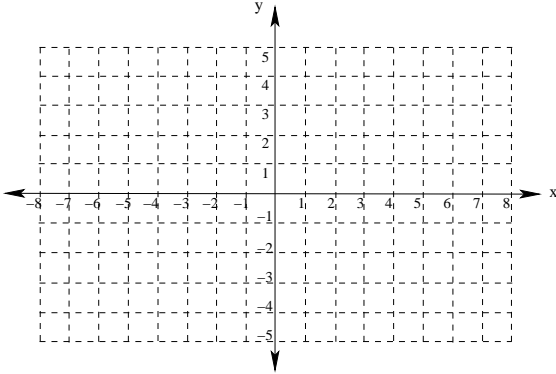


**Instructions:** Work the following problems in groups of 3-4 students. You will have about 20 minutes to complete the problems on this worksheet before we come back together to discuss them.

Given the points  $P : (2, -3)$ ,  $Q : (-4, 5)$ ,  $R : (0, -3)$ ,  $S : (2, 0)$

1. Graph  $P, Q, R$ , and  $S$  on the axes provided



2. Find  $d(P, Q)$

3. Find the equation for a circle with center  $P$  and passing through the point  $Q$ .

4. Find the coordinates of the midpoint  $M$  of  $\overline{PQ}$  and graph it on the axes above.

5. Find the Perimeter of  $\triangle PRS$ .

6. Find the Area of  $\triangle PRS$ .