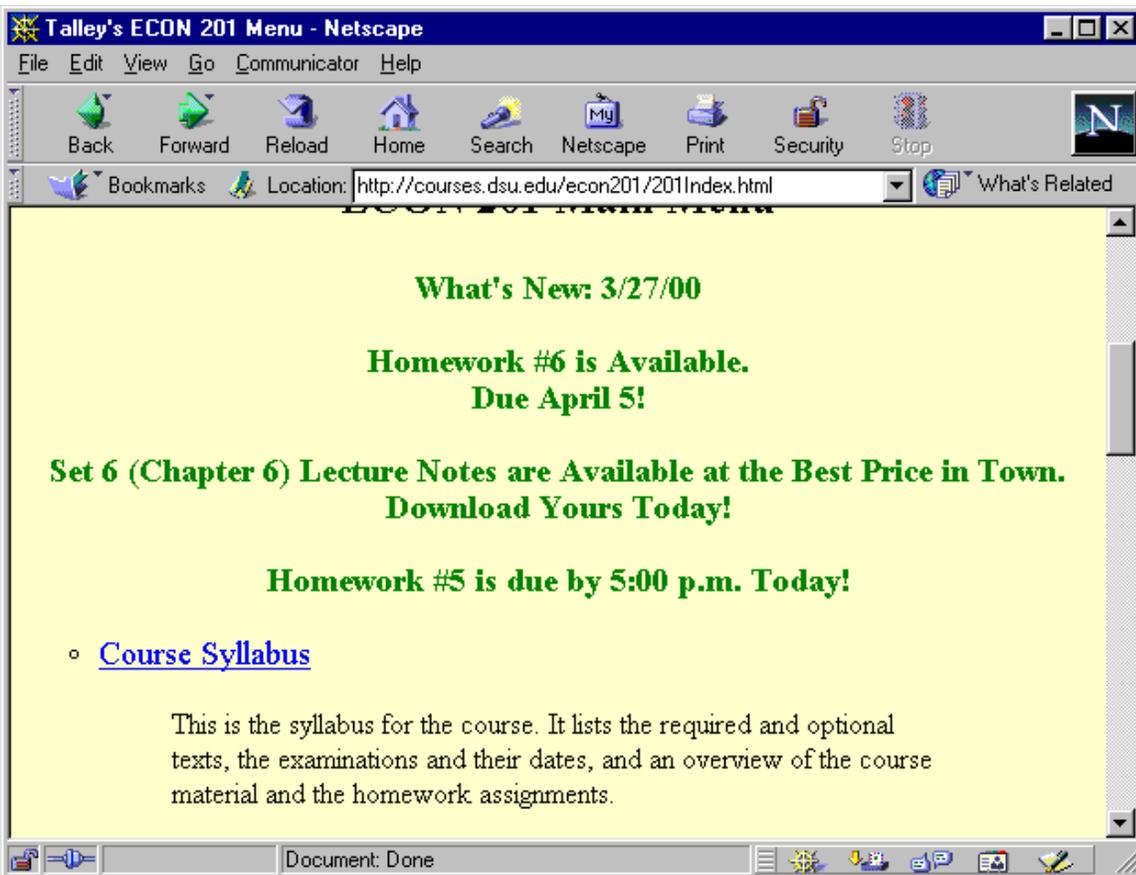
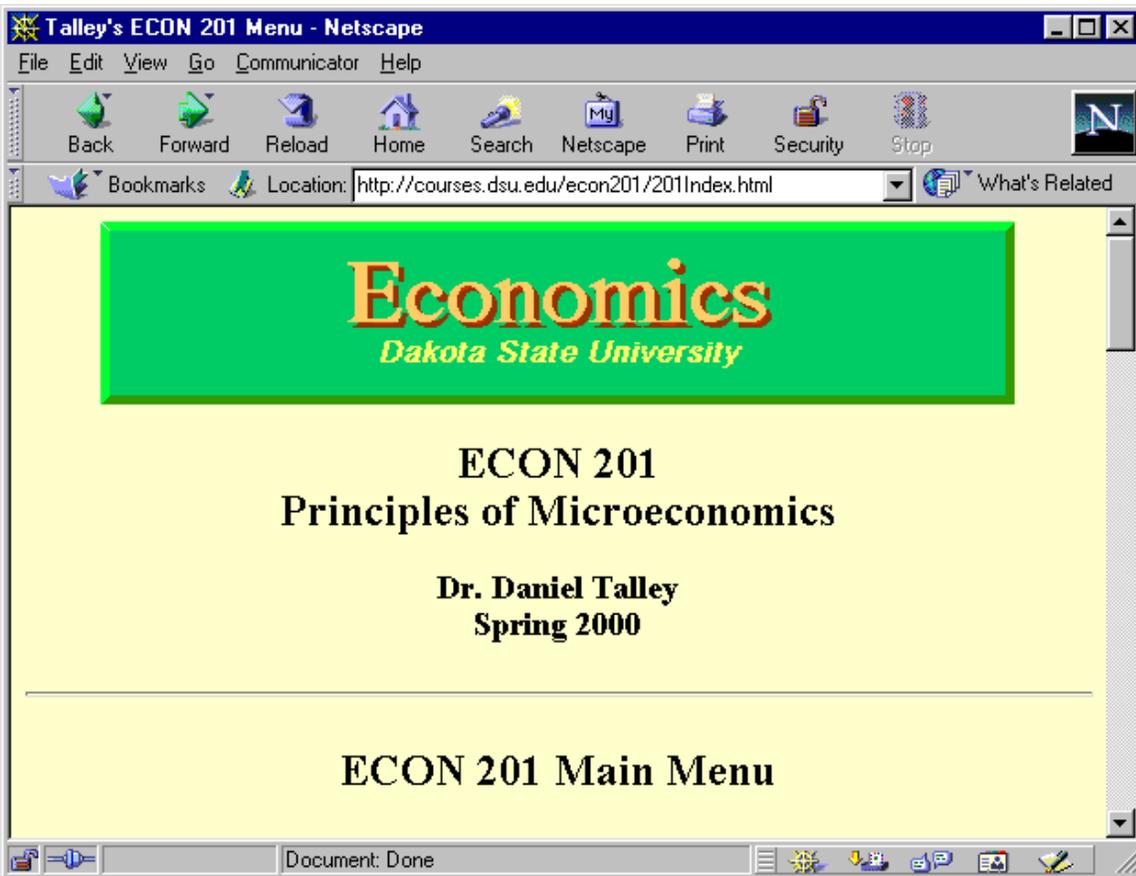
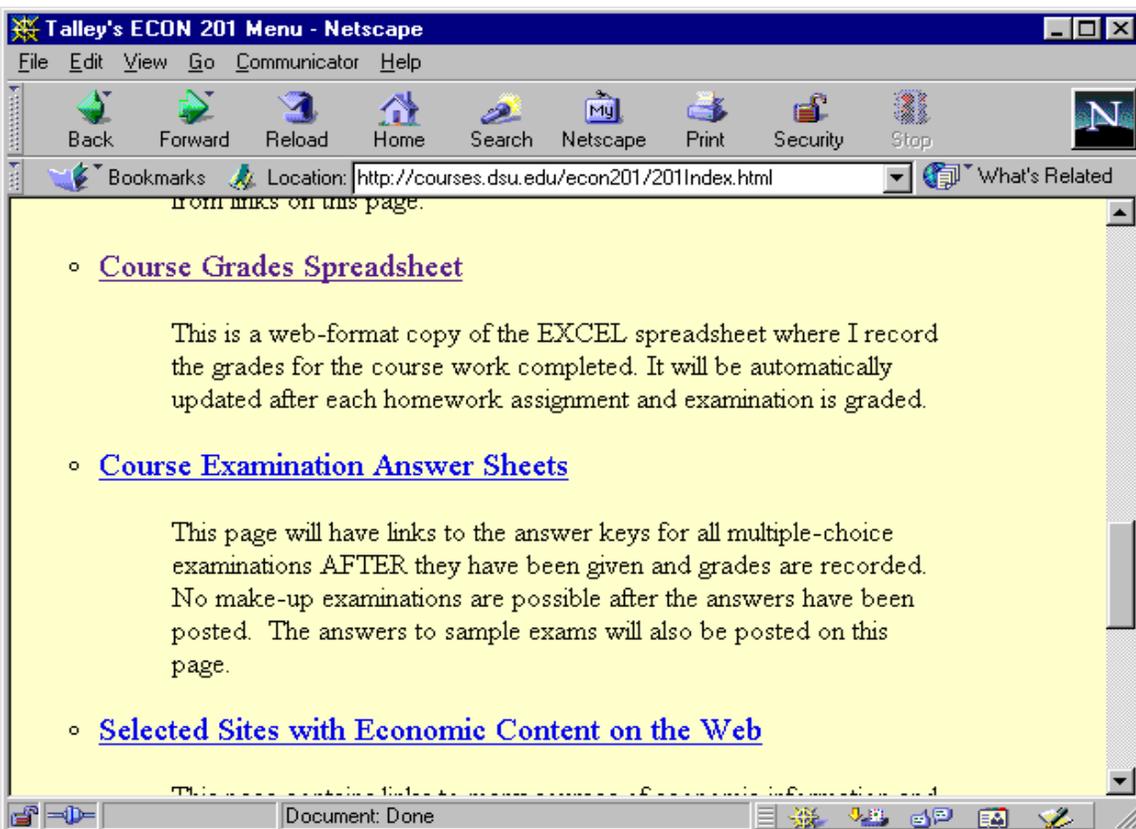
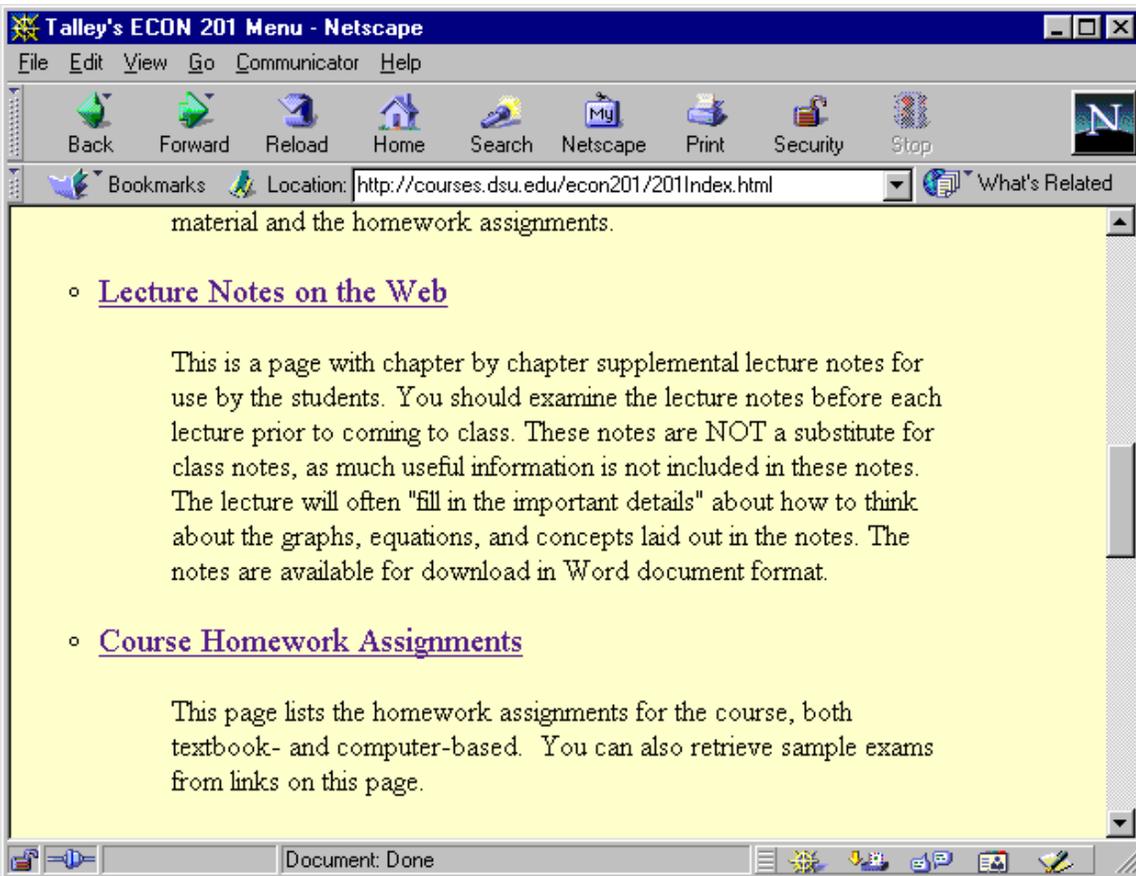


Appendix A

ECON 201 Course Web Site  
Spring 2000





**Talley's ECON 201 Menu - Netscape**

File Edit View Go Communicator Help

Back Forward Reload Home Search Netscape Print Security Stop

Location: <http://courses.dsu.edu/econ201/201Index.html>

**Selected Sites with Economic Content on the Web**

This page contains links to many sources of economic information and data. These links could prove useful in the completion of the homework assignments.

