MIDTERM

Answer all questions. Points (= minutes) are given for each question.

1. (15) Briefly explain in a sentence or two how you could tell:
   a) whether a good is a normal good or an inferior good.
   b) whether a good is a luxury or a necessity.
   c) whether two goods are complements or substitutes.

2. (15) A consumer has the indirect utility function $V(p,y) = \log y - \log (p_1 + p_2)$. If this person had an initial endowment (1,0), what is their price offer curve? What is the income elasticity of demand for good 1? The own price elasticity of demand for good 1?

3. (15) If the initial endowment is on the contract curve, then there must always be a competitive equilibrium in which no trade takes place. True or false? Explain.

4. (15) In a competitive pure exchange economy, if the total value of excess demand for all types of food is zero, then the total value of excess demand for all non-food commodities must be zero. True or false? Explain.