

Quadrilateral Properties

4 Sides	Opposite Sides Parallel	Opposite Sides Congruent	Opposite Angles Congruent	Diagonals Bisect Each Other	Consecutive Angles Supplementary	Diagonals Perpendicular	4 Right Angles	4 Congruent Sides	Exactly One Pair of Opposite Sides Parallel	Diagonals Congruent
Quadrilateral										
Trapezium										
Kite										
Trapezoid										
Isosceles Trapezoid										
Parallelogram										
Rectangle										
Rhombus										
Square										

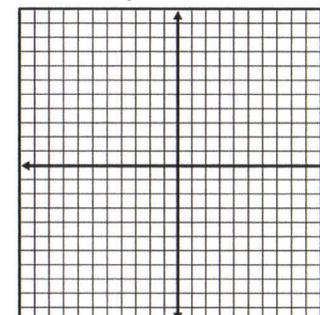
### Quadrilaterals Wrap-Up

1. Suppose a room is constructed in the shape of a rhombus so that one diagonal is 6 feet long and the other is 8 feet long. Find the perimeter of the rhombus.

2. The two diagonals of a square meet at  $(-1, -5)$ . Use the midpoint formula to determine which of the following ordered pairs represent the end points of one of the diagonals.

- A  $(4, 6)$  and  $(2, 4)$
- B  $(-4, -6)$  and  $(2, -4)$
- C  $(4, -6)$  and  $(-2, 4)$
- D  $(-4, 6)$  and  $(2, 4)$

3. Trapezoid ABCD has three of its vertices located at  $A(2, 4)$ ,  $B(6, -4)$ , and  $C(1, -6)$ . If segments AB and CD are the legs of the trapezoid, what is the slope of the median of Trapezoid ABCD?



4. Rectangle WXYZ has vertices at  $W(-4, 2)$ ,  $X(4, 6)$ ,  $Y(7, 0)$  and  $Z(-1, -4)$ . Laura wants to connect the midpoints of the rectangle to form a parallelogram. What are the vertices of the parallelogram that touches the midpoint of each of the four sides of Rectangle WXYZ?

