

Intermediate Microeconomics

Homework #1

Due: Oct. 12

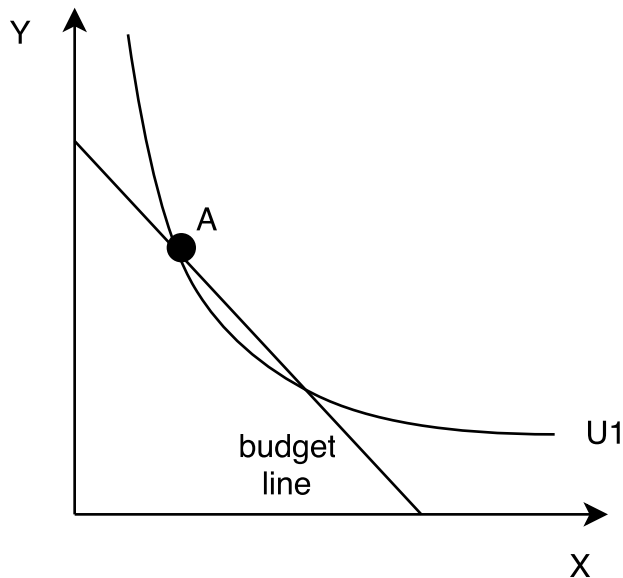
1 Chapter 3: Consumer Behavior

Q1: Chapter 3, Exercise 5 in the textbook.

Q2: Suppose there are two goods: apples (a) and raspberries (r). Suppose that a consumer has a utility of the form: $U(r, a) = 4r + 3a$.

1. Draw the indifference curves for this utility function.
2. What is the marginal rate of substitution between raspberries and apples when the amount consumed is $r = 50$ and $a = 50$? What about at $r = 100, a = 50$?
3. What type of goods are apples and raspberries for this consumer?

Q3: A consumer whose preferences satisfy the standard assumptions is considering the market bundle A in the figure below, which lies on indifference curve U_1 .



For each of the following statements, say if it is true or false, and give a brief explanation why:

1. A is the consumer's optimal bundle, since the indifference curve intersects the budget line.
2. At A, the MRS is equal to the slope of the budget line.

3. The consumer is not using all of his income at A .
4. The consumer can find another affordable point that is on a higher indifference curve than U_1 .
5. The consumer should consume more of good Y since the MRS exceeds the price ratio at A .

Q4: Chapter 3, Exercise 14 in the textbook.

2 Chapter 4: Individual and Market Demand

Q5: Chapter 4, Exercise 4 in the textbook.

Q6: Chapter 4, Exercise 5 in the textbook.