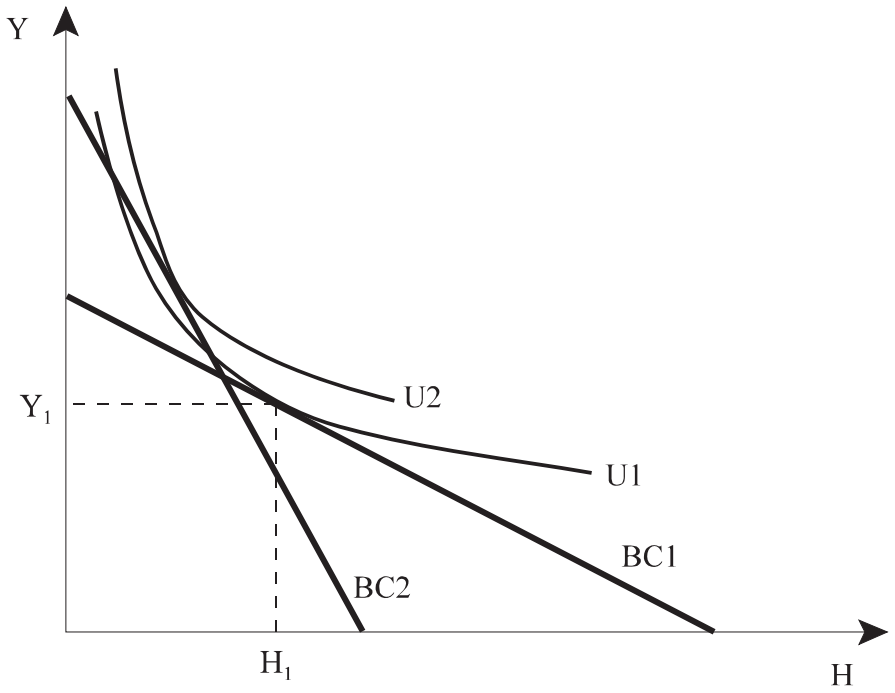
Short Questions

1 Consider a worker who is moving from Champaign to Chicago. His budget constraint in Champaign is given by the line *BC1*, and the consumer spends his money on housing *H* and other goods *Y*. The optimal consumption of *H* and *Y* in Champaign is given by H_1 and Y_1. The worker's budget constraint in Chicago is given by *BC2*. The price of other goods, *Y*, is the same in Chicago as in Champaign, but the price of housing differs.



a. Is the worker's salary in Chicago higher or lower than his salary in Champaign? Give a complete explanation to your answer.

b. Is the price of housing in Chicago higher or lower than the price of housing in Champaign? Give a complete explanation to your answer.

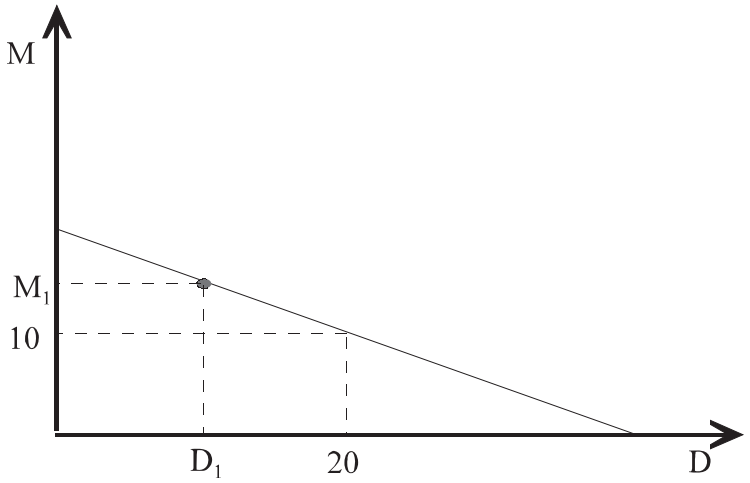
c. "The worker is worse off in Chicago than he was in Champaign, because after he moves to Chicago he can no longer afford the consumption he enjoyed in Champaign." Is this statement true or false? Explain your answer.

2. Consider two goods X and Y that are perfect complements. Draw a couple of indifference curves with good Y on the vertical axis and good X in the horizontal axis. On the same figure, draw a budget constraint and show the optimal consumption of X and Y.

3. Consider two goods X and Y that are perfect substitutes. Draw a few indifference curves with good Y on the vertical axis and good X in the horizontal axis. On the same figure, draw a budget constraint and show the optimal consumption of X and Y.

4. The following figure plots a budge constraint for DVD rental (D) and movie theater tickets (M). Movie theater tickets have a price of 8 and DVD rentals a price of 2. A consumer devotes *I* dollars on his motion picture entertainment, i.e., the he will spend *I* dollars on *M* and *D*.

This person's budget constraint is picture below.



