Problem Set #1

ECON 427: Mathematical Economics

(**due next class**)

1. Given the sets and , which of the following statements are true? **Explain your answer. An answer with no explanation will receive in zero credit.**

a) b) c)

d)

2. Referring to the sets in problem #1, find:

a) b)

3. Find the equilibrium conditions and for the following systems of supply and demand equations. **Graph your results**.

a)

b)

4. Which of the following are functions and why? Assume that *x* is the independent variable and *y* the dependent variable. **Explain your answer. An answer with no explanation will receive zero credit.**

a) b) c)