<b>Personal Home Page</b>	<b>E-Mail</b>
<a href="#">Dr. Talley</a>	<b>Dr. T</b>

<b>Dakota State University</b>	<b>BIS Home Page</b>
<b>Economics</b>	<b>WWW Resources</b>

**Talley's ECON 201 Homework Assignments - Netscape**

File Edit View Go Communicator Help

Back Forward Reload Home Search Netscape Print Security Stop

Location: <http://courses.dsu.edu/econ201/201HWAssn.html>

## Homework Assignments

<a href="#">Homework #1</a>	<a href="#">Homework #2</a>	<a href="#">Homework #3</a>
<a href="#">Homework #4</a>	<a href="#">Homework #5</a>	<a href="#">Homework #6</a>
<a href="#">Homework #7</a>	<a href="#">Homework #8</a>	<a href="#">Homework #9</a>
<a href="#">Internet Assignment #1</a>	<a href="#">Internet Assignment #2</a>	
<a href="#">Sample Midterm 1</a>	<a href="#">Sample Midterm 2</a>	<a href="#">Sample Final</a>

**Homework Policy**

- Each Homework Assignment is worth 10 points. Your homework average

Talley's ECON 201 Grade Sheet - Netscape

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Bookmarks Location: <http://courses.dsu.edu/econ201/201Grades.html> What's Related

## Course Grades

ECON 201  
Principles of Microeconomics

Course ID	Midterm #1		Homework				Course Percent	Midterm Grade	
	Score	Percent	HW#1	HW#2	HW#3	HW#4			
0180	28	93%	10	10	8	9.5	98%	95%	A
0339	15	50%	10	10	9.5	8	98%	62%	D
0492	23	77%	10	10	9.5	6.5	98%	82%	B
0533	23	77%	10	10	7.5	9.5	98%	82%	B
0613	19	63%	10	10	9.5	9.5	98%	72%	C
1080	23	77%	10	9	9.5	10	98%	82%	B
1241	23	77%	10	10	9.5	10	100%	83%	B
1551	17	57%	10	10	9	5	97%	67%	D
1853	19	63%	9	9	8	7	87%	69%	D
1859	24	80%	10	10	10	9.5	100%	85%	B
2163	20	67%	7	10	9.5	5.5	88%	72%	C
2366	21	70%	10	9	9.5	8.5	95%	76%	C

Document: Done

Talley's ECON 201 Lecture Notes - Netscape

File Edit View Go Communicator Help

Back Forward Reload Home Search Netscape Print Security Stop

Bookmarks Location: <http://courses.dsu.edu/econ201/201lecnotes.html> What's Related

## Lecture Notes

I have created a complete set of lecture notes for each chapter that we will study in the text. You may download these lecture notes to a disk and/or print them at your leisure. They are in MS Word format. Each chapter will be made available a few days before I expect to lecture on it. I will announce in class when new chapters are available.

You should have the current set of lecture notes for every course lecture. Reviewing them ahead of time could prove advantageous, as well.

- [SET 1 - Chapter 1: Overview](#)
- [SET 2 - Chapter 2: The U.S. Economy](#)
- [SET CA - Comparative Advantage Lectures \(NOT in the Text!\)](#)
- [SET 3 - Chapter 3: Supply and Demand](#)
- [SET 4 - Chapter 4: The Public Sector](#)
- [SET 5 - Chapter 5: The Demand for Goods](#)
- [SET 6 - Chapter 6: The Costs of Production](#)

Document: Done

Appendix B

SET 6 - Chapter 6 Lecture Notes

to accompany

Bradley R. Schiller's  
*The Microeconomy Today*

Set 6 - Chapter 6 Lecture Notes

**Outline:**

**VI. Foundations of Supply - Theory of the Firm**

- A. Business Organization**
- B. Economic Costs & Economic Profit**
- C. Production and Costs**
  - 1. Production Function**
  - 2. Production in the Short Run**
  - 3. Firm's Cost Function**
  - 4. Relationship between Production & Cost**
  - 5. Costs in the Long Run**
- D. Technological Change**

**IV. Foundations of Supply - Theory of the Firm.**

**A. Business Organizations**

**Definitions**

**Firm:**

**Industry:**

**Plant:**

<b>Types of Firms</b>	<b><u># of Owners</u></b>
<b>a. Proprietorships</b>	<b>1</b>
<b>b. Partnerships</b>	<b>Few</b>
<b>c. Corporations</b>	<b>Many</b>

The model we're going to develop most closely coincides with proprietorships. We will most often use examples of a single owner-entrepreneur.

(but it could be generalized to other 2 types, mutatis mutandis)

[Def'n - Mutatis Mutandis: *latin*. Making the Necessary Changes.]

**B. Economic Costs and Economic Profits**

**Economic Profit =**

**where**

**Def'n - Economic Costs: \_\_\_\_\_ of all resources used in production.**

2 types: Explicit Costs & Implicit Costs

**Def'n - Explicit Costs:**

**Examples:**

**Def'n - Implicit Costs:**

**Examples:**

**Economic Costs = Explicit Costs + Implicit Costs**

Example: You quit a \$20,000 a year job and start your own business, a Trojan-Burger Stand. You withdraw \$2000 (from a savings account earning 5%) to buy the burger stand itself. During the year you operate, you pay \$20,000 to the minimum wage burger-flipper (L) and you buy \$20,000 in burger materials. (buns, hamburger, condiments, propane, etc.)

**Explicit Costs =**

**Implicit Costs =**

**(No Depreciation)**

**Economic Cost =**

**Economic Profit**

**TR = P x Q**

**Accounting Profit = TR - Explicit Costs**

**Economic Profit = TR - Explicit Costs - Implicit Costs**

Example (continued):

Suppose you sell 45,000 hamburgers for \$1 each.

How did you do?

**Accounting Profit =**

**Economic Profit =**

You would have done better to stay at your old job, even though you made an Accounting profit!

**If Economic Profit = 0, then**

**Accounting Profit = Implicit Costs = Normal Profit.**

**Def'n - Normal Profit:**

Redefine, Payments to Resources:

Labor - Wages  
Land - Rent  
Capital - Interest  
**Entrepreneur - Normal Profit**

Note: If Accounting Profit = Normal Profit, then Economic Profit( $\pi$ ) \_\_\_\_\_.

If Accounting Profit > Normal Profit, then Economic Profit( $\pi$ ) \_\_\_\_\_.

If Accounting Profit < Normal Profit, then Economic Profit( $\pi$ ) \_\_\_\_\_.

### **Firms Maximize Economic Profits.**

Resource Allocation at the Industry Level  
Positive Economic Profit Attracts Resources.  
Negative Economic Profit Repels Resources.

C. Production and Costs  
1. Production Function  
Definitions  
Q - industry output  
q - firm output  
**Short Run -**

**Long Run -**

Example: Boeing vs Trojan-Burger  
**Short Run Labor (L)**

**Long Run Capital (K)**

Different Industries have different long runs and short runs.

**Def'n - Production Function:**

$$q = f(\text{inputs})$$

If we divide all inputs into two types for simplicity capital and labor (K & L), then  
 $q = f(K, L)$

In the short run,  $q = f(\bar{K}, L)$  where  $\bar{K}$  means capital is fixed in the short run.

The production function tells you the most output you can get from a given combination of inputs.

		L				
		1	2	3	4	
K	1	2	4	7	9	What is $f(K=2, L=3)$ ? 9
	2	3	6	9	11	
	3	5	10	11	12	

**If Capital is fixed at 1 unit, then you read across varying labor.**

Suppose  $K=2$  and  $L=2$  and the firm produces 5 units of output. - Inefficient!

Production function assumes Technical Efficiency.

Let's examine a short run production function more closely.

## 2. Production in the Short Run

**Ex: The Trojan-Burger stand.**

**$K_{bar} = 1$  stand**

Let's assume labor is the only input I need to make hamburgers.

**$q =$  hamburgers/hour**

Labor (L)	$TPP_L(q)$	$APP_L(q/L)$	$MPP_L(\Delta TPP_L/\Delta L)$
0	0	---	---
1	7		
2	17		
3	24		
4	29		
5	33		
6	34		
7	34		
8	30		

**APP is our usual measure of PRODUCTIVITY (output per worker per hour).**

Let's look at  $MPP_L$

1st worker makes 7 hamburgers/hr.

2nd worker brings the total per hour to 17.

**QUESTION:** Does this mean the second guy is necessarily better than the first?

**ANSWER:**

Because I didn't put names for each laborer, I am assuming I can switch the order around - If I hired the second guy first and the first guy second, I'd get the same numbers.

**Def'n - Homogeneous Inputs:**

Examples:

**QUESTION:** How are the changes in MPP explained when the workers are homogeneous?

**ANSWER:**

Examples:

**QUESTION:** Why does the MPP decrease as additional workers beyond the second are added?

**ANSWER:**

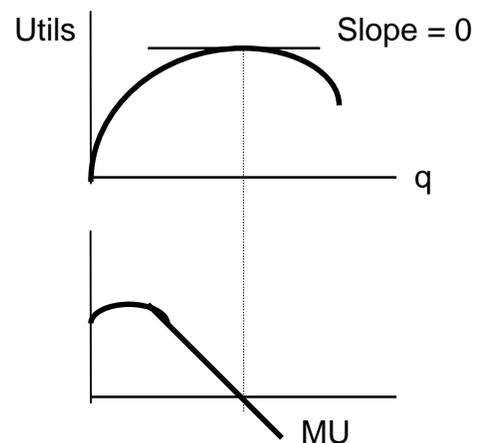
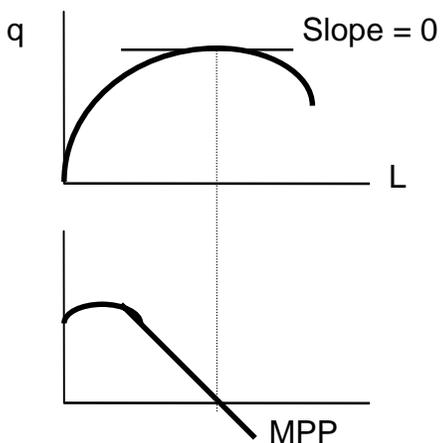
Examples:

Gains from Specialization \_\_\_\_\_ Loss from Congestion --> \_\_\_\_\_  $MPP_1$

Gains from Specialization \_\_\_\_\_ Loss from Congestion --> \_\_\_\_\_  $MPP_1$

At some point, the loss from congestion becomes so great that

**$MPP_1 < 0!$  Adding another worker lowers the total amount produced!  
(8th worker)**



We've already discussed the **Law of Diminishing Utility** in chapters 3 and 5. Parallel in production theory -

**Def'n - Law of Diminishing Returns:**

Eventually, the MPP curve has a downward slope!

**QUESTION:** What is the Point of Diminishing Returns from the table?

**ANSWER:**

**Important Relationships**

**1. Total vs Marginal Product: If  $MPP = 0$ , then TPP is maximized.**

**2. Marginal vs Average Product:**

**If  $MPP > APP$ , then APP increases**

**If  $MPP = APP$ , then APP stays the same**

**If  $MPP < APP$ , then APP decreases**

**Example: 4 Homework Assignments**

**Scores = 9, 9, 9, 9          Average =  $36/4 = 9$**

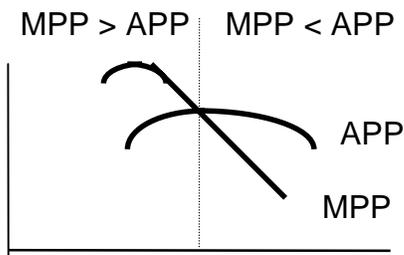
**On the 5th HW (= the Marginal HW)**

**Score = \_\_\_\_\_, then Average = \_\_\_\_\_.**

**Score = \_\_\_\_\_, then Average = \_\_\_\_\_.**

**Score = \_\_\_\_\_, then Average = \_\_\_\_\_.**

**If  $APP = MPP$  after the Point of Diminishing Returns,  
APP is at a maximum.**



**3. Firm's Short-Run Cost Function**

**Definitions**

**TFC - Total Fixed Costs:**

**TVC - Total Variable Costs:**

**TC - Total Cost = TFC + TVC**

**AFC - Average Fixed Cost =**

**AVC - Average Variable Cost =**

**ATC - Average Total Cost =**

**MC - Marginal Cost =**

If there are only 2 inputs,  $\bar{K}$  & L  
then

$$\begin{aligned} \text{TFC} &= P_K \cdot \bar{K} \\ \text{TVC} &= w \cdot L \end{aligned}$$

$P_K$  = Price of Capital  
 $w$  = wage paid to Labor

**Ex: Trojan-Burger Stand**

$$\bar{K} = 1, P_K = \$10/\text{hr}, w = \$4.50/\text{hr}$$

<u>L</u>	<u>q</u>	<u>TFC</u>	<u>TVC</u>	<u>TC</u>	<u>AFC</u>	<u>AVC</u>	<u>ATC</u>	<u>MC</u>
0	0	10	0	10	$\infty$	$\infty$	$\infty$	--
1	7							
2	17							
3	24							
4	29							
5	33							
6	34							
7	34							

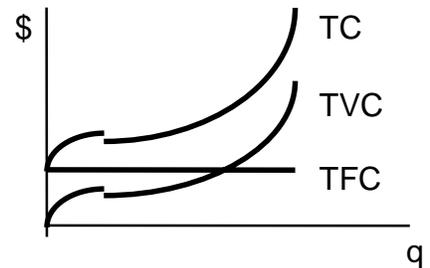
**Several things to notice:**

$$\text{MC} = \frac{\Delta \text{TC}}{\Delta q} = \frac{\Delta \text{TVC}}{\Delta q}$$

