

Sample Exam 2 Questions  
Econ 349

1. Family size in the US decreased for 50 years after 1900 while per capita income increased. Given constant tastes, children must be an inferior good. Evaluate. (Hint: Can you think of an alternative explanation for the change in family size using the tools developed in class?)
2. You buy only beer and pretzels. One day the price of beer goes down, the price of pretzels goes up, and you discover that you can just exactly afford to continue buying the basket you were buying all along. Do these changes leave you happier, less happy, or equally happy? Explain. Illustrate your answer with indifference curves and budget constraints. (Plot beer on the horizontal axis.)
3. Assuming that you like to drive, but dislike breathing polluted air, draw your indifference curves between car rides and pollution. (Plot car rides on the horizontal axis.) Assuming that you have to breathe one unit of polluted air for each ten miles that you drive, draw the appropriate constraint. Indicate on your graph the optimal amount of pollution for you to breathe? Under what circumstance would the optimal amount of pollution for you to breathe be zero?
4. Suppose that you get rid of your old gas-guzzler and buy a new fuel-efficient car. Driving is now cheaper, but on the other hand you have to make monthly car payments. You find that, on balance, you are exactly as happy as you were before. Illustrate this situation using indifference curves and budget constraints between "Car Rides" and AOG. Are you driving more or less than you were before? Explain why or why not.
5. Suppose, upon graduation, you receive two job offers. One offer provides a salary of \$20,000 per year but provides no fringe benefits. The other job pays you \$19,000 per year but allows you to consume up to 20 physician office visits per year with the bill paid by your employer. Suppose that the market price of an office visit is \$50.
  - a) Draw your budget line showing your options to consume visits to physicians each year and expenditures on AOG under each job offer. (Graph each job offer on the same graph. Put visits on the horizontal axis.)
  - b) Suppose you are young and healthy and expect to go to the doctor about 4 times a year. Which job offer would you choose and why? Use indifference curves to show this choice.
  - c) Assuming that you actually do make 4 visits per year, show how much income you can retain to spend on all other goods if you take the job offer selected above.
6. Assume that an individual belongs to tennis club and pays \$30 a month in dues. The individual can play as many hours of tennis per month as desired with no additional fees. This individual plays 30 hours of tennis per month.
  - a) Sketch the initial consumer equilibrium using budget lines and indifference curves. Plot the number of hours playing tennis on the horizontal axis and AOG on the vertical axis.
  - b) Assume now that the club discontinues the \$30 per month dues and begins to charge \$1 per hour of tennis. What will happen to the number of hours the individual now plays each month? Explain. Sketch the new equilibrium on the same graph used above.