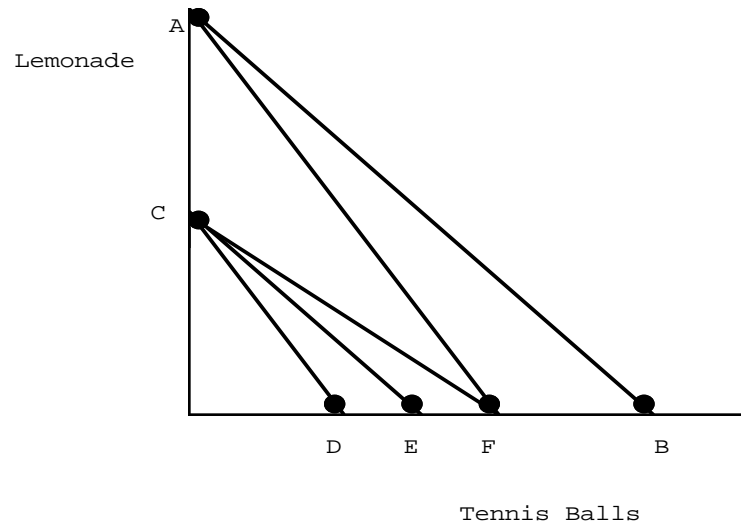


Mock Midterm 1

Part I. Multiple Choice (70 points): For each of the following choose the letter that corresponds to the best answer.

Questions 1 - 4 refer to Gabriella's budget lines given in the diagram:



1. Suppose Gabriella's original budget line is CE. After an increase in income at fixed prices her budget line would shift to:
 - a) CD.
 - b) CF.
 - c) AB.
 - d) Gabriella's budget line would not change.
2. Again suppose the original budget line is CE. Suppose the price of tennis balls has gone up, but income and the price of lemonade remains unchanged. Then the budget line shifts to:
 - a) CD.
 - b) CF.
 - c) AB.
 - d) Gabriella's budget line would not change.
3. Again suppose the original budget line is CE, but now suppose the prices of tennis balls and lemonade double and income also doubles. The new budget line is:
 - a) CD.
 - b) CF.
 - c) AB.
 - d) Gabriella's budget line would not change.
4. Finally, suppose Gabriella's original budget line is given by CF and the price of lemonade falls. The new budget line is:
 - a) CD.
 - b) CE.
 - c) AF.
 - d) Gabriella's budget line would not change.

5. Suppose there are only two commodities in the world. They can both be:

- a) Inferior goods.
- b) Goods with income elasticity greater than 1.
- c) Goods with income elasticity less than 1.
- d) Normal goods.

6. Suppose Spock consumes only vegetables and books on logic. If Spock's income consumption curves for vegetables and books on logic are downward sloping then for Spock:

- a) Vegetables and logic books are both inferior.
- b) Vegetables and logic books are both normal.
- c) Vegetables are normal, logic books are inferior.
- d) One of the commodities is normal, the other is inferior, but you can't tell which is normal and which is inferior.

7. If a 5% increase in income leads to a 17% increase in the demand for diamonds, the income elasticity of demand for diamonds is:

- a) 0.29.
- b) - 0.29.
- c) 3.4.
- d) 17.

8. The sign of the substitution effect is always:

- a) Negative.
- b) Positive.
- c) Zero.
- d) Impossible to tell.

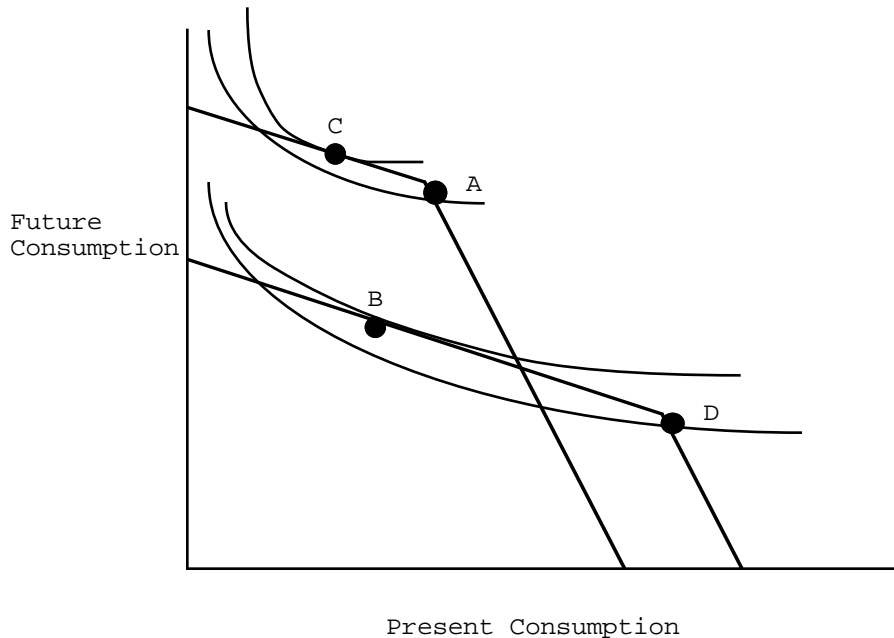
9. Taxing the consumption of a single commodity leaves a typical consumer _____ by raising the same amount of revenue through a lump-sum tax.

