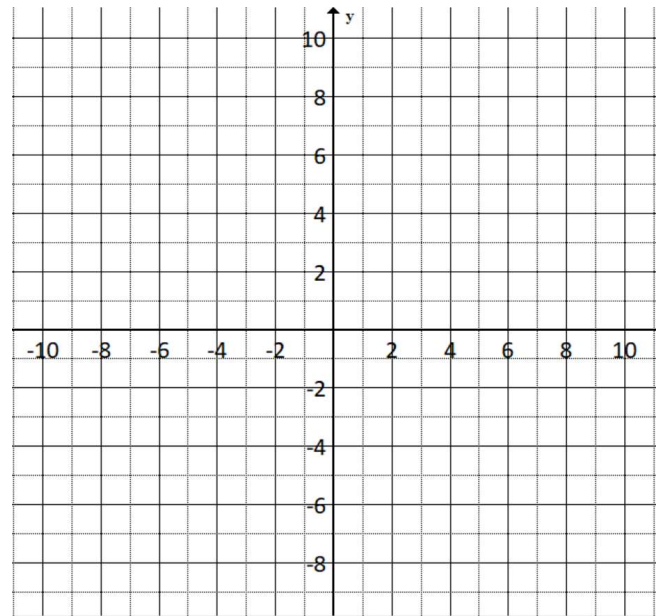


1. Plot points A(-3, -1), B(-1, 2), C(4, 2), and D(2, -1).

a. Find the length of all four sides.

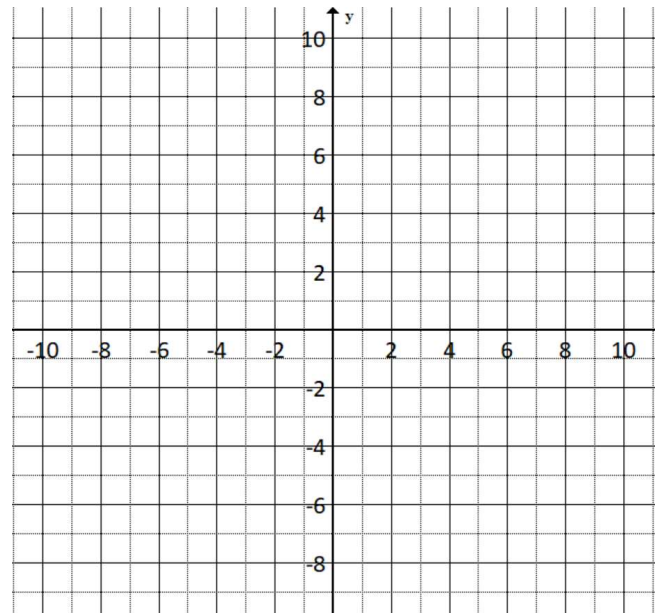


b. Find the slope of all four sides.

c. What specialized geometric figure is quadrilateral ABCD? How do you know?

2. Plot points A(1, 0), B(-1, 2), C(2, 5), and D(4,3).

a. Find the length of all four sides.



b. Find the slope of all four sides.

c. What specialized geometric figure is quadrilateral ABCD? How do you know?

d. Describe another way that we could have shown that this figure was a rectangle?

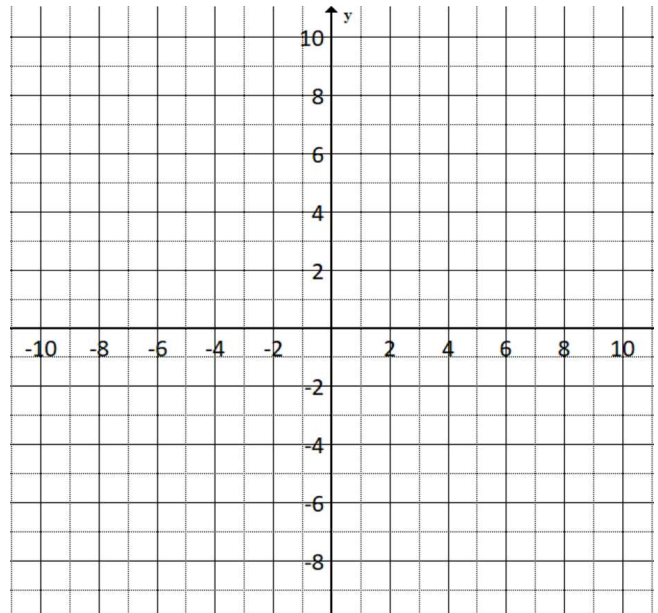
Geometry  
Proving Parallelograms and Rectangles Practice

Name \_\_\_\_\_

3. Plot the points  $W(2, -1)$ ,  $X(1, 3)$ ,  $Y(6, 5)$ , and  $Z(7, 1)$ .

a. What properties do you need to prove  $WXYZ$  is a parallelogram?