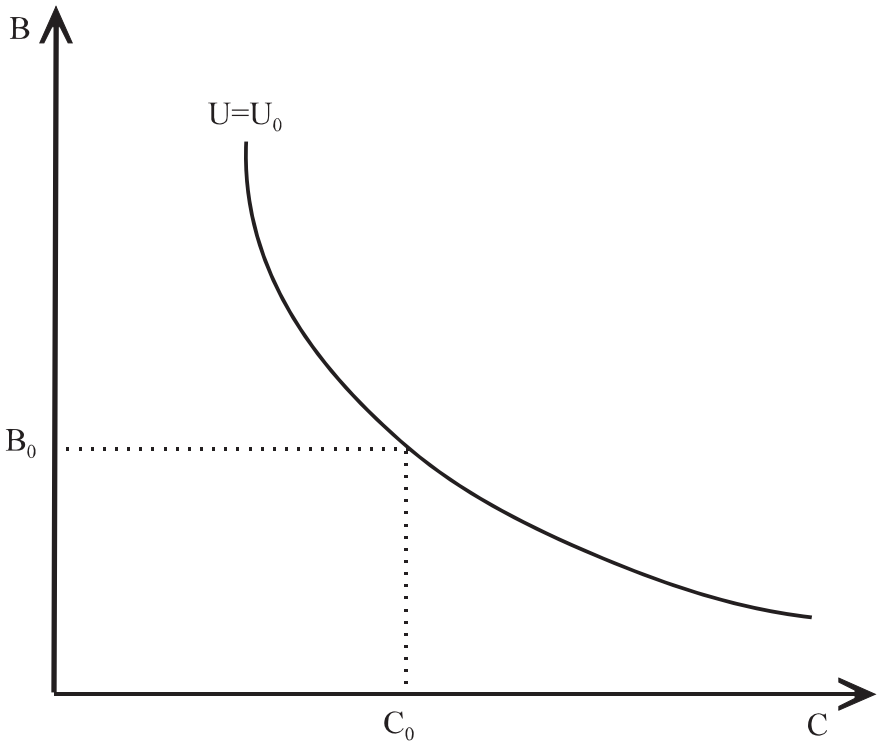
a. What is the value of *I*? Your answer should be a number.

b. Write in the above figure the numerical value of the M-axis and D-axis intercepts.

c. Compared to the consumption of 10 movie theater tickets and 20 DVD rentals, would the consumption of M_1 movie theater tickets and D_1 DVD rentals cost (i) more, (ii) as much as, (iii) less, or (iv) is it impossible to tell?

d. Compared to the consumption of 10 movie theater tickets and 20 DVD rentals, would the consumption of M_1 movie theater tickets and D_1 DVD rentals yield (i) more utility, (ii) as much utility, (iii) less utility, or (iv) is it impossible to tell?

5. A consumer is observed to consume B_0 units of beef and C_0 units of chicken. The indifference curve that goes through this consumption bundle is given in the figure below.

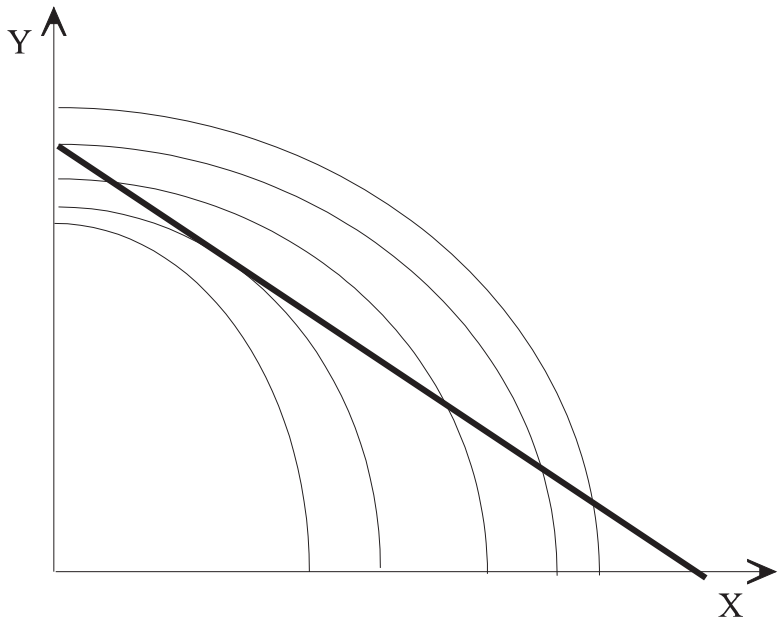


a. For this consumer, are beef and chicken (i) complements, (ii) perfect substitutes, (iii) imperfect substitutes, or (iv) is no determination possible on the basis of the above figure?

b. In the above figure, draw this person's budget constraint for beef and chicken that is consistent with B_0 units of beef and C_0 units of chicken being the utility maximizing choice.

c. Suppose the price chicken goes up. Draw in the above graph this consumer's new budget constraint following this price increase.

6. In the figure below, the budget constraint is drawn with a bold line. A set of indifference curves is drawn in regular width. Finally, utility is increasing in both *X* and *Y*, i.e., indifference curves that are further out from the origin correspond to higher utility.



On this figure, label the combination of *X* and *Y* that maximizes this consumer's utility.

Problems

There are none for this lecture.