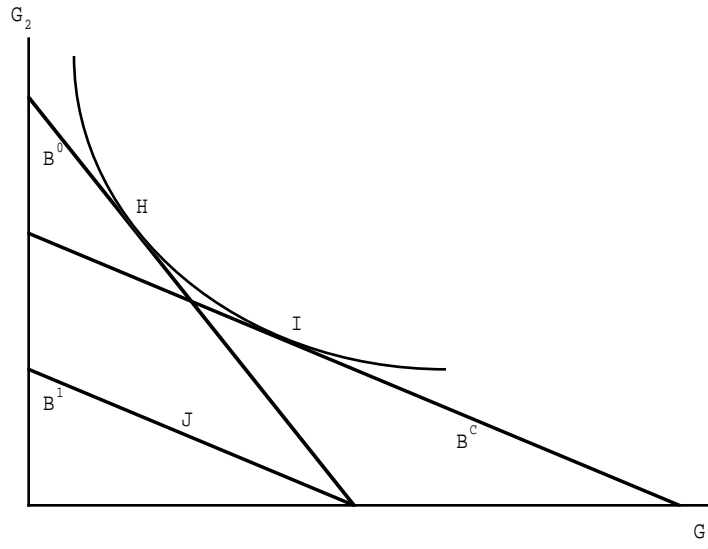


Midterm 1

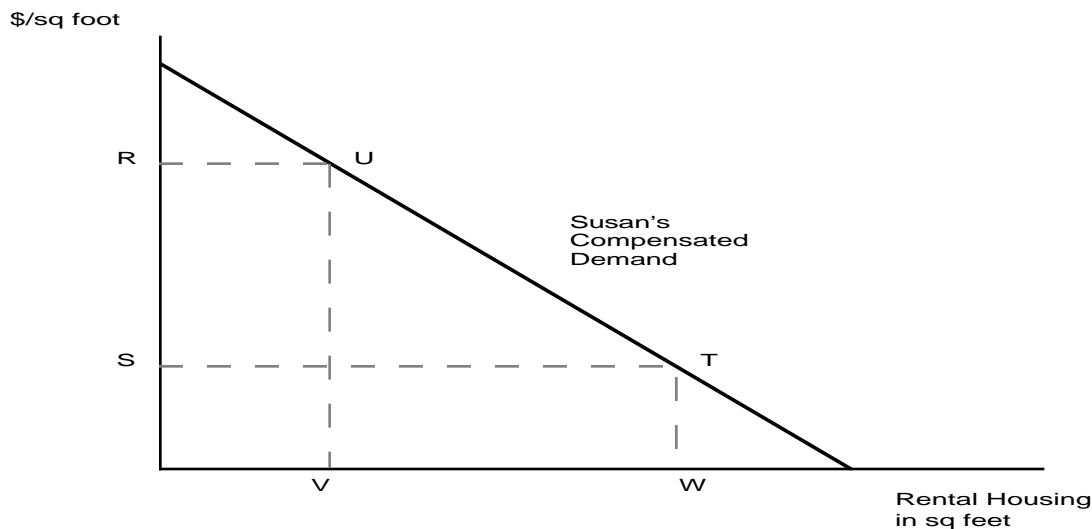
Part I. Multiple Choice (50 points): For each of the following choose the letter that corresponds to the best answer.

Questions 1 - 4 refer to the following diagram:



1. The graph depicts:
 - a) An increase in money income.
 - b) A decrease in real income.
 - c) An increase in p_2 .
 - d) A decrease in p_1 .
2. The substitution effect is measured by:
 - a) The move from H to I.
 - b) The move from I to J.
 - c) The move from H to J.
 - d) The area under the budget line B^C .
3. The income effect is measured by:
 - a) The move from H to I.
 - b) The move from I to J.
 - c) The move from H to J.
 - d) The area under the budget line B^C .
4. As compared with the budget line B^0 , the budget line B^C has:
 - a) The same real income.
 - b) A higher real income.
 - c) The same relative price.
 - d) A higher relative price.

Questions 5 through 8 refer to the following diagram.



