

Determine the Midpoint between the following sets of points (show work):

1) $(0,0)$ and $(0,10)$

2) $(7,5)$ and $(3,1)$

3) $(13,29)$ and $(54, 86)$

4) $(-8,4)$ and $(0,0)$ form the endpoint of a diagonal of a given quadrilateral.

A. Determine the Midpoint (show work):

B. Determine the Slope (show work):

C. Determine the length (show work):

D. Based upon the characteristics of the above calculations, what can you conclude about the shape of the quadrilateral?

5) $(-8,4)$ and $(0,0)$ form the endpoint of a diagonal of a given quadrilateral.

A. Determine the Midpoint (show work):

B. Determine the Slope (show work):

C. Determine the length (show work):

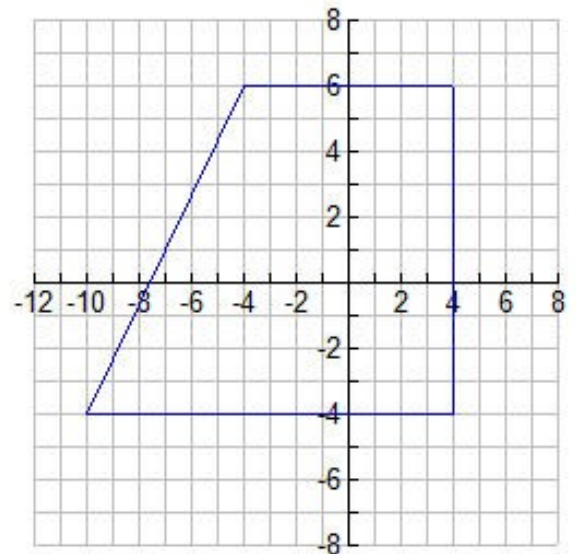
D. Based upon the characteristics of the above calculations, what can you conclude about the shape of the quadrilateral?

6) A student constructs the following quadrilateral:

A. Determine the Midpoints of the diagonals (show work):

B. Determine the Slopes of the diagonals (show work):

C. Determine the lengths of the diagonals (show work):



D. Based upon the characteristics of the above calculations, what can you conclude about the shape of the quadrilateral?

Complete the table below:

Shape	Are lengths of diagonals equal to each other?	Are midpoints of each diagonal located at the same point?	Does the intersection of the diagonals form a right angle?
Square			
Isosceles Trapezoid			
Rectangle			
Kite			
Parallelogram			
Rhombus			