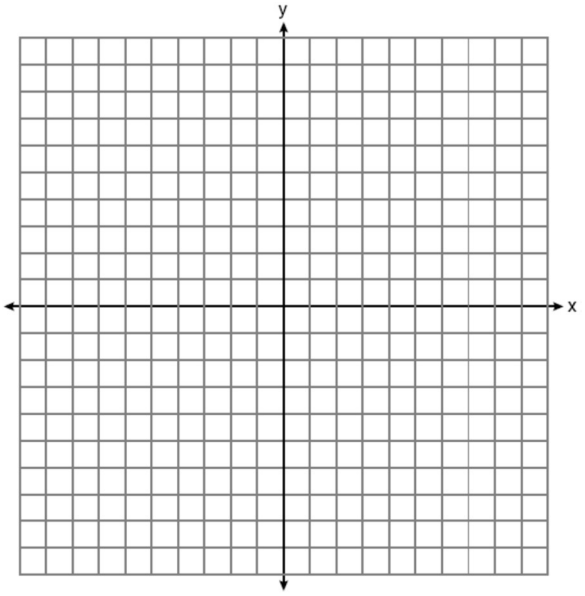
1. Triangle *SUN* has coordinates *S*(0,6), *U*(3,5), and *N*(3,0). On the accompanying grid, draw and label $\triangle SUN$. Then, graph and state the coordinates of $\triangle S'U'N'$, the image of $\triangle SUN$ after a counter-clockwise rotation of 90 centered at the origin.



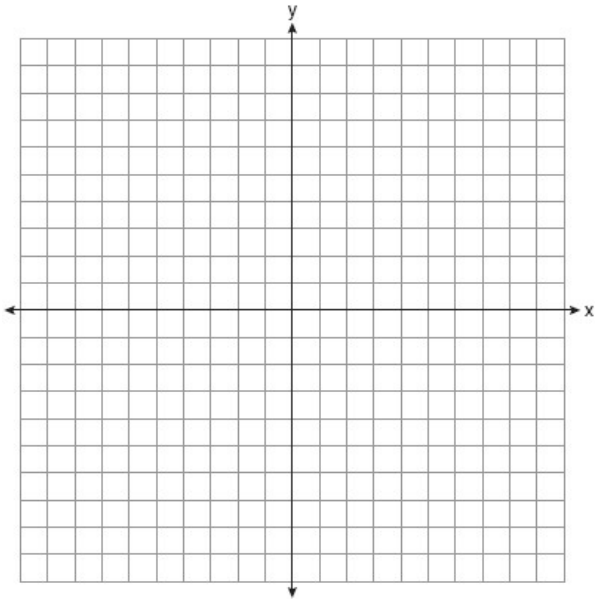
2. Triangle *ARF* has coordinates *A*(-3,6), *R*(5,2), and *F*(1,-4). On the accompanying grid, draw and label ΔARF. Then, graph and state the coordinates of $\Delta A'R'F'$, the image of ΔARF after a counter-clockwise rotation of 180 centered at the origin.



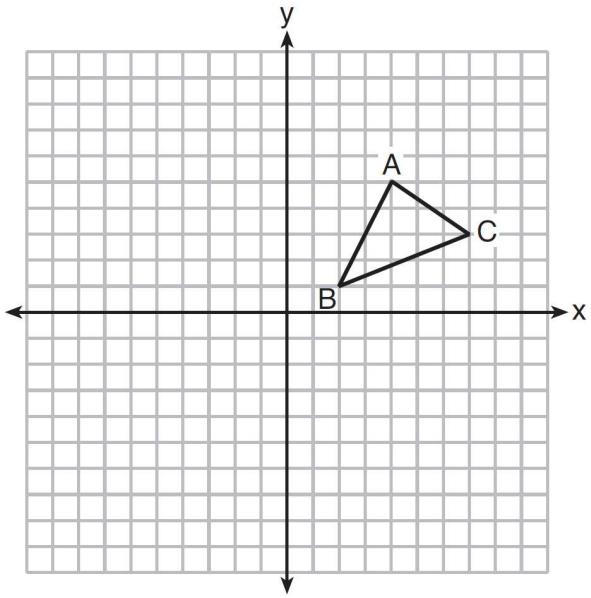
3. On the accompanying set of axes, graph ΔVXY if it is the image of $V(-2,3)$, $X(0,5)$, and $Y(4,4)$ after a counter-clockwise rotation of 270 centered at the origin.