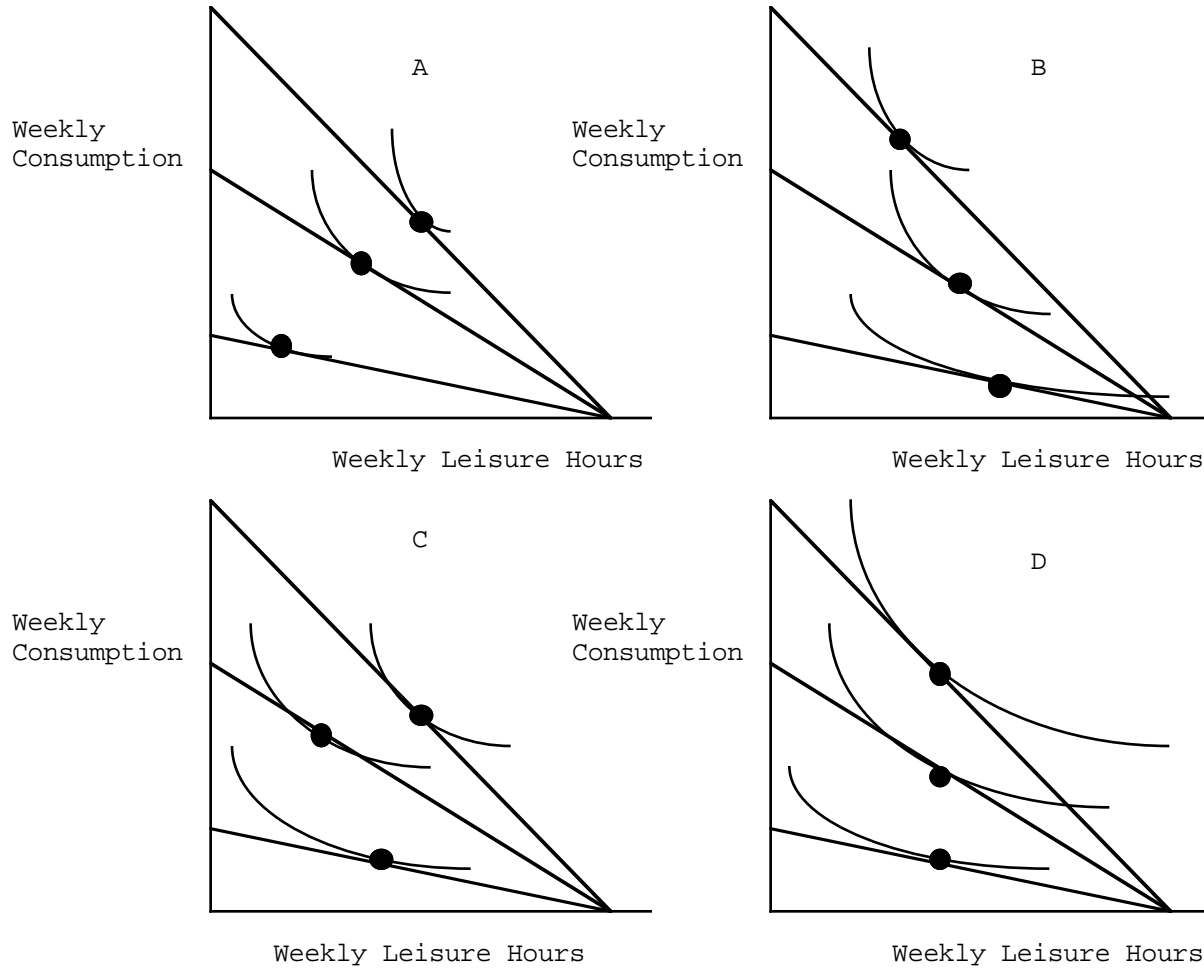
5. Suppose the original rental price of housing is R and this price falls to S. Then the movement for V to W measures:
 - a) Susan's overall increase in demand for rental housing.
 - b) The income effect in Susan's demand for rental housing.
 - c) The substitution effect in Susan's demand for rental housing.
 - d) The equivalent variation due to the price change.

6. The area RSTU represents
 - a) The equivalent variation from the price change.
 - b) The compensating variation from the price change.
 - c) The change in consumer surplus from the price change.
 - d) The change in producer surplus from the price change.

7. If rental housing is a normal good for Susan, then the ordinary demand curve through point U
 - a) Is the same as the given compensated demand curve.
 - b) Is more elastic than the compensated demand curve.
 - c) Is infinitely elastic.
 - d) Is less elastic than the compensated demand curve.

8. If rental housing is a normal good for Susan, then the change in consumer surplus from the price reduction
 - a) Equals the equivalent variation.
 - b) Is greater than the equivalent variation.
 - c) Equals the compensating variation.
 - d) Is greater than the compensating variation.

Questions 9 and 10 refer to the four graphs on the next page.



9. An upward sloping labor supply curve corresponds to graph:

- a) A.
- b) B.
- c) C.
- d) D.

10) A perfectly inelastic labor supply curve correspond to graph:

- a) A.
- b) B.
- c) C.
- d) D.

Part II. Economics for the Noneconomist Question (25 points):
 Argue whether the following statement is true or false. You will be graded, not so much on which side of the position you take, but on how well you support your argument (a real life example or two might be very helpful in this respect) and on how you organize your argument. A paragraph or two should be sufficient for you to make your case.

"Other things equal, a person will necessarily work less after receiving a cash transfer from the government."

Part III. Problem (25 points): Answer the following problem graphically and provide a written explanation for your conclusions.

A part-time graduate student here, at the University of Illinois, is also working as an instructor at Parkland College. The student devotes a fraction, x , of her working time per semester to teaching and the remaining fraction, $1-x$, to doing her research. The student wishes she were working on her pathbreaking dissertation full-time, since she knows that the better her thesis is the more fame and glory she will receive from the profession and, more importantly, the more money she will receive throughout the rest of her career. However, the student wants to live a little right now and knows that incomplete dissertations are regarded as poor collateral by banks. In fact, the student finds capital markets completely inaccessible. (Grad students who pursue an academic career have worse access to capital markets than undergrads!)

a) Making any other simplifying assumptions you deem appropriate, formulate the student's problem which determines the optimal value of research time.

b) If, in an economy move, Parkland College lowers the wage paid to its part-time instructors, what effect, if any, does this have on the amount of time the student devotes to research? Make sure that you justify your answer.

(HINT: BE CAREFUL WHEN YOU IDENTIFY THE COMMODITIES. IDENTIFY THE EXTREME POINTS ON THE BUDGET CONSTRAINT.)