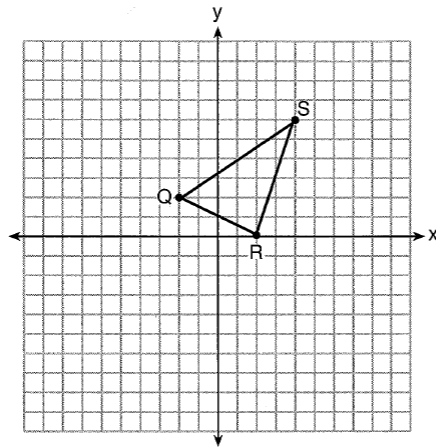


7) [4] Triangle QRS is graphed on the set of axes below.



On the same set of axes, graph and label $\triangle Q'R'S'$, the image of $\triangle QRS$ after a dilation with a scale factor of $\frac{3}{2}$ centered at the origin.

Use slopes to explain why $\overline{Q'R'} \parallel \overline{QR}$.

8) [5] If a triangle is formed by $A(-8, 1)$, $B(-4, 6)$ and $D(-6, -4)$, prove if the triangle is obtuse, acute, or right. Find a point C so that $ABCD$ is a trapezoid and prove that this trapezoid.