PLCY 289 Problem Set 5

Question 6 is due in class on Thursday March 2 2006. You may work together but should not copy answers verbatim and must hand-in individual assignments. Assignments will not be returned so make a copy of what you turn in. [Interesting fact: Questions 1-5 appeared on the first test last spring as short answer (true, false, uncertain) problems.]

1. Agricultural households in developing countries often do not respond to changes in prices, typically marketing less of their products when output prices increase. These households are ‘irrational’.
2. If food stamps are inframarginal they are as good as cash.
3. In-kind transfers may be efficient if preferences are interdependent.
4. It is cheaper for the central government to induce the provision of a given level of desired good (D*) through a non-matching grant with maintenance of effort than it is through a matching grant.
5. In the face of a shortage, a ration coupon or an excise (per unit) tax are equivalent ways of reducing demand, although they have different distributive consequences.

6. Assume that the supply of water is perfectly inelastic in the short run. A prolonged drought in North America has lead Canada to stop exporting water to the US, and US emergency water reserves are under threat of being exhausted if present consumption patterns continue. The government wants to reduce the consumption of water until the drought ends. Analyze the impact on the market for water when each of these policies is imposed (assume that the purchase of water can be observed and controlled by the authorities). Aside from the equilibrium price and quantity, discuss the implications for exchange efficiency, transaction costs, and equity (see Friedman for a description of these concepts). Also think about the administrative cost of each policy.
   a. No action; the free market is permitted to function.
   b. A price freeze at the current world market price for water. Remember, Canadian imports have been cut-off.
   c. Non-transferable ration coupons are distributed to each household according to some transparent formula. Consider the case where enough coupons are issued to exhaust domestic supply of water, and the case where not enough coupons are issued.
   d. Transferable ration coupons are issued.
   e. An excise tax is placed on water purchases.

7. Problems 5-1, 5-2 and 5-3 on pages 160-161 in (F) are also good practice.