**6.5 - Optimization: Exploring Solutions**

Example 1:

Consider the situation: Restrictions: $x\in R, y\in R$

 Constraints: $x+3y\leq 9, x-y\leq 3, x\geq -3$

 Objective function: $P=2x+y$

1. Draw a graph to model the situation.
2. What are the points of intersection? (Vertices of the feasible region)
3. What point in the feasible region would result in the maximum value of the objective function?
4. What point in the feasible region would result in the minimum value of the objective function?