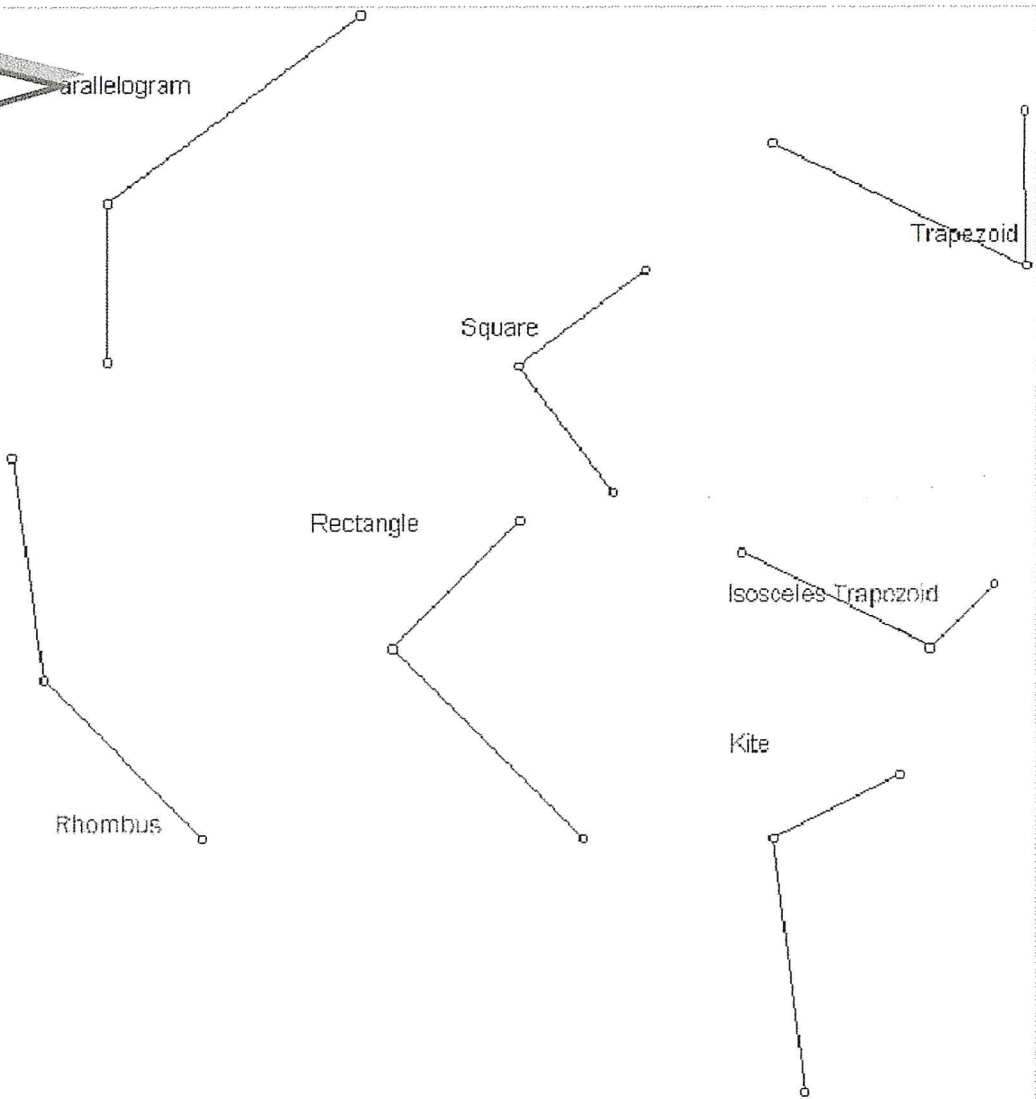


# Exploring Quadrilaterals: Sides, Angles, and Diagonals

Participant Page

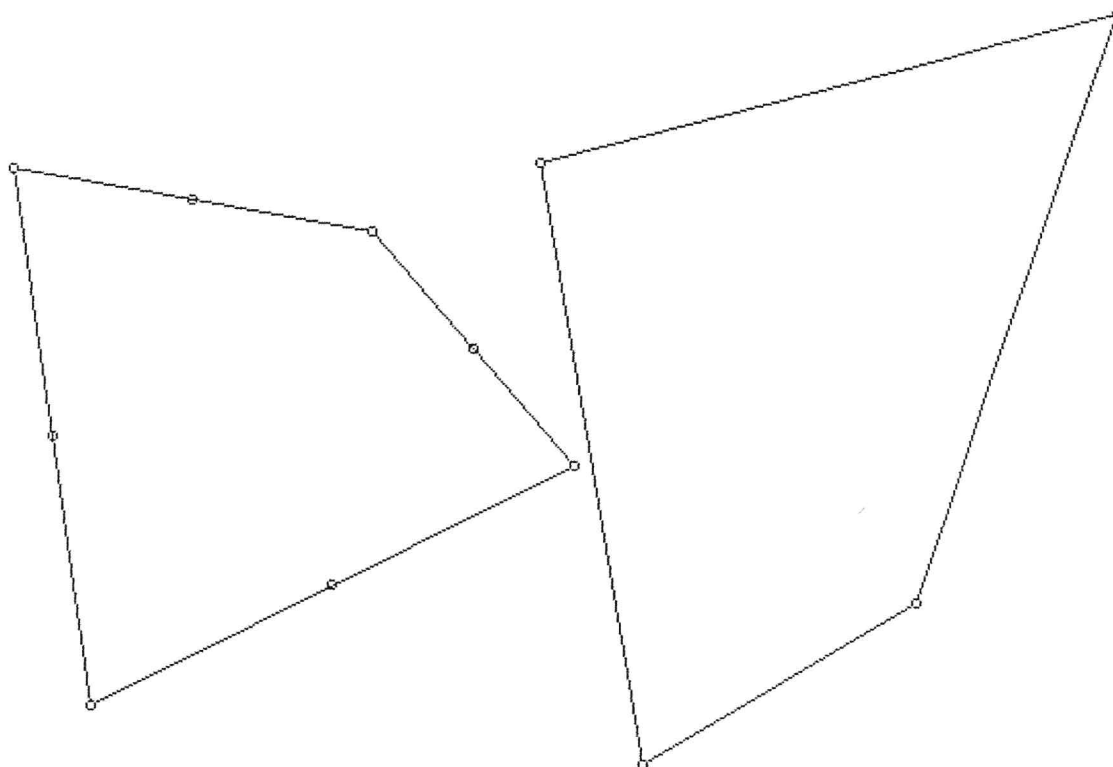
Each drawing at the right is the beginning of a quadrilateral. Finish each figure. Draw the diagonals, measure them and fill in the table below.



Quadrilaterals and Their Diagonals				
Quadrilateral	Diagonals Bisect Each Other?	Diagonals Congruent?	Diagonals Perpendicular?	Diagonals Bisect Opposite Angles?
Rhombus				
Parallelogram				
Square				
Rectangle				
Trapezoid				
Kite				
Isosceles Trapezoid				

## Quadrilaterals Within Quadrilaterals

Below are two quadrilaterals. One has the midpoints placed on the sides. If you connect those midpoints, you will have drawn another quadrilateral. Make a prediction as to what kind of quadrilateral it will be. Connect the midpoints and measure the sides and angles of quadrilateral formed to see if you were right. Find the midpoints on the other quadrilateral and connect them.



Quadrilaterals Within Quadrilaterals	
Original Polygon	Most specific name for the quadrilateral formed by connecting the midpoints
Quadrilateral	
Parallelogram	
Rectangle	
Square	
Rhombus	
Trapezoid	
Isosceles Trapezoid	

On a separate sheet of paper, draw at least two of each of the polygons listed in the table at left. Then find the midpoints of the sides and connect them to find the quadrilateral formed.