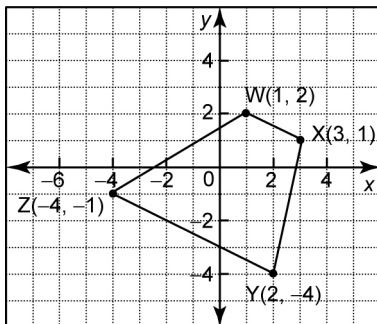
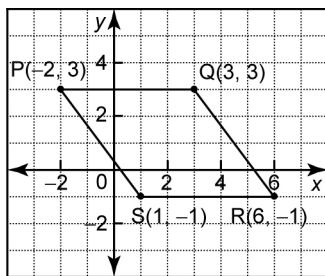


## Section 3.4 Practice Master

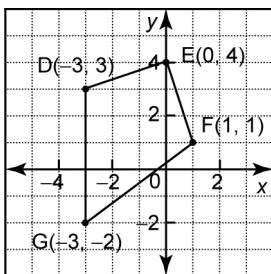
1. Verify that quadrilateral WXYZ is a trapezoid.



2. Verify that quadrilateral PQRS is a rhombus.



3. Verify that quadrilateral DEFG is a kite.



4. a) Draw the quadrilateral with vertices  $A(-2, 3)$ ,  $B(-5, 1)$ ,  $C(-1, -5)$ , and  $D(2, -3)$ .  
 b) Verify that quadrilateral ABCD is a rectangle.  
 c) Verify that the diagonals of ABCD are equal in length and bisect each other.
5. a) Draw the quadrilateral with vertices  $S(-2, 4)$ ,  $T(-4, -2)$ ,  $U(2, -4)$ , and  $V(4, 0)$ .  
 b) Find the midpoint D of side ST, the midpoint E of side TU, the midpoint F of side UV, and the midpoint G of side VS. Join the midpoints of adjacent sides to form a new quadrilateral DEFG.  
 c) Verify that opposite sides of DEFG are parallel.  
 d) Verify that opposite sides of DEFG are equal in length.
6. **Use Technology** Use geometry software to answer question 5. Outline your method.
7. a) Draw the trapezoid with vertices  $P(-3, 3)$ ,  $Q(2, 4)$ ,  $R(6, -1)$ , and  $S(-4, -3)$ .  
 b) Verify that the line segment joining the midpoints of the non-parallel sides of the trapezoid is parallel to the other two sides.
8. **Use Technology** Use geometry software to answer question 7. Outline your method.