

ECO 401
Fall 2004
Problem Set #2

Due: Monday, September 20

1. Suppose the following: In period 1 your money income was \$100 per week, enchiladas were \$4 apiece, banana splits were \$1 each; no other goods are available. In period 2 your money income increases to \$200, enchiladas rise to \$10, and banana splits to \$2. Illustrate your initial and new budget constraints. Can we say anything unambiguous about your standard of living? If so, what?
2. Manfred is consuming beer and pizza such that his marginal rate of substitution between beer and pizza is 2 beers for 1 pizza. Manfred's income is \$36 per week. Pizzas are priced at \$4 each, and beers are priced at \$1 each. Illustrate Manfred's situation in a budget constraint-indifference curve diagram. Is Manfred maximizing utility? Explain why or why not.
3. Mick has \$100 of income per week available for recreational activities, including exercise, movies, restaurant meals, etc. Mick's health club charges a fee of \$4 per hour, and Mick chooses to use the facility for 10 hours per week.
 - a) Illustrate Mick's consumption choice in a diagram with health club usage on the horizontal axis and other recreational activities on the vertical axis.
 - b) Now Mick's health club institutes a new pricing policy. A fixed fee of \$30 per week is charged for access to the facilities, but then a rate of \$1 per hour is charged for each hour of utilization. Is Mick better off as a result of this change? Explain your answer using the diagram that you drew in (a).
4. Tommy Twit is happiest when he has 8 cookies and 4 glasses of milk per day. Whenever he has more than his favorite amount of either food, giving him even more makes him worse off. Whenever he has less than his favorite amount of either food, giving him more makes him better off. His mother makes him drink 6 glasses of milk and only allows him 4 cookies per day. One day when his mother was gone, Tommy's sadistic sister made him eat 13 cookies and only give him 1 glass of milk, despite the fact that Tommy complained bitterly about the last 5 cookies that she made him eat and he begged for more milk. Although Tommy complained later to his mother, he had to admit that he liked the diet that his sister forced on him better than what his mother demanded. Draw indifference curves for Tommy that are consistent with this story.