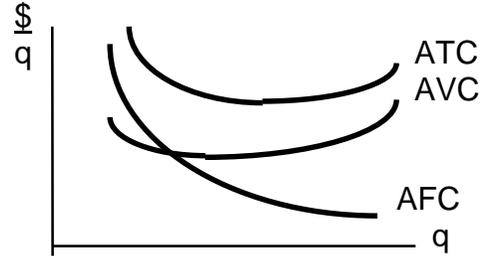
$$\text{TFC} = \text{TC} \text{ at } q = 0$$

Difference between TC and TVC is TFC

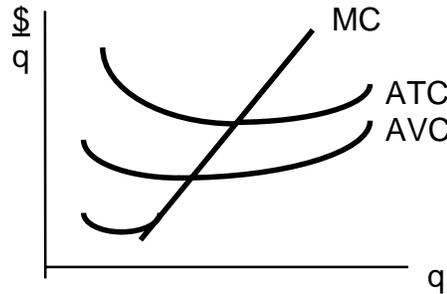
$$\text{TFC} = \text{TC} - \text{TVC}$$



**AFC is always decreasing**  
**Draw Curve**  
**AVC first decreases, then increases and**  
**ATC first decreases, then increases**  
**—both U-Shaped!**



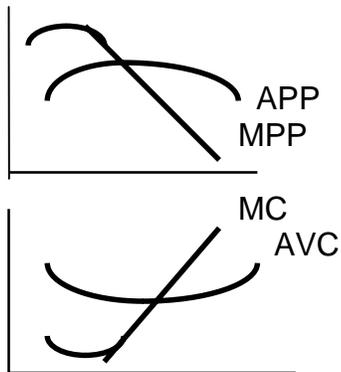
**Relationship between MC and AVC & ATC**  
**At Min AVC, MC = AVC**  
**At Min ATC, MC = ATC**



**Def'n - Law of Increasing Short-Run MC:**

“Reflection” of the Law of Diminishing Returns

4. Relationship between Production and Cost



As MPP increases, MC declines

As APP increases, AVC falls

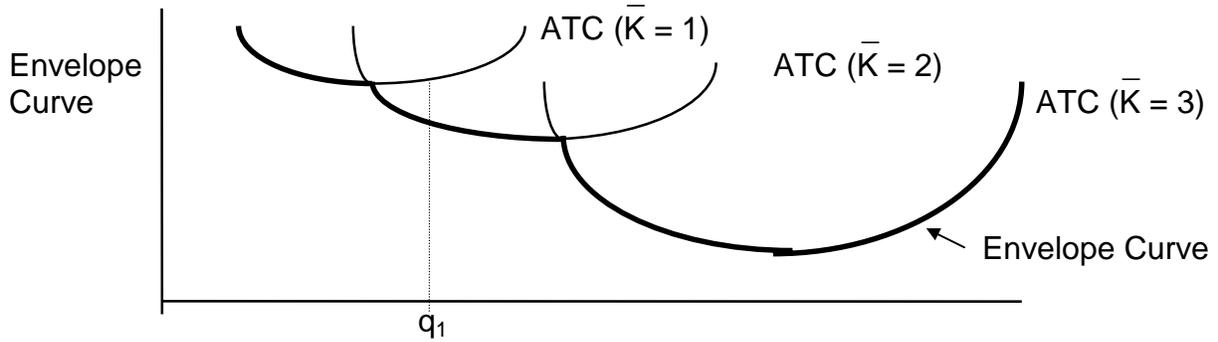
**Can Anyone Prove It?**

**Proof:**

Now we have examined the relationship between short-run production and costs.

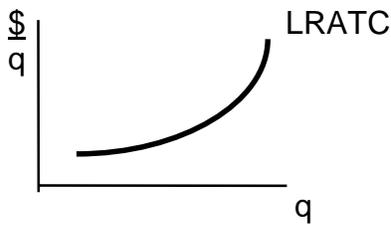
Let's consider Long-Run Investment Decisions. Change  $\bar{K}$  from 1 to 2 to 3.

5. Costs in the Long Run

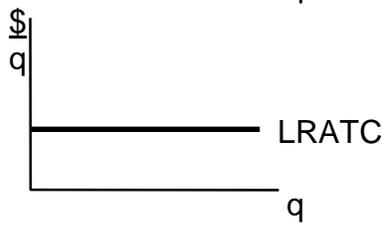


Develop the Envelope Curve.

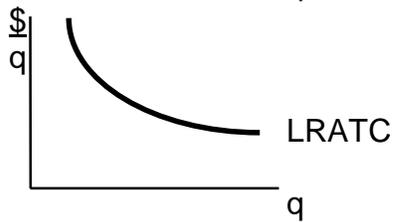
Should I use  $K = 1$  or  $K = 2$  if  $q^1$  is the profit-maximizing output level.



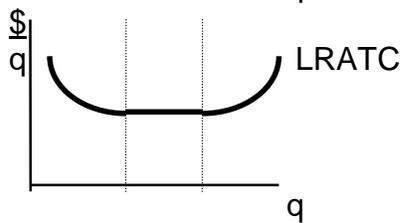
- Diseconomies of Scale



- Constant Economies of Scale



- Economies of Scale



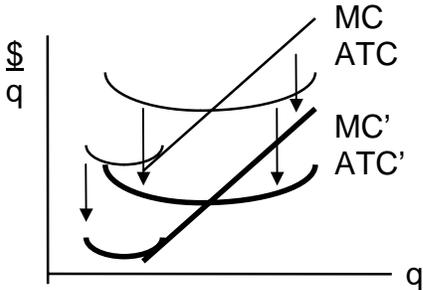
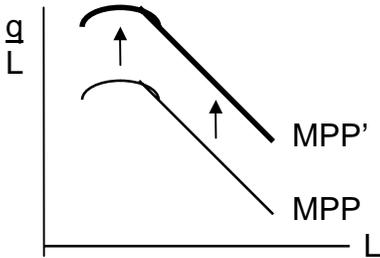
- All three

**Reasons for Economies:**

**Reasons for Diseconomies:**

**Ignore LRMC curve!**

- D. Technological Change  
Increasing Technology is an upward shift in MPP and a downward-shift in MC & ATC



Appendix C

Internet Assignment #2  
Spring 1999

An Internet-based Research Assignment  
on the Microsoft Antitrust Trial

**ECON 201**  
**Principles of Microeconomics**

**Internet Assignment #2**

On October 19, 1998, an historic trial began in the annals of antitrust action in the United States. In "The United States v. Microsoft," the government seeks to prove that Microsoft has used its effective monopoly in operating systems to restrict competition in other markets. You have been instructed to follow the trial via the Wall Street Journal throughout the course. However, you are not restricted to the Wall Street Journal for this assignment.

Your assignment is to write an economic analysis of the case consisting of three parts. You will (1) summarize the most significant arguments made by prosecution witnesses, (2) summarize the most significant rebuttal arguments made by Microsoft witnesses, and (3) use the concepts of competition, monopoly and antitrust discussed in Chapters 7 - 10 to analyze the case. (Chapter 12 includes a non-technical discussion of antitrust regulations that have been imposed in other industries and may also be used for this assignment.)

(1) (10 Points)

The government has brought forward sworn depositions from twelve witnesses, including officers from the following companies: Netscape, America On-line, Apple, Intel and Microsoft itself. List the 5 strongest arguments or statements made by a government witness that demonstrate Microsoft used its effective monopoly in operating systems to restrict competition in other markets. You may use any statement made between the start of the trial and February 26, 1999. Support those statements with direct quotes from or references to articles from reliable sources (newspapers, magazines, etc.) using footnotes or endnotes.

(2) (10 Points)

Microsoft's defense has offered sworn depositions from its twelve witnesses. List the 5 strongest arguments or statements made by a Microsoft witness that refutes the government's allegation that either Microsoft has an effective monopoly in operating systems *or* that Microsoft has used business practices for the sole purpose of restricting competition in other markets. Support your statements with direct quotes from or references to articles from reliable sources using footnotes or endnotes.

**NOTE: Do not plagiarize.** You cannot copy a statement word-for-word without giving credit to its author. Failure to cite the source of a statement will result in 0 points.

(3) (30 Points)

Assess the following statement: "Microsoft has, by its actions past and present, used its market power to restrict competition in the computer software industry." In particular, state whether you agree or disagree and why. You should develop this thesis by fairly representing both sides, that is by referring to *at least* one argument from each of the two sections above. The most successful analysis will take into account as many of the above statements as are relevant to your thesis. In addition, you will be graded on your demonstrated understanding of economic theory on competition and monopoly.

You may wish to include brief discussions of the concepts of monopoly, market power, monopoly profits, and antitrust regulation, possibly including specific examples of antitrust actions in other industries. You should consider in what ways Microsoft fits the definition of a monopoly and in what ways it differs from the textbook definition. In deciding whether Microsoft has violated the national antitrust statutes prohibiting "conspiracies in restraint of trade," you should examine the Sherman Act, the Clayton Act and the Federal Trade Commission Act on page 238. In addition, the textbook's discussions on "Dismantling Monopolies" and "Antitrust Guidelines," at the end of Chapters 9 and 10 respectively, may also prove useful. You will NOT be graded on the position you take, but on how well you justify that position.

Part (3) should consist of an essay of no more than 7 pages maximum. 3 - 5 typed, double-spaced pages should be sufficient. Your introductory paragraph should describe the order in which the issues above are discussed in your paper and your conclusion paragraph must contain your response as to whether you agree or disagree with the statement above.

Appendix D

Questionnaire on the

Usefulness of the Archipelago CD-ROM Textbook

and the ECON 201 Course Web Site

given to

ECON 201 Principles of Microeconomics

Fall 1998, Section 1

Name: \_\_\_\_\_

Institution: \_\_\_\_\_

Email address: \_\_\_\_\_

Phone: \_\_\_\_\_

May we contact you for more information or clarification? \_\_\_\_\_

---

**MULTIMEDIA LESSON PRESENTATION: CD-ROM**

**1. How readily were you able to install the program on your personal computer?**

- Easily, from onscreen instruction       With help from the documentation  
 With help from the instructor       With help from tech support       Not able to install, n/a

**2. How readily were you able to load a lesson and view it within the Lesson Player?**

- Easily, no help required       With help from the documentation  
 With help from the instructor       With help from tech support       Not able to load a lesson

**3. Overall, how readily were you able to navigate through a lesson presentation?**

**From screen-to-screen?**

- very easily       somewhat easily       not easily       with difficulty

**Within a lesson screen?**

- very easily       somewhat easily       not easily       with difficulty

**4. How useful did you find the following buttons as you worked through the presentation:**

**Resources: Glossary**

- very helpful       somewhat helpful       not helpful       did not use

**Resources: FAQs**

- very helpful       somewhat helpful       not helpful       did not use

**Transcript:**

- very helpful       somewhat helpful       not helpful       did not use

**Web site**

- very helpful       somewhat helpful       not helpful       did not use

**5. How useful was the printed Student Notebook as a note-taking device or reference tool?**

- very useful       somewhat useful       not useful       did not use

Comments: \_\_\_\_\_

**6. How would you find this type of multimedia presentation most useful? (check all that apply)**

- instead of a textbook       to complement a textbook  
 instead of a classroom lecture       to complement a classroom lecture  
 to complement distance learning courses which have no face-to-face contact with the instructor  
 to complement a campus-based course, which also has face-to-face contact with the instructor  
 do not find this type of presentation useful.

Other: \_\_\_\_\_

**7. What aspects of the multimedia presentation are most appealing to you? (check all that apply)**

- student-controlled pace of the presentation  
 visual reinforcement of concepts  
 audio explanations of concepts  
 access to audio, visual and textual explanations of concepts  
 pedagogical features: guided problems, pop questions, glossary, FAQs, etc.

Other: \_\_\_\_\_

**ARCHIPELAGO COURSE WEB SITE**

**8. How readily were you able to access the course web site provided by archipelago?**

- Easily, from onscreen instruction       With help from the documentation  
 With help from the instructor       With help from tech support  
 Not able to access

**9. Overall, how readily were you able to navigate through the web site?**

- very easily     somewhat easily     not easily     with difficulty     did not use

**10. Overall, how easily were you able to access and search the Resources/Tools: (Glossary, FAQs, Links) from the web site?**

- very easily     somewhat easily     not easily     with difficulty     did not use

**I found these resources to be:**

- very helpful     somewhat helpful     not helpful     did not use

Comments: \_\_\_\_\_

**11. Overall, how easily were you able to access Lesson Assignments (desktops) from the web site?**

- very easily     somewhat easily     not easily     with difficulty     did not use

**Please rate the assignments for their usefulness:**

**Web Lessons (posted lecture notes and problem assignments)**

- very useful     somewhat useful     not useful     did not use

**Web Activities (assignments using other links on the WWW)**

- very useful     somewhat useful     not useful     did not use

**Quizzing and Testing**

- very useful     somewhat useful     not useful     did not use

Comments: \_\_\_\_\_

**12. On a scale of 1-10, please rank each of the following functions of the web site according to their importance to you:**

**To relay information about course assignments**  
1-----5-----10

**To report information about my progress in the course**  
1-----5-----10

**To communicate with the instructor**  
1-----5-----10

**To communicate with fellow students**  
1-----5-----10

**To interact with course material through self-assessment/quizzes**  
1-----5-----10

**To access additional content and resources related to the course material**  
1-----5-----10

**Other, please explain** \_\_\_\_\_

**13. Would you recommend a course taught with an on-line textbook to your fellow students?**

- yes       yes, with recommended improvements     no

**Why or why not?:** \_\_\_\_\_

## DSU COURSE WEB SITE

14. Throughout the entire semester, approximately how often did you access the ECON 201 web site maintained by your instructor?

