

**ECON 6500 Spring 2008**  
**Assignment 1: Consumer Theory**

**Instructions:**

The following are a set of TRUE or FALSE statements. You are to determine if they are true or false and give a logical explanation for your answer. Saying "True" or "False" without an explanation is worth ZERO. Usually a carefully drawn graph and a few sentences are all that is required.

1. An indifference curve is defined as a set of bundles that a consumer with a given income can afford, and among which she or he is indifferent.
2. More is preferred to less means that if the total number of goods in bundle A exceeds the total quantity in B, than A is preferred to B.
3. A diminishing marginal rate of substitution implies that an individual requires increasing amounts of one good as he gives up more and more of the other good to remain at the same utility level.
4. More is preferred to less implies that two bundles with different amounts of either good 1 or good 2 and the same amount of the other good cannot be on the same indifference curve.
5. Since utility is ordinal and not cardinal, interpersonal comparisons cannot be made.
6. The *MRS* for indifference curve  $x_1 + x_2 = c$  is diminishing.
7. The indifference curve between garbage and ice cream would be positively sloped.
8. If the total benefit of loud music equals the total cost of loud music, then the optimal amount of loud music is being played.
9. A commodity bundle lying below a consumer's budget line must be inferior to all bundles lying on the budget line.
10. Assume that a certain individual consumes only goods 1 and 2. If the prices of good 1 and good 2 double and his income doubles, then the quantity demanded for goods 1 and 2 will not change.