

## Chapter 2

- I. Introduction
- II. Demand
  - A. Demand Shifters
    - 1. Income
    - 2. Prices of Related Goods
    - 3. Advertising and Consumer Tastes
    - 4. Population
    - 5. Consumer Expectations
    - 6. Other Factors
  - B. The Demand Function
  - C. Consumer Surplus
- III. Supply
  - A. Supply Shifters
    - 1. Input Prices
    - 2. Technology or Government Regulations
    - 3. Number of Firms
    - 4. Substitutes in Production
    - 5. Taxes
    - 6. Producer Expectations
  - B. The Supply Function
  - C. Producer Surplus
- IV. Market Equilibrium
- V. Price Restrictions and Market Equilibrium
  - A. Price Ceilings
  - B. Price Floors
- VI. Comparative Statics
  - A. Changes in Demand
  - B. Changes in Supply
  - C. Simultaneous Shifts in Supply and Demand
- VII. Answering the Headline

Practice Quiz - [http://highered.mcgraw-hill.com/sites/0073523224/student\\_view0/chapter2/multiple\\_choice\\_quiz.html](http://highered.mcgraw-hill.com/sites/0073523224/student_view0/chapter2/multiple_choice_quiz.html)

## Chapter 3

- I. Introduction
- II. The Elasticity Concept
- III. Own Price Elasticity of Demand
  - A. Elasticity and Total Revenue
  - B. Factors Affecting the Own Price Elasticity
    - 1. Available Substitutes
    - 2. Time
    - 3. Expenditure Share
  - C. Marginal Revenue and the Own Price Elasticity of Demand
- IV. Cross-Price Elasticity
- V. Income Elasticity
- VI. Other Elasticities
- VII. Obtaining Elasticities from Demand Functions
  - A. Elasticities for Linear Demand Functions
  - B. Elasticities for Nonlinear Demand Functions
- VIII. Regression Analysis
  - A. Evaluating the Statistical Significance of Estimated Coefficients

## ECO 3320 – Managerial Economics **Test 1 – Fall 2013**

1. Confidence Intervals
2. The  $t$ -Statistic
- B. Evaluating the Overall Fit of the Regression Line
  1. The  $R$ -Square
  2. The  $F$ -Statistic

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### Chapter 4

- I. Introduction
- II. Consumer Behavior
- III. Constraints
  - A. The Budget Constraint
  - B. Changes in Income
  - C. Changes in Prices
- IV. Consumer Equilibrium
- V. Comparative Statics
  - A. Price Changes and Consumer Behavior
  - B. Income Changes and Consumer Behavior
- VI. Applications of Indifference Curve Analysis
  - A. Choices by Workers and Managers
    1. A Simplified Model of Income-Leisure Choice
    2. The Decisions of Managers

Practice Quiz - [http://highered.mcgraw-hill.com/sites/0073523224/student\\_view0/chapter4/multiple\\_choice\\_quiz.html](http://highered.mcgraw-hill.com/sites/0073523224/student_view0/chapter4/multiple_choice_quiz.html)

### Chapter 5

- I. Introduction
- II. The Production Function
  - A. Short-Run Versus Long-Run Decisions
  - B. Measures of Productivity
    1. Total Product
    2. Average Product
    3. Marginal Product
  - C. The Role of the Manager in the Production Process
    1. Produce on the Production Function
    2. Use the Right Level of Inputs
  - D. Algebraic Forms of Production Functions
  - E. Algebraic Measures of Productivity
  - F. Isoquants
  - G. Isocosts
  - H. Cost Minimization
  - I. Optimal Input Substitution

Practice Quiz - [http://highered.mcgraw-hill.com/sites/0073523224/student\\_view0/chapter5/multiple\\_choice\\_quiz.html](http://highered.mcgraw-hill.com/sites/0073523224/student_view0/chapter5/multiple_choice_quiz.html)

*Short Answer (10 Points each)*

1) The demand for good X is given by

$$Q_x^D = 6,000 - \frac{1}{2}P_x - 9P_y + 2P_z + \frac{1}{5}M$$

Research shows that the prices of related goods are given by  $P_y = \$6,500$  and  $P_z = \$100$ , while the average income of individuals consuming this product is  $M = \$70,000$ .

a. Indicate whether good Z is a substitute or complement for good X. *Use calculus (partial derivatives) to show why good Z is a substitute or complement.*

b. Is X an inferior or normal good? *Use calculus (partial derivatives).*

2) Suppose you have estimated the following demand equation,

$$\ln Q_x^D = \beta_0 + \beta_1 \ln P_x + \beta_2 \ln M$$

and have the regression output found below.

SUMMARY  
OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.990875254
R Square	0.981833769
Adjusted R Square	0.981060737
Standard Error	0.050628181
Observations	50

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	6.511118815	3.255559408	1270.108969	1.23801E-41
Residual	47	0.120470996	0.002563213		
Total	49	6.631589811			

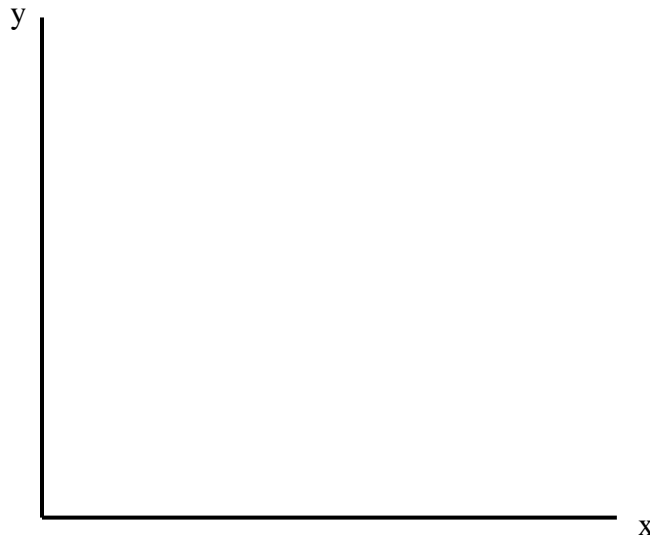
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>
Intercept	3.73204384	0.369188285	10.10878187	2.25605E-13	2.98933281
lnPrice	-0.266268464	0.1111181355	-2.39490213	0.020663179	-0.4899365
lnIncome	0.794470931	0.015968764	49.75156197	2.6297E-42	0.762345922

a) What is the own-price elasticity of demand?

b) Identify what the manager of this firm should do in order to raise revenues?

3) Two parts - each worth 5 points:

a) Show what would happen to the utility maximizing combination of goods  $x$  and  $y$  if a consumer's income decreases. Assume that  $y$  is a normal good and  $x$  is an inferior good.



b) List the four properties of “well-behaved” indifference curves; choose one property and explain why it is necessary.

- 4) Suppose that the costs of implementing the new Affordable Care Act can be simplified and represented as an increase in the wage rate for labor. Using an isoquant and isocost diagram, illustrate what will happen in terms of input substitution. (i.e., show what the new cost-minimizing input combination will be)