- very often (more than once a week)       occasionally (once a week)  
 rarely (approximately once a month or less)       did not use

Comments: \_\_\_\_\_

15. Which of the following sections did you use the MOST or find the most useful (check all that apply):

- course syllabus       chapter lecture notes       homework assignments page  
 course grades spreadsheet       examination answers page       selected econ sites

Comments: \_\_\_\_\_

16. Which of the following sections did you use the LEAST or find the least helpful (check all that apply):

- course syllabus       chapter lecture notes       homework assignments page  
 course grades spreadsheet       examination answers page       selected econ sites

Comments: \_\_\_\_\_

17. Select three of the following that should be added to the web site for future courses:

- additional assignment information and hints  
 more information about my progress in the course  
 communication with the instructor via the web (common chat time, on-line office hours)  
 communication with fellow students via the web (chat, discussion board)  
 additional sample examination questions (sample midterms, sample finals)  
 on-line midterms examinations  
 self-assessment exams and quizzes (ungraded)  
 glossary of economic terms  
 frequently asked questions and answers page (FAQ)  
 additional links to outside web sites that are related to economics  
 password-access to the web site  
 download-able grades spreadsheet (in EXCEL format)

Comments: \_\_\_\_\_

18. Complete this sentence: I prefer that the homework assignments \_\_\_\_\_

- can be printed from the web browser, not downloaded as .DOC files.  
 can be downloaded as .DOC files, not printed from the web browser.  
 are handed out in class, and would prefer not to be required to retrieve them from the web site.

Comments: \_\_\_\_\_

19. Overall, how readily were you able to navigate through the web site?

- very easily       somewhat easily       not easily       with difficulty       did not use

20. USE THE SPACE BELOW TO DESCRIBE YOUR EXPERIENCE WITH THE ARCHIPELAGO TEXTBOOK. WHAT WAS THE BEST FEATURE AND WHAT WOULD YOU IMPROVE?

Appendix E

Syllabi for

ECON 201 Principles of Microeconomics

Fall 1997

Fall 1998, Section 1

Fall 1998, Section 2

Fall 1998, Section 3

Summer 1999

**ECON 201:**  
**Principles of Microeconomics**

Fall, 1997  
Credits: 3.0

CRN: 12878  
Room: KC 104

Instructor: Dr. Daniel A. Talley  
Office Hours: 2 - 4:00 p.m. MWF  
2:30 - 4:30 p.m. UH  
Phone: 256-5114  
E-mail: talleyd@columbia.dsu.edu

Office: KC 138  
College of Bus & Info Sys  
Dakota State University

**APPROVED COURSE DESCRIPTION:** The study of economics from the micro-economic approach with a detailed look at the markets, the price system, and the allocation of resources.

**UNAPPROVED COURSE DESCRIPTION:** This course is an introduction to microeconomic analysis. Topics include Supply and Demand Theory, Utility Maximization Theory, detailed discussion of the Theory of the Firm (Cost and Production), and an examination of the different market structures in which real world firms interact (Industrial Organization). The last part of the course will deal with government intervention (regulation and antitrust) and labor market issues. The course is designed to give the student an understanding of the fundamental operations of the markets in which we daily transact--how they work as well as when they fail. Given the fact that many of today's defining events have important economic origins--such as the break-up of the former Soviet Union, the 1990 invasion of Kuwait by Iraq, and even the outcome of presidential elections--a knowledge of economics can aid in understanding our world and the occurrences that affect our lives.

**TEXT:** The textbook for the course is The Microeconomy Today, 7th edition by Bradley R. Schiller. All readings are from the text.

**STUDY GUIDE:** A study guide to supplement the text is available, but optional. It does contain a large number of practice problems that would be very useful for learning the material in this course.

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<u>Method 1</u>		<u>Method 2</u>	
Homework Average	20%	Homework Average	20%
Midterm 1	25%	Highest Midterm	30%
Midterm 2	25%	Lowest Midterm	0%
Final	<u>30%</u>	Final	<u>50%</u>
	100%		100%

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**MAKE-UP POLICY:** There will be no make-up exams. If you miss an exam for any reason, Method 2 will automatically be used to calculate your course score. However, it is **strongly recommended** you plan on taking both midterms. Carefully note the examination dates listed on the back of this page.

EXAMINATION DATES: The dates of the exams are:

Midterm 1                   **Friday, Oct. 17**  
Midterm 2                   **Friday, Nov. 21**  
Final                         **Wednesday, Dec 17 from 1:00 to 3:00 p.m.**

These dates are immutable. The dates of the examination will not change under any circumstance.

IMPORTANT: If you know you will be unable to take the final, do NOT take this course.

(The last day to drop with a full refund is September 16.)

COURSE OUTLINE:

<u>Topic</u>	<u>Reading</u>
Introduction and Basic Concepts	Ch 1, with appendix
Production Possibilities Tradeoff and Basic Economic Questions	Ch 2
Comparative Advantage	Ch 3
Supply, Demand and the Price System	Ch 4
The Public Sector	

MIDTERM 1 -- FRIDAY, OCTOBER 17

Utility Theory	Ch 5
Production and Costs	Ch 6
Perfect Competition	Ch 7 & 8
Monopoly	Ch 9

MIDTERM 2 -- FRIDAY, NOVEMBER 21

Oligopoly	Ch 10
Monopolistic Competition	Ch 11
Competitive Labor Market	Ch 15
(Additional Topics as Time Permits)	

FINAL -- WEDNESDAY, DECEMBER 17, FROM 1:00 TO 3:00 P.M.

OBJECTIVES OF THE COURSE: By the end of the course, students will have improved their analytical and critical thinking skills as well as their understanding of the basic operation of markets and the price system in the U.S. economy. In addition, students will improve their understanding of those terms and basic concepts in economics crucial to success in our market economy.

COMPUTER SKILLS REQUIRED: The student may use computers for their homework assignments. A spreadsheet program can be usefully employed for several assignments. In addition, I encourage students to contact me via e-mail. In addition, some homework assignments may require the use of an Internet browser, such as Netscape Navigator™.

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**ECON 201:  
Principles of Microeconomics**

Fall, 1998  
Credits: 3.0

SYN: 10260  
Room: KC 112

Instructor: Dr. Daniel A. Talley  
Office Hours: 1 - 3:00 p.m. MWF and  
11 - 12:00 and 2:30 - 3:30 p.m. TR  
Phone: 256-5114  
E-mail: talleyd@columbia.dsu.edu

Office: KC 138  
College of Bus & Info Sys  
Dakota State University

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**PREREQUISITES:** MATH 102 (or place appropriately on the DSU math placement test).

**TEXT:** There is no paper textbook for the course. An on-line textbook called Microeconomics, 1st edition from Archipelago Software will be made available to you free of charge. In addition, the software is installed in KC 122. You will receive instructions on check out procedures. A semester subscription to the Wall Street Journal is required for this course.

**STUDY GUIDE:** A study guide to supplement a standard text is available, but optional, called A Study Guide to Accompany The Microeconomy Today and is available at the bookstore.

**WEB SITE:** An extensive course web site has been established at <http://courses.dsu.edu/econ201-1/201Index.html>. You will be expected to obtain supplemental lecture outlines, all course assignments, and current course information (e.g. scores and answer keys for homework assignments and exams) from this site.

**GRADES:** Your course grade is based on two midterm examinations, a comprehensive final examination, your scores on weekly homework assignments and monthly computer assignments requiring use of the World-Wide Web. These assignments and exams will be the **sole basis** for your course grade. Two methods will be used to calculate your score for the course. The two methods are:

<u>Method 1</u>		<u>Method 2</u>	
Homework Assignments	10%	Homework Assignments	10%
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Final	<u>35%</u>	Final	<u>50%</u>
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Midterm 1 **Wednesday, Oct. 14 from 6:30 to 7:30 p.m.**

Midterm 2 **Monday, Nov. 23 from 6:30 to 7:30 p.m.**

Final **Friday, Dec, 18 from 8:00 to 10:00 a.m.**

These dates are immutable. The dates of the examination will not change under any circumstance.

**IMPORTANT:** If you know you will be unable to take the final, do NOT take this course.

(The last day to drop with a full refund is September 15.)

**COURSE OUTLINE:**

<u>Topic</u>	<u>Reading</u>
Introduction and Basic Concepts	Ch 1, with appendix
Production Possibilities Tradeoff and Basic Economic Questions	Ch 2
Comparative Advantage	Ch 3
Supply, Demand and the Price System	Ch 4
The Public Sector	

MIDTERM 1 -- WEDNESDAY, OCTOBER 14, FROM 6:30 TO 7:30 P.M.

Utility Theory	Ch 5
Production and Costs	Ch 6
Perfect Competition	Ch 7 & 8
Monopoly	Ch 9

MIDTERM 2 -- MONDAY, NOVEMBER 23, FROM 6:30 TO 7:30 P.M.

Oligopoly	Ch 10
Monopolistic Competition	Ch 11
Competitive Labor Market	Ch 15
(Additional Topics as Time Permits)	

FINAL -- FRIDAY, DECEMBER 18, FROM 8:00 TO 10:00 A.M.

**OBJECTIVES OF THE COURSE:** By the end of the course, students will have improved their analytical and critical thinking skills as well as their understanding of the basic operation of markets and the price system in the U.S. economy. In addition, students will improve their understanding of those terms and basic concepts in economics crucial to success in our market economy. This course is a required course for admission to the Bachelor of Business Administration Major. You must complete this course with a "C" or better to be eligible to enroll in upper division business courses. (The other required courses are ECON 202, ACCT 210, ACCT 211, and MATH 102.)

**COMPUTER SKILLS REQUIRED:** The student may use computers for their weekly homework assignments. A spreadsheet program can be usefully employed for several assignments. In addition, I encourage students to contact me via e-mail. The computer assignments will require the use of an Internet browser, such as Netscape Navigator™ or Internet Explorer™. These assignments will allow you to build skill in finding, retrieving and analyzing current economic information from a wide variety of sources.

**AMERICANS WITH DISABILITIES ACT:** If there is any student in this class who has special needs for accommodation, please feel free to discuss the matter with me. Students requiring accommodations need to contact Dr. Nancy Moose, the DSU ADA Academic Coordinator. She can be reached at (605) 256-5146, (605) 256-5269 or [moosen@columbia.dsu.edu](mailto:moosen@columbia.dsu.edu). The ADA Office is located in the Student Services Office in the Trojan Center on the Madison Campus.

**ECON 201:**  
**Principles of Microeconomics**

Fall, 1998  
Credits: 3.0

SYN: 10261  
Room: KC 104

Instructor: Dr. Daniel A. Talley  
Office Hours: 1 - 3:00 p.m. MWF and  
11 - 12:00 and 2:30 - 3:30 p.m. TR  
Phone: 256-5114  
E-mail: talleyd@columbia.dsu.edu

Office: KC 138  
College of Bus & Info Sys  
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**APPROVED COURSE DESCRIPTION:** The study of economics from the micro-economic approach with a detailed look at the markets, the price system, and the allocation of resources.

**UNAPPROVED COURSE DESCRIPTION:** This course is an introduction to microeconomic analysis. Topics include Supply and Demand Theory, Utility Maximization Theory, detailed discussion of the Theory of the Firm (Cost and Production), and an examination of the different market structures in which real world firms interact (Industrial Organization). The last part of the course will deal with government intervention (regulation and antitrust) and labor market issues. The course is designed to give the student an understanding of the fundamental operations of the markets in which we daily transact--how they work as well as when they fail. Given the fact that many of today's defining events have important economic origins--such as the break-up of the former Soviet Union, the 1990 invasion of Kuwait by Iraq, and even the outcome of presidential elections--a knowledge of economics can aid in understanding our world and the occurrences that affect our lives.

**PREREQUISITES:** MATH 102 (or place appropriately on the DSU math placement test).

**TEXT:** The textbook for the course is The Microeconomy Today, 7th edition by Bradley R. Schiller. All readings are from the text.

**STUDY GUIDE:** A study guide to supplement the text is available, but optional. It does contain a large number of practice problems that would be very useful for learning the material in this course.

**WEB SITE:** An extensive course web site has been established at <http://courses.dsu.edu/econ201-2/201Index.html>. You will be expected to obtain supplemental lecture outlines, all course assignments, and current course information (e.g. scores and answer keys for homework assignments and exams) from this site.