- a) worse off than
- b) better off than
- c) as well off as
- d) neither better or worse off than

10. When the interest rate is 8% Scrooge is a saver. If the interest rate decreases to 5% Scrooge:

- a) Saves less.
- b) Saves more.
- c) Saves the same amount.
- d) There is insufficient data to tell.

Questions 11 - 14 refer to the following diagram:



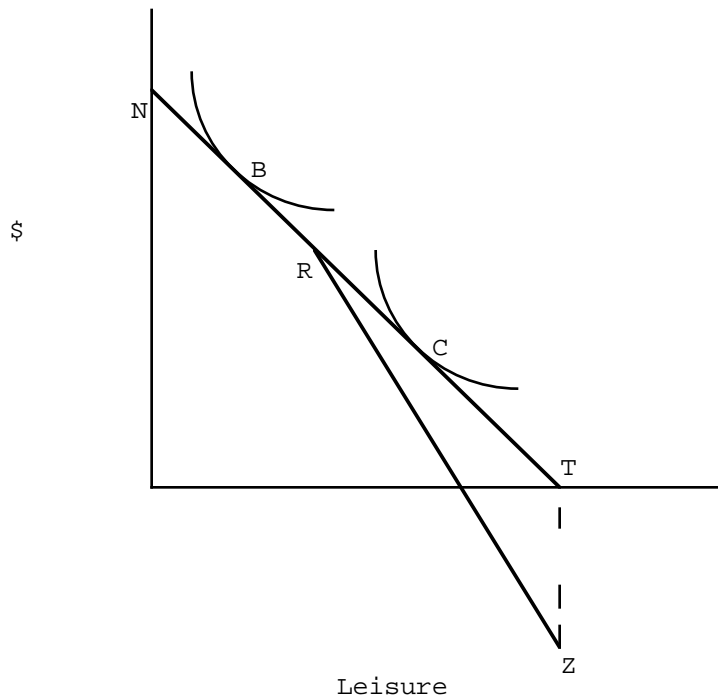
11. Rodney has a choice between two jobs. The first pays him present and future incomes represented by the point A while the second pays him present and future incomes represented by the point D. If his budget constraint under the two jobs are as depicted then:
- The rate at which Rodney can borrow is less than the rate at which Rodney can lend.
 - The rate at which Rodney can borrow is equal to the rate at which Rodney can lend.
 - The rate at which Rodney can borrow is greater than the rate at which Rodney can lend.
 - There is not enough information to compare the borrowing and lending rates.
12. Suppose Rodney's optimal consumption choice if he takes the first job is represented by the point C, while his optimal consumption choice if he takes the second job is represented by the point B. Then if he takes either job, he is:
- A borrower.
 - A lender.
 - Neither a borrower nor a lender.
 - The answer depends on which job he takes.
13. In order to maximize his utility, Rodney should choose:
- The first job.
 - The second job.
 - Either job since he is indifferent between them.
 - The job with the higher present value at the borrowing rate.
14. In comparing the two jobs:
- The first job has a higher present value at the borrowing rate but a lower present value at the lending rate.
 - The second job has a higher present value at the borrowing rate but a lower present value at the lending rate.
 - Both jobs have the same present value at the borrowing rate.
 - Both jobs have the same present value at the lending rate.

Use the following information for questions 15 and 16:

Sabrina and Kris are contestants on Let's Make a Deal. Monty offers each of them \$5000 in cash or the choice to take what's behind the curtain. Monty tells them there is either a new auto, with cash value equal to \$10,000, or a goat, with no cash value. Monty assures them that both possibilities are equally likely.

15. If Sabrina is risk-loving, she picks:
- The \$5000 in cash.
 - What's behind the curtain.
 - Either the cash or the curtain. She is indifferent between the alternatives.
 - The goat.
16. If Kris is risk-averse, she picks:
- The \$5000 in cash.
 - What's behind the curtain.
 - Either the cash or the curtain. She is indifferent between the alternatives.
 - The goat.
17. A risk-averse person facing actuarially fair coverage will:
- buy full coverage.
 - buy more than full coverage.
 - buy less than full coverage.
 - never buy any insurance.

Part II. Problem (30 points): Answer the following problem graphically and provide a written explanation for your conclusions.



Suppose the government imposes a lump-sum tax on individuals and rebates the money back to people in proportion to the number of hours they choose to work, up to a certain point. This policy

changes the budget constraint between leisure and consumption from NT to NRZ, where TZ is the size of the lump-sum tax.

What is the effect on Bill's labor supply if his pre-transfer equilibrium occurs at B? What is the effect on Cindy's labor supply if here pre-transfer equilibrium occurs at C?

Is Cindy better off or worse off under the transfer policy? What about Bill?

Contrast the results of this policy with the results you get under an AFDC policy. Explain the reasons for the similarities and differences.