Homework 2.4 – Verifying Figures

1. Show that the line segment joining points P(1,4) and Q(5,5) is parallel to the line segment joining points R(3,-4) and S(7,-3).

2. Show that TU, T(-1,7) and U(3,5), is perpendicular to VW, V(-4,1) and W(-1,7).

3. Prove what type of triangle is formed by J(2,5), K(5,-2), and L(-1,-2).

4. Show that triangle ABC is a right scalene triangle with points $A(-2,2)$, $B(-1,-2)$, and $C(7,0)$.	

5. A polygon is defined by points A(-5,1), B(5,3), C(2,-1), and D(-8,-3). Show that the polygon is a parallelogram.

6. Determine the type of quadrilateral described by $P(-5,1)$, $Q(3,3)$, $R(4,-1)$, and $S(-4,-3)$.