**GRADES:** Your course grade is based on two midterm examinations, a comprehensive final examination, your scores on weekly homework assignments and monthly computer assignments requiring use of the World-Wide Web. These assignments and exams will be the **sole basis** for your course grade. Two methods will be used to calculate your score for the course. The two methods are:

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Introduction and Basic Concepts	Ch 1, with appendix
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Oligopoly	Ch 10
Monopolistic Competition	Ch 11
Competitive Labor Market (Additional Topics as Time Permits)	Ch 15

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Comparative Advantage	Ch 3
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Production and Costs	Ch 6
Perfect Competition	Ch 7 & 8
Monopoly	Ch 9

**MIDTERM 2 -- MONDAY, NOVEMBER 23, FROM 6:30 TO 7:30 P.M.**

Oligopoly	Ch 10
Monopolistic Competition	Ch 11
Competitive Labor Market	Ch 15
(Additional Topics as Time Permits)	

**FINAL -- THURSDAY, DECEMBER 17, FROM 8:00 TO 10:00 A.M.**

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Appendix F

Final Exams

from

ECON 201 Principles of Microeconomics

Fall 1997

Fall 1998, Section 1

Fall 1998, Section 2

Fall 1998, Section 3

# ECON 201: Principles of Microeconomics Talley

## Final Examination Fall, 1997

This is a multiple-choice exam with 50 questions. You must use a SCANTRON answer sheet to record your responses and you may use a calculator. You may keep this test when you are finished. The answers to the exam will be posted immediately, and the course grades will be posted on my office door by 5:00 p.m. Thursday, Dec. 18. Good Luck!

1. The central issue of the study of economics is:
  - A. How best to use society's scarce resources.
  - B. How society spends the income of individuals based on resource availability.
  - C. How society purchases resources, given its macroeconomic goals.
  - D. How individual market participants decide what to produce given fixed resource constraints.
2. The opportunity cost of studying for an economics test is:
  - A. Negative, since it may improve your grade.
  - B. Zero, since you knew when you registered for the class that studying would be required.
  - C. The money you spent on tuition for the class.
  - D. The best alternative use of your time.
3. If an economy experiences increasing opportunity costs with respect to two goods, then the production possibilities curve between the two goods will be:
  - A. Bowed outward.
  - B. Bowed inward.
  - C. A straight, downward-sloping line.
  - D. All of the above are possible.
4. When technological change allows a smaller amount of a resource to be used in producing two goods shown on a production possibilities curve, there will be:
  - A. A movement along the production possibilities curve.
  - B. An inward shift of the production possibilities curve.
  - C. No change in the production possibilities curve.
  - D. An outward shift of the production possibilities curve.
5. A single proprietorship is a firm owned by:
  - A. A small number of individuals who are liable for the firm's debt and obligations.
  - B. Many people who own shares (stocks) of the firm, but who are not liable for the firm's debt.

- C. One individual who is liable for the firm's obligations and debt.
  - D. Another firm or corporation.
6. When diseconomies of scale occur:
- A. The long run average total cost curve falls as output increases.
  - B. Marginal cost intersects average total cost.
  - C. The long run average total cost curve increases as output increases.
  - D. Average fixed costs will rise.
7. The study of microeconomic theory focuses on the:
- A. Interaction of international trade and the domestic production of goods and services.
  - B. Operation of the entire economy.
  - C. Role of the banking system in the economy.
  - D. Structure and performance of markets and the operation of the price system.
8. Economic models are used by economists to:
- A. Predict economic behavior.
  - B. Explain economic behavior.
  - C. Formulate economic policy.
  - D. All of the above.
9. One In the News article in the text points out that one B-2 bomber costing \$532 million could buy housing for 8,000 families. Implicitly, the article is suggesting the opportunity cost of B-2 bombers in terms of family housing is:
- A. Housing for 8,000 families.
  - B. \$532 million.
  - C. 0.000125.
  - D. 800.
10. Mort R. Board, a recent college graduate, turns down a \$25,000-a-year job offer from IBM to open his own business. Mort borrows \$100,000 to purchase equipment. During Mort's first year, total sales equal \$200,000, his labor costs equal \$110,000, and his raw material costs equal \$50,000. He pays \$10,000 in interest on his equipment loan. Assuming no depreciation of his equipment, which of the following is the best estimate of Mort's economic profit for the first year?
- A. \$20,000
  - B. -\$95,000
  - C. \$30,000
  - D. \$5000
11. The income distribution of the United States is basically the nation's answer to:
- A. The WHAT question.
  - B. The HOW question.
  - C. The FOR WHOM question.
  - D. All of the above.

12. Which of the following provides an example of the law of supply?
- A. Falling labor costs cause an increase in supply.
  - B. Improved technology shifts the supply curve to the right.
  - C. Some producers leave the industry, and the supply curve shifts to the left.
  - D. Price falls and the quantity supplied decreases.
13. Economists make a distinction between a change in “demand” and a change in the “quantity demanded”:
- A. Because the supply curve shifts whenever there is a change in demand.
  - B. Because the demand curve shifts whenever there is a change in quantity demanded.
  - C. To distinguish a shift in the demand curve from a movement along the demand curve.
  - D. To distinguish a shift in supply from a shift in demand.
14. The market demand curve for a particular good indicates:
- A. That consumer will purchase more of the good at higher prices, *ceteris paribus*.
  - B. That sellers will offer more of the good only at higher prices, *ceteris paribus*.
  - C. The total quantities that buyers are willing and able to purchase at alternative prices, *ceteris paribus*.
  - D. How much of the good is actually purchased in a given time period.
15. Which determinant changes in the personal computer market as more individuals become interested in “surfing the Internet”?
- A. Cost of factors of production.
  - B. Income.
  - C. Technology.
  - D. Number of buyers.
16. Which of the following statement concerning the relationships between total physical product (TPP), average physical product (APP), and marginal physical product (MPP) is NOT correct:
- A. APP continues to rise so long as TPP is rising.
  - B. APP reaches a maximum when  $MPP = APP$ .
  - C. TPP reaches a maximum when the MPP of the variable input becomes zero.
  - D. When MPP starts to diminish, TPP continues to rise.
17. Tennis balls and tennis rackets are commonly used together. A decrease in the price of tennis balls will result in:
- A. An increase in the demand for tennis balls.
  - B. A decrease in the demand for tennis balls.
  - C. An increase in the demand for tennis rackets.
  - D. A decrease in the demand for tennis rackets.
18. The amount of a good suppliers are willing and able to supply at any given price in a given time period could depend on:
- A. Income.
  - B. Expectations on the part of buyers.
  - C. The state of technology at the time.

- D. The consumer demand for the good.
19. A market is said to be in equilibrium when:
- A. Demand is fully satisfied at alternative prices.
  - B. Every buyer who wants the good receives the good.
  - C. Every seller who has a product to sell is able to sell the good.
  - D. The quantity demanded equals the quantity supplied.
20. Depreciation affects which of the following factors of production?
- A. Land
  - B. Labor
  - C. Capital
  - D. All of the above
21. An effective price ceiling results in black-market pressures to:
- A. Reduce prices because of surpluses.
  - B. Raise prices because of surpluses.
  - C. Raise prices because of shortages.
  - D. Reduce prices because of shortages.
22. Suppose that if your income is \$10,000, your tax is \$1,000, but if your income is \$50,000, your tax is \$4,000. Such a tax is:
- A. Regressive.
  - B. Progressive.
  - C. Proportional.
  - D. A flat tax.
23. Government antitrust activity led to the breakup of AT&T in 1984 because, among other things, the government felt that AT&T had too much control over the telecommunications market. Which type of market failure was involved?
- A. Inequity.
  - B. Public goods.
  - C. Externalities.
  - D. Market power.
24. Transfer payments include:
- A. Unemployment benefits.
  - B. Social security benefits.
  - C. Welfare.
  - D. All of the above.
25. In the market for home computers, in which of the following instances will the effect upon equilibrium price be indeterminate, that is dependent upon the magnitude of the given shifts in supply and demand?
- A. A decrease in the price of software (a complement) and a decrease in the price of DRAM.
  - B. An increase in the number of buyers and an increase in the price of hard drives.

- C. A decrease in the price of DRAM only.
  - D. A decrease in the income of computer buyers and a drop in the price of CD-ROM drives.
26. Changes in short-run total costs result from changes in only:
- A. Variable costs.
  - B. Fixed costs.
  - C. Profit.
  - D. The price elasticity of demand.
27. Which of the following would be most likely to have a price elasticity of demand less than 1?
- A. An addictive drug.
  - B. Airline travel.
  - C. Restaurant meals.
  - D. New cars.
28. A price cut will increase the total revenue a firm receives, *ceteris paribus*, only if the demand for its product is:
- A. Elastic.
  - B. Inelastic.
  - C. Unitary elastic.
  - D. Perfectly Inelastic.

Use the following information to answer Questions 29 and 30.

Output (units per day)	0	10	20	30
Total Cost (dollars per day)	40	60	80	100

29. Average fixed cost at 20 units of output is:
- A. \$1.
  - B. \$2.
  - C. \$4.
  - D. \$6.
30. The marginal cost between 20 and 30 units of output is:
- A. \$1.
  - B. \$2.
  - C. \$3.
  - D. \$20.
31. The government is considering imposing a gasoline tax of 25 to 50 cents per gallon to reduce carbon dioxide emissions by discouraging gasoline use. This gas tax would:
- A. Reduce the demand for gasoline, decreasing the equilibrium price and quantity.
  - B. Reduce the demand for gasoline, increasing the equilibrium price and decreasing the equilibrium quantity.

- C. Reduce the supply of gasoline, increasing the equilibrium price and decreasing the equilibrium quantity.
  - D. None of the above are correct.
32. If the equilibrium wage is \$5.50 in the market for unskilled labor and the government raises the minimum wage to \$5.15, then:
- A. There will be a shortage of labor at the new minimum wage rate.
  - B. There will be a surplus of labor at the new minimum wage rate.
  - C. There will be no effect on the equilibrium wage.
  - D. Wages will rise and there will be a surplus of labor, i.e. unemployment.
33. Economic costs and economic profits are:
- A. Usually greater and smaller, respectively, than their accounting counterparts.
  - B. Usually smaller and greater, respectively, than their accounting counterparts.
  - C. Usually both smaller than their accounting counterparts.
  - D. Usually both greater than their accounting counterparts.
34. Normal profit implies that:
- A. Economic profit is zero.
  - B. All factors employed are earning an amount equal to their opportunity costs.
  - C. The factors employed are earning as much as they could in their best alternative employment.
  - D. All of the above.
35. The essential characteristic of a perfectly competitive firm is that:
- A. It is a price setter.
  - B. It is a price taker.
  - C. The market demand curve is perfectly elastic.
  - D. Each firm's demand curve is perfectly inelastic.
36. At the profit-maximizing level of output for a competitive firm:
- A. Average physical product = average total cost.
  - B. Total revenue = price.
  - C. Marginal cost = price.
  - D. Total cost = Total revenue.
37. A competitive firm should always continue to operate in the short run as long as:
- A.  $P < ATC$ .
  - B.  $P < AVC$ .
  - C.  $MR > AVC$ .
  - D.  $MR > MC$ .
38. If economic profits are earned in a competitive market:
- A. More firms will enter the market.
  - B. The market supply curve will shift to the left.

- C. Equilibrium price will rise.
  - D. All of the above.
39. If a firm can change market prices by altering its output, then:
- A. It has market power.
  - B. It is a price taker.
  - C. It faces a flat demand curve.
  - D. It engages in marginal cost pricing.
40. Which of the following definitions is correct?
- A. Accounting profit + Economic Profit = Normal Profit
  - B. Economic Profit – Accounting Profit = Explicit Costs
  - C. Economic Profit = Accounting Profit – Implicit Costs
  - D. Economic Profit – Implicit Costs = Accounting Profits

Use the diagram below to answer Questions 41 and 42. Diagram (a) presents the cost curves that are relevant to a firm's production decision, and diagram (b) shows the market demand and supply curves for the market. Use both diagrams to answer these questions.

41. In the figure above, if market demand is  $D_3$  and market supply is  $S$ , the market price will be:
- A.  $P_1$ .
  - B.  $P_2$ .
  - C.  $P_3$ .
  - D.  $P_4$ .
42. In the long run, at prices below  $P_2$  in the figure above:
- A. There is economic profit.
  - B. The firm will produce the quantity,  $q_1$ .
  - C. Firms will enter the market.
  - D. Firms will exit the market.
43. If the entire output of market is produced by a single seller, the firm:
- A. Is a monopoly.

- B. Is perfectly competitive.
  - C. Is an oligopolist.
  - D. Faces a perfectly inelastic demand.
44. An outcome expected in competitive market is:
- A. Market price occurring at the equilibrium price (quantity demand equal to quantity supplied).
  - B. Zero economic profit in the long run.
  - C.  $MC = P$ .
  - D. All of the above.
45. Assume a national economy is characterized by unemployment and an inefficient allocation of resources. The immediate effect of resolving these problems will be to:
- A. Move the level of actual output closer to the economy's production possibilities curve.
  - B. Create a less equal distribution of income.
  - C. Shift its production possibilities curve to the left.
  - D. Shift its production possibilities curve to the right.
- Use the figure below to answer Questions 46 and 47.

46. In the figure above, the profit-maximizing level of output is:
- A. 40 units.
  - B. 60 units.
  - C. Between 40 and 60 units.
  - D. Between 80 and 100 units.
47. In the figure above, the profit-maximizing monopolist will charge a price of:
- A. \$6.00.
  - B. \$7.00.
  - C. \$10.00.
  - D. \$11.00.