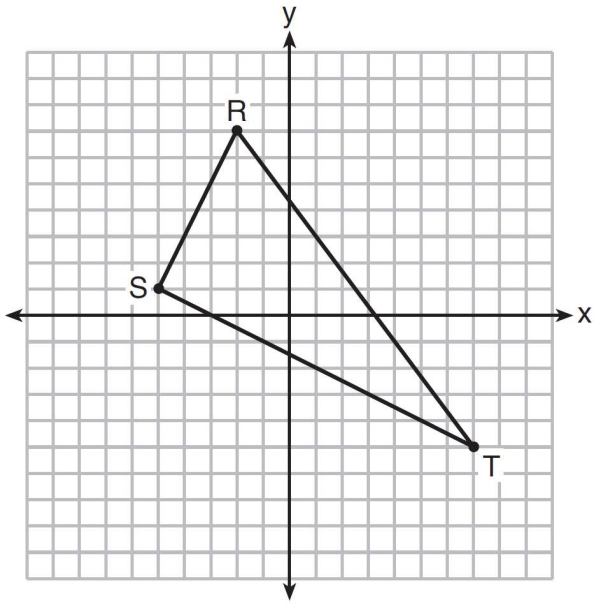
4. The coordinates of ΔQRS are $Q(-3,1)$, $R(-6,5)$, and $S(1,2)$. Graph and state the coordinates of the image of ΔQRS after a clockwise rotation of 90 centered at the origin and label it $\Delta Q'R'S'$.



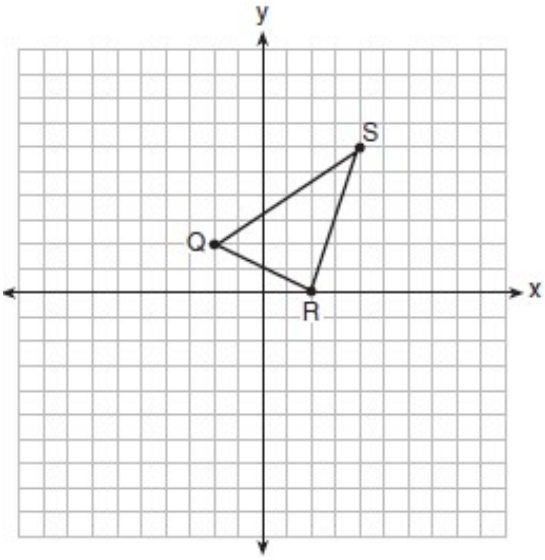
5. In the diagram below, $\triangle ABC$ is graphed with A(4,5), B(2,1), and C(7,3). Graph and state the coordinates of the image of $\triangle ABC$ after a clockwise rotation of 270 centered at the origin and label it $\Delta A'B'C'$.



6. Triangle *RST* is graphed on the set of axes below with R(-2,7), S(-5,1), and T(7,-5). Graph the image of ΔRST after a clockwise rotation of 180 centered at the origin and label it $\Delta R'S'T'$.



7. Triangle *QRS* is graphed on the set of axes below. Graph and state the coordinates of $\Delta Q'R'S'$, the image of ΔQRS after a counter-clockwise rotation of 270 centered at the origin



8. Quadrilateral *ABCD* is graphed on the set of axes below. State the coordinates of quadrilateral $A'B'C'D'$, the image of quadrilateral *ABCD* after a clockwise rotation of 270 centered at the origin.