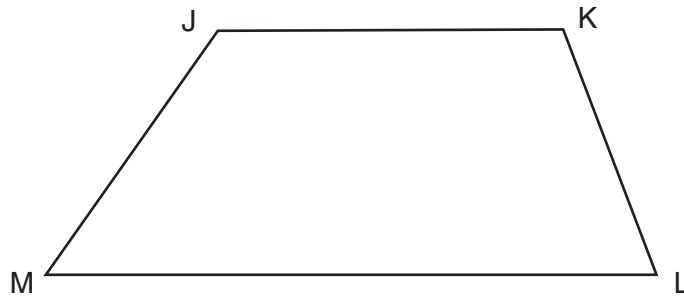


Part II

Answer all 7 questions in this part. Each correct answer will receive 2 credits. Clearly indicate the necessary steps, including appropriate formula substitutions, diagrams, graphs, charts, etc. Utilize the information provided for each question to determine your answer. Note that diagrams are not necessarily drawn to scale. For all questions in this part, a correct numerical answer with no work shown will receive only 1 credit. All answers should be written in pen, except for graphs and drawings, which should be done in pencil. [14]

25 Given: Trapezoid  $JKLM$  with  $\overline{JK} \parallel \overline{ML}$

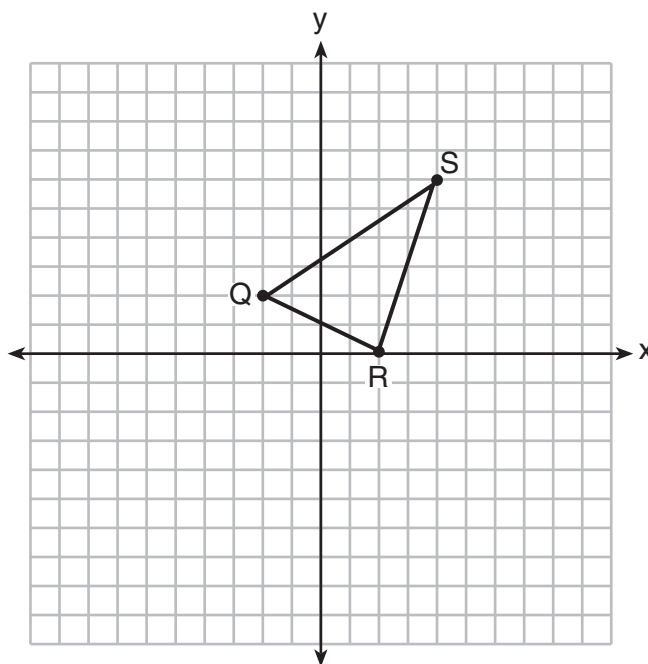
Using a compass and straightedge, construct the altitude from vertex  $J$  to  $\overline{ML}$ .  
[Leave all construction marks.]



### Part III

Answer all 3 questions in this part. Each correct answer will receive 4 credits. Clearly indicate the necessary steps, including appropriate formula substitutions, diagrams, graphs, charts, etc. Utilize the information provided for each question to determine your answer. Note that diagrams are not necessarily drawn to scale. For all questions in this part, a correct numerical answer with no work shown will receive only 1 credit. All answers should be written in pen, except for graphs and drawings, which should be done in pencil. [12]

32 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  $\overline{Q'R'} \parallel \overline{QR}$ .