48. In which of the following market structures are a focus on market share, price leadership, price wars, and other signs of interdependence to be expected?
- A. Perfect competition.
  - B. Monopolistic competition.
  - C. Oligopoly.
  - D. Monopoly.
49. Which of the following sectors of the U.S. economy have shrunk in absolute terms since the turn of the century?
- A. Manufacturing
  - B. Government
  - C. Service
  - D. None of the above
50. A monopolistically competitive firm maximizes profits in the short run by:
- A. Using marginal cost pricing.
  - B. Producing output at the level where ATC is minimized.
  - C. Producing output at the level where price equals ATC.
  - D. Producing output at the level where  $MC = MR$ .

# ECON 201: Principles of Microeconomics

## Talley

### Final Examination

#### Section 01

#### Fall, 1998

This is a multiple choice exam with 50 questions. You must use an answer sheet to record your responses and you may use a calculator. You must hand in this test when you are finished. You may pick up your exam and the answers will be posted to the web at noon on Monday. The course grades will be posted to the Web by Tuesday morning. Good Luck!

1. OPEC, a group of foreign oil-producing countries, has let the price of oil fall to record lows in recent months. What will happen to the equilibrium price and quantity in the market for U.S. crude oil as a result of the low price for OPEC oil, *ceteris paribus*?
  - A. Price will fall and quantity will rise.
  - B. Price and quantity will fall.
  - C. Price will rise and quantity will fall.
  - D. Price and quantity will rise.
2. When a country's people and its other resources are fully employed, which of the following must be true before more of any one item can be produced?
  - A. There has to be a general decrease in prices.
  - B. There has to be less production of other products.
  - C. Private enterprise has to produce it rather than the government.
  - D. All of the above
3. During the Persian Gulf War of 1991, many of Kuwait's oil refineries were destroyed. This would best be represented by:
  - A. A movement down and to the right along Kuwait's production possibility frontier.
  - B. A movement off Kuwait's production possibility frontier to a point inside the frontier.
  - C. A shift of Kuwait's production possibility frontier down and to the left.
  - D. A movement up and to the left along Kuwait's production possibility frontier.
4. Which of the following is a long run concept?
  - A. Increasing marginal cost.
  - B. Diminishing returns.
  - C. Diseconomies of scale.
  - D. All of the above.
5. When industries or countries specialize in producing goods and services, which of the following will generally result:
  - A. Increased price inflation.
  - B. Greater world output.
  - C. Less output per hour worked.
  - D. More equal distribution of income.

6. What is the most essential characteristic of a market economy?
  - A. Active competition in the marketplace.
  - B. Effective labor unions.
  - C. Effective government regulation.
  - D. Responsible action by business leaders.
  
7. In a market economy, individuals pursue their own self-interest. This serves the *public* interest because of:
  - A. Social responsibility of business leaders.
  - B. Careful planning and coordination of market activity by the government.
  - C. Individuals' understanding of the public interest.
  - D. The operation of efficient markets.
  
8. What would happen to employment if the government mandated a minimum wage above what employers currently pay?
  - A. Employment would go down.
  - B. Employment would go up.
  - C. Employment would stay the same.
  - D. There is not enough information about worker's wage demands to answer the question.
  
9. Which of the following approaches to pollution control makes the best use of a country's economic resources?
  - A. Abolishing the use of toxic chemicals.
  - B. Controlling pollution as long as the extra benefits are greater than the extra costs.
  - C. Prohibiting economic activities that cause pollution or harm the environment.
  - D. Using resources to reduce all pollution damage.
  
10. Under perfect competition, an individual firm's supply curve is exactly the same as:
  - A. Its demand curve.
  - B. The average total cost curve.
  - C. The marginal cost curve for prices below minimum average variable cost.
  - D. The marginal cost curve for prices above minimum average variable cost.
  
11. Which of the following limits an economy's potential output?
  - A. The amount of money in circulation.
  - B. Business demand for final goods and services.
  - C. Government regulations and spending.
  - D. The quantity and quality of labor, capital and natural resources.
  
12. Why are private businesses not likely to operate a lighthouse?
  - A. Ship owners buy insurance policies to protect themselves from losses so they won't pay for lighthouses.
  - B. It would cost a private business more to operate a lighthouse than it costs the government.
  - C. The light from a lighthouse can be used even by ships that do not pay a fee for the service.
  - D. The cost of operating a lighthouse is too high.
  
13. From our discussions in class, declining marginal product is the result of:
  - A. Congestion effects dominating specialization effects.
  - B. Inefficiency in the production process.
  - C. The use of inferior factors of production.
  - D. Laziness.

14. The goals of the principal participants in the economy are the maximization of:
- Income for consumers, profits for business, and taxes for government.
  - Goods and services for consumers, scarce resources for business, and resources not used by business for government.
  - Satisfaction from purchases for consumers, profits for businesses, and society's general welfare for government.
  - Available goods and services for consumers, scarce resources for businesses, and general welfare for government.

Use the following table to answer Question #15.

J.L. Picard's Utility Schedule

<u>Units of Beer</u>	<u>TU of Beer</u>	<u>MU of Beer</u>	<u>Units of Pretzels</u>	<u>TU of Pretzels</u>	<u>MU of Pretzels</u>
1	20	20	1	15	15
2	36	16	2	27	12
3	48	12	3	37	10
4	56	8	4	45	8
5	60	4	5	47	2

Assume the price of beer is \$4.00 per unit, and the price of pretzels is \$2.00 per unit.

15. Suppose J.L. has \$16 to spend on beer and pretzels for a large party. What combination should he purchase in order to maximize his utility? (Use the table above)
- 2 units of beers and 4 units of pretzels.
  - 3 units of beers and 2 units of pretzels.
  - 4 units of beers and 4 units of pretzels.
  - None of the above.
16. Long-run equilibrium in perfect competition requires:
- $\pi = 0$ .
  - $P = MC$ .
  - $P = \text{minimum ATC}$ .
  - All of the above.
17. A flat demand curve for a firm indicates that:
- Marginal revenue is below the demand curve.
  - The firm is at the minimum of average variable costs.
  - The law of demand does not apply in the market.
  - A firm has no market power.
18. Collusion is:
- Illegal only if it harms consumers.
  - Explicit agreement among producers to limit competition.
  - Legal if it results in a decrease in production costs.
  - The same as price leadership.
19. A perfectly competitive firm:
- Is large enough relative to the market to be taken into account by competitors.
  - Confronts a downward-sloping firm demand curve.
  - Is a price taker.
  - Has the market power to compete effectively.

20. The law of demand states that *ceteris paribus*:
- A consumer will purchase more of a good at higher prices than at lower prices.
  - The quantity demanded increases at lower prices.
  - Price and quantity supplied are directly related.
  - The responsiveness of consumer demand to a change in the price of a good is measured by the price elasticity of demand.

Use the following table to answer Question #21.

<u>Output</u>	<u>Average Fixed Cost</u>	<u>Average Total Cost</u>
0 Units	$\infty$	$\infty$
10 Units	\$60	\$70
20 Units	30	39
30 Units	20	28
40 Units	15	22

21. Given the production data for a hypothetical firm, what is the marginal cost per unit of increasing output from 30 units to 40 units?
- \$2
  - \$4
  - \$6
  - \$8
22. Marginal Revenue Product (MRP) for a perfectly competitive firm is equal to:
- MR divided by MPP.
  - MR multiplied by output (q).
  - Price multiplied by MPP.
  - None of the above are correct.
23. In economics, an example of an "investment" is:
- The purchase of plant and machinery.
  - The purchase of corporate stock.
  - Money put into a pension fund.
  - All of the above.
24. Which of the following occurs when one country trades wheat to another country in exchange for oil?
- The country that trades wheat gains and the country that trades oil loses.
  - The country that trades oil gains and the country that trades wheat loses.
  - Both countries lose.
  - Both countries gain.
25. If a price floor is to be effective in benefiting producers, it should be set:
- Below the equilibrium price and create market shortages.
  - Below the equilibrium price and create market surpluses.
  - Above the equilibrium price and create market shortages.
  - Above the equilibrium price and create market surpluses.
26. The marginal revenue of a monopolist:
- Is equal to price at all levels of output.
  - Is constant up to the rate of output that maximizes total revenues.
  - Is the same as the demand curve.
  - Is below price.

27. A monopolistically competitive firm maximizes profits or minimizes losses in the short-run by:
- Setting price equal to marginal cost.
  - Producing output at the level where ATC is minimized.
  - Producing output at the level where  $MR = MC$ .
  - Producing output at the level where  $P = ATC$ .
28. Oligopoly is more difficult to analyze than other market models because:
- Of rival response and the fact that all the possible responses of each rival must be taken into account in setting equilibrium price and quantity.
  - Unlike the firms of other market models, it cannot be assumed that the oligopoly firm is a profit maximizer.
  - The number of firms is so large that market behavior cannot be accurately predicted.
  - The marginal cost and marginal revenue curves of an oligopoly firm play no part in the determination of equilibrium price and quantity.
29. The government raises revenue to repair roads by taxing gasoline. The government will be able to raise more revenue by raising the gasoline tax if the demand for gasoline is:
- relatively elastic.
  - relatively inelastic.
  - perfectly elastic.
  - unitarily elastic.
30. When total revenue does not cover all costs:
- Producers will shut down.
  - Producers will continue to produce in the short run if total revenue exceeds total variable costs.
  - Producers will continue to produce in the short run if total revenue exceeds total fixed costs.
  - Producers will continue to produce only in the long run.
31. The opportunity cost of working is the:
- Marginal revenue product.
  - Earnings that could be made in an alternative job.
  - Amount of consumption that is made possible.
  - Value of leisure time that must be given up.

Use the following information to answer Questions 32 and 33.

Output (units per day)	0	10	20	30
Total Cost (dollars per day)	40	60	80	100

51. Average fixed cost at 10 units of output is:
- \$6
  - \$4
  - \$2
  - \$1
52. The marginal cost between 20 and 30 units of output is:
- \$1
  - \$2
  - \$3
  - \$20

34. Rising marginal costs result from:
- A. Rising prices of fixed inputs.
  - B. Falling marginal physical product.
  - C. Rising prices of variable inputs.
  - D. All of the above.
35. In which of the following market structures are a focus on market share, price leadership, price wars, and other signs of interdependence to be expected?
- E. Monopoly.
  - F. Oligopoly.
  - G. Monopolistic competition.
  - H. Perfect competition.
36. An unusually bountiful crop of coffee beans might be expected to:
- A. Increase the supply of coffee.
  - B. Reduce the price of coffee.
  - C. Lower the price of tea.
  - D. All of the above
37. If the supply and demand curves for a product both decrease, we can say that equilibrium:
- A. Quantity must decline, but equilibrium price may either fall, rise, or remain unchanged.
  - B. Price must fall, but equilibrium quantity may either fall, rise, or remain unchanged.
  - C. Quantity and price must both decline.
  - D. Quantity must fall and equilibrium price must rise.
38. When economists say that the demand for a product has increased, this means that:
- A. The demand curve has shifted to the left.
  - B. The product has become particularly scarce for some reason.
  - C. Product price has fallen and as a consequence consumers are buying a larger quantity of the product.
  - D. Consumers are now willing to purchase more of this product at each possible price.
39. In the market for home computers, in which of the following instances will the effect upon equilibrium quantity be indeterminate, that is dependent upon the magnitude of the given shifts in supply and demand?
- A. An increase in the price of software (a complement) and an increase in the price of DRAM.
  - B. An increase in the number of buyers and a decrease in the price of hard drives.
  - C. An increase in the price of DRAM only.
  - D. A decrease in the income of computer buyers and a fall in the price of CD-ROM drives.
40. All of the following could immediately or eventually lead to an inward shift of a nation's production possibilities curve, *except*:
- A. An increase in the average skill level of the labor force.
  - B. Emigration of skilled workers from the nation.
  - C. A decline in the birth rate.
  - D. Depletion and reduced availability of major energy resources.

41. The amount of calendar time associated with the long run:
- Is the same for all firms in the economy.
  - Is one year by definition.
  - Is less than that associated with the short run.
  - Varies from industry to industry.
42. Microsoft has been charged with practices that restrict competition by the Antitrust Division of which federal agency?
- The Federal Trade Commission (FTC).
  - The Justice Department.
  - The Securities and Exchange Commission (SEC).
  - The Internal Revenue Service (IRS).
43. A fixed cost:
- Is any cost which a firm would incur even if output was zero.
  - Is associated with all inputs whose short-run supply is perfectly inelastic.
  - Is associated with any productive resource whose price is fixed.
  - Is any cost which increases proportionately with output.

Use the following information to answer the Questions 44 - 46.

The Sunshine Corporation finds that its costs are \$40 when it produces no output. Its total variable costs (TVC) change with output as shown below:

<u>Output</u>	<u>TVC</u>
1	\$30
2	50
3	65
4	85
5	110

44. The total cost of producing 3 units of output is:
- \$185
  - \$145
  - \$105
  - \$65
45. The marginal cost of 3 units of output is:
- \$15
  - \$20
  - \$25
  - \$105
46. This firm:
- May be either realizing a profit or a loss.
  - Is making an economic profit of \$260.
  - Is realizing a loss of \$125.
  - Is selling its output in a perfectly competitive market.