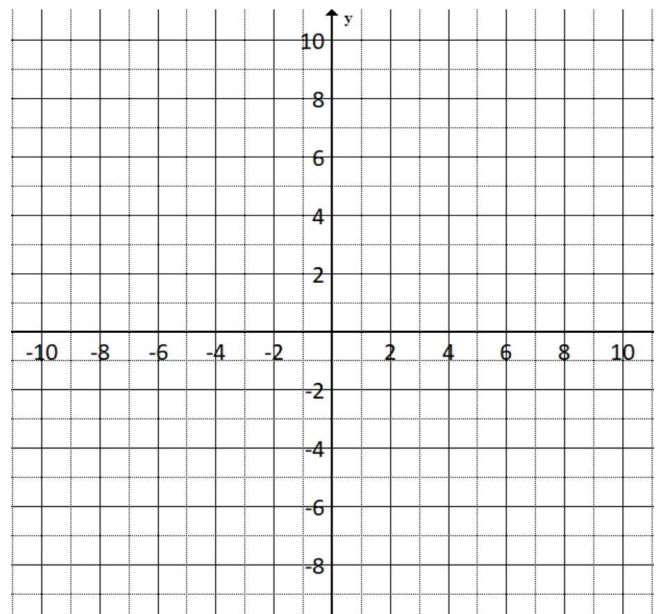
b. Show that  $WXYZ$  is a parallelogram.



4. Plot the points  $P(3, 1)$ ,  $Q(3, -3)$ ,  $R(-2, -3)$ , and  $S(-2, 1)$ .

a. What properties do you need to prove  $PQRS$  is a rectangle?

b. Show that  $PQRS$  is a rectangle.

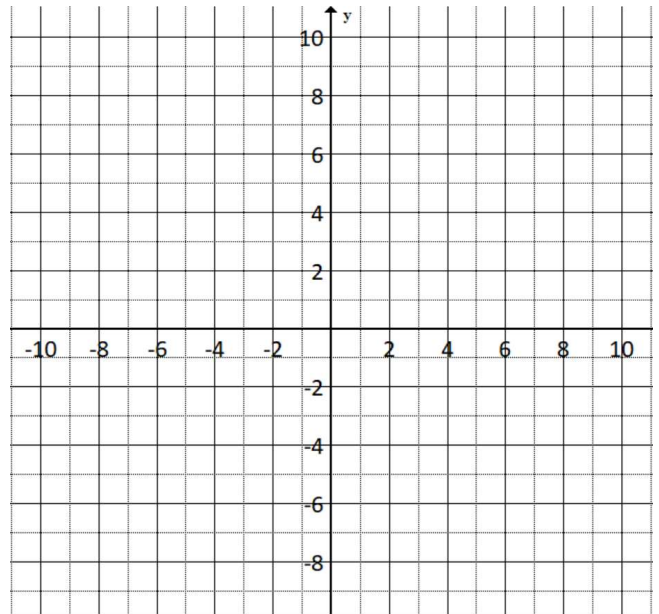


Geometry  
Proving Parallelograms and Rectangles Practice

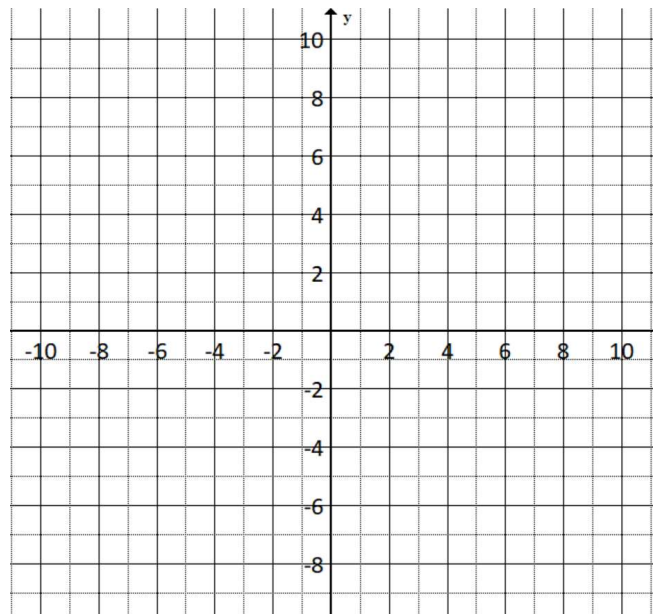
Name \_\_\_\_\_

Determine whether the given points represent the vertices of a parallelogram, rectangle, rhombus, or square. Justify your answer mathematically.

5.  $A(-2, 8)$ ,  $B(5, 8)$ ,  $C(2, 0)$ ,  $D(-5, 0)$

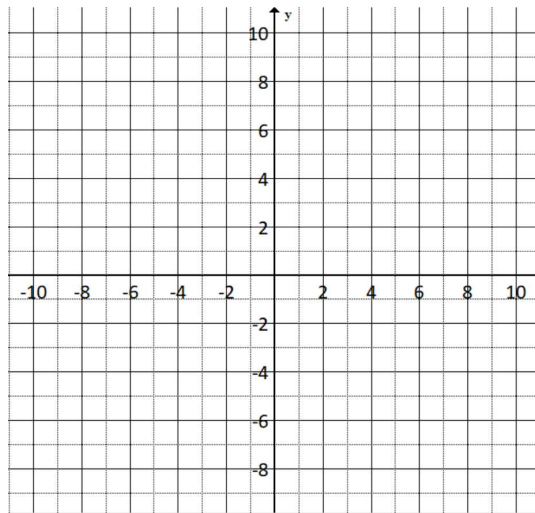


6.  $P(2, 5)$ ,  $Q(-4, 5)$ ,  $R(2, -7)$ ,  $S(-4, -7)$



**Multiple Choice. Choose the correct answer.**

7. Three vertices of a rectangle on the coordinate plane are  $(-2, -1)$ ,  $(6, -1)$ , and  $(-2, 1)$ .



Which of the following is the coordinate of the fourth vertex?

- A.  $(6,1)$                       B.  $(6, -1)$                       C.  $(-7, 1)$                       D.  $(2, 1)$