47. EverOnward Motors manufactures three styles of passenger cars, and two models of trucks. During a given month in the life of EverOnward, which of the following would MOST LIKELY be classified as fixed input?
- A. Labor
  - B. Paint
  - C. Tooling equipment
  - D. The two models of trucks
48. Concentration ratios measure the:
- A. Number of firms in an industry.
  - B. Geographic location of the largest corporations in each industry.
  - C. The degree to which product price exceeds marginal cost in various industries.
  - D. Percentage of total output accounted for by the four largest firms in the industry.
49. Oligopoly industries are characterized by:
- A. A large number of firms and low entry barriers.
  - B. A few dominant firms and low entry barriers.
  - C. A few dominant firms and substantial entry barriers.
  - D. A few dominant firms and no barriers to entry.
50. OPEC is a cartel made up of oil exporting nations. What does "OPEC" stand for?
- A. The acronym has no direct translation in the English language.
  - B. Oil & Petroleum Exporting Conglomerate
  - C. Organization for the Promotion of Exports and Commerce
  - D. Organization of Petroleum Exporting Countries

# ECON 201: Principles of Microeconomics

## Talley

### Final Examination

#### Section 02

#### Fall, 1998

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1. What is the most essential characteristic of a market economy?
  - E. Active competition in the marketplace.
  - F. Effective labor unions.
  - G. Effective government regulation.
  - H. Responsible action by business leaders.
  
2. OPEC, a group of foreign oil-producing countries, has let the price of oil fall to record lows in recent months. What will happen to the equilibrium price and quantity in the market for U.S. crude oil as a result of the low price for OPEC oil, *ceteris paribus*?
  - E. Price will fall and quantity will rise.
  - F. Price and quantity will fall.
  - G. Price will rise and quantity will fall.
  - H. Price and quantity will rise.
  
3. When a country's people and its other resources are fully employed, which of the following must be true before more of any one item can be produced?
  - E. There has to be a general decrease in prices.
  - F. There has to be less production of other products.
  - G. Private enterprise has to produce it rather than the government.
  - H. All of the above
  
4. Which of the following approaches to pollution control makes the best use of a country's economic resources?
  - E. Abolishing the use of toxic chemicals.
  - F. Controlling pollution as long as the extra benefits are greater than the extra costs.
  - G. Prohibiting economic activities that cause pollution or harm the environment.
  - H. Using resources to reduce all pollution damage.
  
5. Which of the following is a long run concept?
  - E. Increasing marginal cost.
  - F. Diminishing returns.
  - G. Diseconomies of scale.
  - H. All of the above.

6. The law of demand states that *ceteris paribus*:
- E. A consumer will purchase more of a good at higher prices than at lower prices.
  - F. The quantity demanded increases at lower prices.
  - G. Price and quantity supplied are directly related.
  - H. The responsiveness of consumer demand to a change in the price of a good is measured by the price elasticity of demand.
20. A perfectly competitive firm:
- E. Is large enough relative to the market to be taken into account by competitors.
  - F. Confronts a downward-sloping firm demand curve.
  - G. Is a price taker.
  - H. Has the market power to compete effectively.

Use the following table to answer Question #8.

<u>Output</u>	<u>Average Fixed Cost</u>	<u>Average Total Cost</u>
0 Units	$\infty$	$\infty$
10 Units	\$60	\$70
20 Units	30	39
30 Units	20	28
40 Units	15	22

8. Given the production data for a hypothetical firm, what is the marginal cost per unit of increasing output from 30 units to 40 units?
- E. \$2
  - F. \$4
  - G. \$6
  - H. \$8
9. Marginal Revenue Product (MRP) for a perfectly competitive firm is equal to:
- E. MR divided by MPP.
  - F. MR multiplied by output (q).
  - G. Price multiplied by MPP.
  - H. None of the above are correct.
10. In economics, an example of an "investment" is:
- E. The purchase of plant and machinery.
  - F. The purchase of corporate stock.
  - G. Money put into a pension fund.
  - H. All of the above.
11. Which of the following occurs when one country trades wheat to another country in exchange for oil?
- E. The country that trades wheat gains and the country that trades oil loses.
  - F. The country that trades oil gains and the country that trades wheat loses.
  - G. Both countries lose.
  - H. Both countries gain.
12. If a price floor is to be effective in benefiting producers, it should be set:
- E. Below the equilibrium price and create market shortages.
  - F. Below the equilibrium price and create market surpluses.
  - G. Above the equilibrium price and create market shortages.
  - H. Above the equilibrium price and create market surpluses.
13. When industries or countries specialize in producing goods and services, which of the following will generally result:
- E. Increased price inflation.

- F. Greater world output.
  - G. Less output per hour worked.
  - H. More equal distribution of income.
14. In a market economy, individuals pursue their own self-interest. This serves the *public* interest because of:
- E. Social responsibility of business leaders.
  - F. Careful planning and coordination of market activity by the government.
  - G. Individuals' understanding of the public interest.
  - H. The operation of efficient markets.
15. What would happen to employment if the government mandated a minimum wage above what employers currently pay?
- E. Employment would go down.
  - F. Employment would go up.
  - G. Employment would stay the same.
  - H. There is not enough information about worker's wage demands to answer the question.
16. During the Persian Gulf War of 1991, many of Kuwait's oil refineries were destroyed. This would best be represented by:
- E. A movement down and to the right along Kuwait's production possibility frontier.
  - F. A movement off Kuwait's production possibility frontier to a point inside the frontier.
  - G. A shift of Kuwait's production possibility frontier down and to the left.
  - H. A movement up and to the left along Kuwait's production possibility frontier.
17. Under perfect competition, an individual firm's supply curve is exactly the same as:
- E. Its demand curve.
  - F. The average total cost curve.
  - G. The marginal cost curve for prices below minimum average variable cost.
  - H. The marginal cost curve for prices above minimum average variable cost.
18. Which of the following limits an economy's potential output?
- E. The amount of money in circulation.
  - F. Business demand for final goods and services.
  - G. Government regulations and spending.
  - H. The quantity and quality of labor, capital and natural resources.
19. Why are private businesses not likely to operate a lighthouse?
- E. Ship owners buy insurance policies to protect themselves from losses so they won't pay for lighthouses.
  - F. It would cost a private business more to operate a lighthouse than it costs the government.
  - G. The light from a lighthouse can be used even by ships that do not pay a fee for the service.
  - H. The cost of operating a lighthouse is too high.

20. From our discussions in class, declining marginal product is the result of:
- E. Congestion effects dominating specialization effects.
  - F. Inefficiency in the production process.
  - G. The use of inferior factors of production.
  - H. Laziness.
21. The goals of the principal participants in the economy are the maximization of:
- E. Income for consumers, profits for business, and taxes for government.
  - F. Goods and services for consumers, scarce resources for business, and resources not used by business for government.
  - G. Satisfaction from purchases for consumers, profits for businesses, and society's general welfare for government.
  - H. Available goods and services for consumers, scarce resources for businesses, and general welfare for government.

Use the following table to answer Question #22.

J.L. Picard's Utility Schedule

<u>Units of Beer</u>	<u>TU of Beer</u>	<u>MU of Beer</u>	<u>Units of Pretzels</u>	<u>TU of Pretzels</u>	<u>MU of Pretzels</u>
1	20	20	1	15	15
2	36	16	2	27	12
3	48	12	3	37	10
4	56	8	4	45	8
5	60	4	5	47	2

Assume the price of beer is \$4.00 per unit, and the price of pretzels is \$2.00 per unit.

22. Suppose J.L. has \$16 to spend on beer and pretzels for a large party. What combination should he purchase in order to maximize his utility? (Use the table above)
- E. 2 units of beers and 4 units of pretzels.
  - F. 3 units of beers and 2 units of pretzels.
  - G. 4 units of beers and 4 units of pretzels.
  - H. None of the above.
23. Long-run equilibrium in perfect competition requires:
- E.  $\pi = 0$ .
  - F.  $P = MC$ .
  - G.  $P = \text{minimum ATC}$ .
  - H. All of the above.
24. A flat demand curve for a firm indicates that:
- E. Marginal revenue is below the demand curve.
  - F. The firm is at the minimum of average variable costs.
  - G. The law of demand does not apply in the market.
  - H. A firm has no market power.
25. Collusion is:
- E. Illegal only if it harms consumers.
  - F. Explicit agreement among producers to limit competition.
  - G. Legal if it results in a decrease in production costs.
  - H. The same as price leadership.

26. Rising marginal costs result from:  
E. Rising prices of fixed inputs.  
F. Falling marginal physical product.  
G. Rising prices of variable inputs.  
H. All of the above.
36. In which of the following market structures are a focus on market share, price leadership, price wars, and other signs of interdependence to be expected?  
I. Monopoly.  
J. Oligopoly.  
K. Monopolistic competition.  
L. Perfect competition.
28. An unusually bountiful crop of coffee beans might be expected to:  
A. Increase the supply of coffee.  
B. Reduce the price of coffee.  
C. Lower the price of tea.  
D. All of the above
29. When total revenue does not cover all costs:  
E. Producers will shut down.  
F. Producers will continue to produce in the short run if total revenue exceeds total variable costs.  
G. Producers will continue to produce in the short run if total revenue exceeds total fixed costs.  
H. Producers will continue to produce only in the long run.
30. If the supply and demand curves for a product both decrease, we can say that equilibrium:  
E. Quantity must decline, but equilibrium price may either fall, rise, or remain unchanged.  
F. Price must fall, but equilibrium quantity may either fall, rise, or remain unchanged.  
G. Quantity and price must both decline.  
H. Quantity must fall and equilibrium price must rise.
31. When economists say that the demand for a product has increased, this means that:  
E. The demand curve has shifted to the left.  
F. The product has become particularly scarce for some reason.  
G. Product price has fallen and as a consequence consumers are buying a larger quantity of the product.  
H. Consumers are now willing to purchase more of this product at each possible price.
32. In the market for home computers, in which of the following instances will the effect upon equilibrium quantity be indeterminate, that is dependent upon the magnitude of the given shifts in supply and demand?  
E. An increase in the price of software (a complement) and an increase in the price of DRAM.  
F. An increase in the number of buyers and a decrease in the price of hard drives.  
G. An increase in the price of DRAM only.  
H. A decrease in the income of computer buyers and a fall in the price of CD-ROM drives.

33. The marginal revenue of a monopolist:
- E. Is equal to price at all levels of output.
  - F. Is constant up to the rate of output that maximizes total revenues.
  - G. Is the same as the demand curve.
  - H. Is below price.
34. A monopolistically competitive firm maximizes profits or minimizes losses in the short-run by:
- E. Setting price equal to marginal cost.
  - F. Producing output at the level where ATC is minimized.
  - G. Producing output at the level where  $MR = MC$ .
  - H. Producing output at the level where  $P = ATC$ .
29. Oligopoly is more difficult to analyze than other market models because:
- E. Of rival response and the fact that all the possible responses of each rival must be taken into account in setting equilibrium price and quantity.
  - F. Unlike the firms of other market models, it cannot be assumed that the oligopoly firm is a profit maximizer.
  - G. The number of firms is so large that market behavior cannot be accurately predicted.
  - H. The marginal cost and marginal revenue curves of an oligopoly firm play no part in the determination of equilibrium price and quantity.
36. The government raises revenue to repair roads by taxing gasoline. The government will be able to raise more revenue by raising the gasoline tax if the demand for gasoline is:
- E. relatively elastic.
  - F. relatively inelastic.
  - G. perfectly elastic.
  - H. unitarily elastic.
37. The opportunity cost of working is the:
- E. Marginal revenue product.
  - F. Earnings that could be made in an alternative job.
  - G. Amount of consumption that is made possible.
  - H. Value of leisure time that must be given up.

Use the following information to answer Questions 38 and 39.

Output (units per day)	0	10	20	30
Total Cost (dollars per day)	40	60	80	100

53. Average fixed cost at 10 units of output is:
- E. \$6
  - F. \$4
  - G. \$2
  - H. \$1
54. The marginal cost between 20 and 30 units of output is:
- A. \$1
  - B. \$2
  - C. \$3
  - D. \$20

40. Concentration ratios measure the:
- A. Number of firms in an industry.
  - B. Geographic location of the largest corporations in each industry.
  - C. The degree to which product price exceeds marginal cost in various industries.
  - D. Percentage of total output accounted for by the four largest firms in the industry.
41. The amount of calendar time associated with the long run:
- E. Is the same for all firms in the economy.
  - F. Is one year by definition.
  - G. Is less than that associated with the short run.
  - H. Varies from industry to industry.
42. Microsoft has been charged with practices that restrict competition by the Antitrust Division of which federal agency?
- E. The Federal Trade Commission (FTC).
  - F. The Justice Department.
  - G. The Securities and Exchange Commission (SEC).
  - H. The Internal Revenue Service (IRS).
44. A fixed cost:
- E. Is any cost which a firm would incur even if output was zero.
  - F. Is associated with all inputs whose short-run supply is perfectly inelastic.
  - G. Is associated with any productive resource whose price is fixed.
  - H. Is any cost which increases proportionately with output.

Use the following information to answer the Questions 44 - 46.

The Sunshine Corporation finds that its costs are \$40 when it produces no output. Its total variable costs (TVC) change with output as shown below:

<u>Output</u>	<u>TVC</u>
1	\$30
2	50
3	65
4	85
5	110

44. The total cost of producing 3 units of output is:
- A. \$185
  - C. \$145
  - C. \$105
  - D. \$65
45. The marginal cost of 3 units of output is:
- E. \$15
  - F. \$20
  - G. \$25
  - H. \$105
46. This firm:
- A. May be either realizing a profit or a loss.
  - B. Is making an economic profit of \$260.
  - C. Is realizing a loss of \$125.
  - D. Is selling its output in a perfectly competitive market.

41. All of the following could immediately or eventually lead to an inward shift of a nation's production possibilities curve, *except*:
- E. An increase in the average skill level of the labor force.
  - F. Emigration of skilled workers from the nation.
  - G. A decline in the birth rate.
  - H. Depletion and reduced availability of major energy resources.
48. EverOnward Motors manufactures three styles of passenger cars, and two models of trucks. During a given month in the life of EverOnward, which of the following would MOST LIKELY be classified as fixed input?
- E. Labor
  - F. Paint
  - G. Tooling equipment
  - H. The two models of trucks
49. Oligopoly industries are characterized by:
- A. A few dominant firms and substantial entry barriers.
  - B. A few dominant firms and low entry barriers.
  - C. A few dominant firms and no barriers to entry.
  - D. A large number of firms and low entry barriers.
50. OPEC is a cartel made up of oil exporting nations. What does "OPEC" stand for?
- A. The acronym has no direct translation in the English language.
  - B. Organization of Petroleum Exporting Countries
  - C. Oil & Petroleum Exporting Conglomerate
  - D. Organization for the Promotion of Exports and Commerce

# ECON 201: Principles of Microeconomics

## Talley

### Final Examination

#### Section 03

#### Fall, 1998

This is a multiple choice exam with 50 questions. You must use an answer sheet to record your responses and you may use a calculator. You must hand in this test when you are finished. You may pick up your exam and the answers will be posted to the web at noon on Monday. The course grades will be posted to the Web by Tuesday morning. Good Luck!

1. During the Persian Gulf War of 1991, many of Kuwait's oil refineries were destroyed. This would best be represented by:
  - I. A movement down and to the right along Kuwait's production possibility frontier.
  - J. A movement off Kuwait's production possibility frontier to a point inside the frontier.
  - K. A shift of Kuwait's production possibility frontier down and to the left.
  - L. A movement up and to the left along Kuwait's production possibility frontier.
  
2. Which of the following is a long run concept?
  - I. Increasing marginal cost.
  - J. Diminishing returns.
  - K. Diseconomies of scale.
  - L. All of the above.
  
3. OPEC, a group of foreign oil-producing countries, has let the price of oil fall to record lows in recent months. What will happen to the equilibrium price and quantity in the market for U.S. crude oil as a result of the low price for OPEC oil, *ceteris paribus*?
  - A. Price will rise and quantity will fall.
  - B. Price and quantity will rise.
  - C. Price will fall and quantity will rise.
  - D. Price and quantity will fall.
  
4. When a country's people and its other resources are fully employed, which of the following must be true before more of any one item can be produced?
  - A. Private enterprise has to produce it rather than the government.
  - B. There has to be less production of other products.
  - C. There has to be a general decrease in prices.
  - D. All of the above
  
5. When industries or countries specialize in producing goods and services, which of the following will generally result?
  - A. Increased price inflation.
  - B. Less output per hour worked.
  - C. Greater world output.
  - D. More equal distribution of income.

6. What is the most essential characteristic of a market economy?
  - A. Effective labor unions.
  - B. Effective government regulation.
  - C. Responsible action by business leaders.
  - D. Active competition in the marketplace.
  
7. In a market economy, individuals pursue their own self-interest. This serves the *public* interest because of:
  - A. The operation of efficient markets.
  - B. Social responsibility of business leaders.
  - C. Careful planning and coordination of market activity by the government.
  - D. Individuals' understanding of the public interest.
  
8. What would happen to employment if the government mandated a minimum wage above what employers currently pay?
  - A. Employment would go up.
  - B. Employment would go down.
  - C. Employment would stay the same.
  - D. There is not enough information about worker's wage demands to answer the question.
  
9. Which of the following approaches to pollution control makes the best use of a country's economic resources?
  - A. Abolishing the use of toxic chemicals.
  - B. Using resources to reduce all pollution damage.
  - C. Controlling pollution as long as the extra benefits are greater than the extra costs.
  - D. Prohibiting economic activities that cause pollution or harm the environment.
  
10. Under perfect competition, an individual firm's supply curve is exactly the same as:
  - I. Its demand curve.
  - J. The average total cost curve.
  - K. The marginal cost curve for prices below minimum average variable cost.
  - L. The marginal cost curve for prices above minimum average variable cost.
  
11. Which of the following limits an economy's potential output?
  - A. The quantity and quality of labor, capital and natural resources.
  - B. Business demand for final goods and services.
  - C. Government regulations and spending.
  - D. The amount of money in circulation.
  
12. Why are private businesses not likely to operate a lighthouse?
  - A. Ship owners buy insurance policies to protect themselves from losses so they won't pay for lighthouses.
  - B. The light from a lighthouse can be used even by ships that do not pay a fee for the service.
  - C. It would cost a private business more to operate a lighthouse than it costs the government.
  - D. The cost of operating a lighthouse is too high.
  
13. In class, declining marginal product is the result of:
  - A. Inefficiency in the production process.
  - B. The use of inferior factors of production.
  - C. Laziness.
  - D. Congestion effects dominating specialization effects.

14. The goals of the principal participants in the economy are the maximization of:
- I. Income for consumers, profits for business, and taxes for government.
  - J. Goods and services for consumers, scarce resources for business, and resources not used by business for government.
  - K. Satisfaction from purchases for consumers, profits for businesses, and society's general welfare for government.
  - L. Available goods and services for consumers, scarce resources for businesses, and general welfare for government.

Use the following table to answer Question #15.

J.L. Picard's Utility Schedule

<u>Units of Beer</u>	<u>TU of Beer</u>	<u>MU of Beer</u>	<u>Units of Pretzels</u>	<u>TU of Pretzels</u>	<u>MU of Pretzels</u>
1	20	20	1	15	15
2	36	16	2	27	12
3	48	12	3	37	10
4	56	8	4	45	8
5	60	4	5	47	2

Assume the price of beer is \$4.00 per unit, and the price of pretzels is \$2.00 per unit.

15. Suppose J.T. has \$16 to spend on beer and pretzels for a large party. What combination should he purchase in order to maximize his utility? (Use the table above)
- A. 4 units of beers and 4 units of pretzels.
  - B. 3 units of beers and 2 units of pretzels.
  - C. 2 units of beers and 4 units of pretzels.
  - D. None of the above.
16. A flat demand curve for a firm indicates that:
- A. The law of demand does not apply in the market.
  - B. A firm has no market power.
  - C. Marginal revenue is below the demand curve.
  - D. The firm is at the minimum of average variable costs.
17. Long-run in perfect competition requires:
- A.  $\pi = 0$ .
  - B.  $P = MC$ .
  - C.  $P = \text{minimum ATC}$ .
  - D. All of the above.
21. Collusion is:
- A. Explicit agreement among producers to limit competition.
  - B. Illegal only if it harms consumers.
  - C. Legal if it results in a decrease in production costs.
  - D. The same as price leadership.
22. A perfectly competitive firm:
- A. Has the market power to compete effectively.
  - B. Is large enough relative to the market to be taken into account by competitors.
  - C. Confronts a downward-sloping firm demand curve.
  - D. Is a price taker.

20. The law of demand states that *ceteris paribus*:
- I. The quantity demanded increases at lower prices.
  - J. A consumer will purchase more of a good at higher prices than at lower prices.
  - K. Price and quantity supplied are directly related.
  - L. The responsiveness of consumer demand to a change in the price of a good is measured by the price elasticity of demand.

Use the following table to answer Question #21.

<u>Output</u>	<u>Average Fixed Cost</u>	<u>Average Total Cost</u>
0 Units	$\infty$	$\infty$
10 Units	\$60	\$70
20 Units	30	39
30 Units	20	28
40 Units	15	22

21. Given the production data for a hypothetical firm, what is the marginal cost per unit of increasing output from 30 units to 40 units?
- A. \$6
  - B. \$8
  - C. \$2
  - D. \$4
22. Marginal Revenue Product (MRP) for a perfectly competitive firm is equal to:
- A. MR divided by MPP.
  - B. Price multiplied by MPP.
  - C. MR multiplied by output (q).
  - D. None of the above are correct.
23. In economics, an example of an "investment" is:
- I. The purchase of plant and machinery.
  - J. The purchase of corporate stock.
  - K. Money put into a pension fund.
  - L. All of the above.
24. Which of the following occurs when one country trades wheat to another country in exchange for oil?
- A. Both countries gain.
  - B. Both countries lose.
  - C. The country that trades wheat gains and the country that trades oil loses.
  - D. The country that trades oil gains and the country that trades wheat loses.
25. If a price floor is to be effective in benefiting producers, it should be set:
- I. Below the equilibrium price and create market shortages.
  - J. Below the equilibrium price and create market surpluses.
  - K. Above the equilibrium price and create market shortages.
  - L. Above the equilibrium price and create market surpluses.
26. The marginal revenue of a monopolist:
- A. Is equal to price at all levels of output.
  - B. Is below price.
  - C. Is constant up to the rate of output that maximizes total revenues.
  - D. Is the same as the demand curve.

27. A monopolistically competitive firm maximizes profits or minimizes losses in the short-run by:
- Setting price equal to marginal cost.
  - Producing output at the level where ATC is minimized.
  - Producing output at the level where  $P = ATC$ .
  - Producing output at the level where  $MR = MC$ .
30. Oligopoly is more difficult to analyze than other market models because:
- The number of firms is so large that market behavior cannot be accurately predicted.
  - The marginal cost and marginal revenue curves of an oligopoly firm play no part in the determination of equilibrium price and quantity.
  - Of rival response and the fact that all the possible responses of each rival must be taken into account in setting equilibrium price and quantity.
  - Unlike the firms of other market models, it cannot be assumed that the oligopoly firm is a profit maximizer.
29. The government raises revenue to repair roads by taxing gasoline. The government will be able to raise more revenue by raising the gasoline tax if the demand for gasoline is:
- perfectly elastic.
  - unitarily elastic.
  - relatively elastic.
  - relatively inelastic.
30. When total revenue does not cover all costs:
- Producers will shut down.
  - Producers will continue to produce in the short run if total revenue exceeds total fixed costs.
  - Producers will continue to produce in the short run if total revenue exceeds total variable costs.
  - Producers will continue to produce only in the long run.
31. The opportunity cost of working is the:
- Marginal revenue product.
  - Value of leisure time that must be given up.
  - Earnings that could be made in an alternative job.
  - Amount of consumption that is made possible.

Use the following information to answer Questions 32 and 33.

Output (units per day)	0	10	20	30
Total Cost (dollars per day)	40	60	80	100

55. Average fixed cost at 20 units of output is:
- \$1
  - \$2
  - \$4
  - \$6
56. The marginal cost between 20 and 30 units of output is:
- \$1
  - \$2
  - \$3
  - \$20

34. Rising marginal costs result from:  
A. Rising prices of fixed inputs.  
B. Falling marginal physical product.  
C. Rising prices of variable inputs.  
D. All of the above.
37. In which of the following market structures are a focus on market share, price leadership, price wars, and other signs of interdependence to be expected?  
M. Perfect competition.  
N. Monopolistic competition.  
O. Oligopoly.  
P. Monopoly.
36. An unusually bountiful crop of coffee beans might be expected to:  
A. Increase the supply of coffee.  
B. Reduce the price of coffee.  
C. Lower the price of tea.  
D. All of the above
37. If the supply and demand curves for a product both decrease, we can say that equilibrium:  
A. Quantity must fall and equilibrium price must rise.  
B. Price must fall, but equilibrium quantity may either fall, rise, or remain unchanged.  
C. Quantity must decline, but equilibrium price may either fall, rise, or remain unchanged.  
D. Quantity and price must both decline.
38. When economists say that the demand for a product has increased, this means that:  
I. Consumers are now willing to purchase more of this product at each possible price.  
J. The product has become particularly scarce for some reason.  
K. Product price has fallen and as a consequence consumers are buying a larger quantity of the product.  
L. The demand curve has shifted to the left.
39. In the market for home computers, in which of the following instances will the effect upon equilibrium quantity be indeterminate, that is dependent upon the magnitude of the given shifts in supply and demand?  
I. An increase in the price of software (a complement) and an increase in the price of DRAM.  
J. An increase in the number of buyers and a decrease in the price of hard drives.  
K. An increase in the price of DRAM only.  
L. A decrease in the income of computer buyers and a fall in the price of CD-ROM drives.
42. All of the following could immediately or eventually lead to an inward shift of a nation's production possibilities curve, *except*:  
A. Emigration of skilled workers from the nation.  
B. A decline in the birth rate.  
C. An increase in the average skill level of the labor force.  
D. Depletion and reduced availability of major energy resources.

41. The amount of calendar time associated with the long run:
- A. Is less than that associated with short run.
  - B. Varies from industry to industry.
  - C. Is the same for all firms in the economy.
  - D. Is one year by definition.
42. Microsoft has been charged with practices that restrict competition by the Antitrust Division of which federal agency?
- I. The Federal Trade Commission (FTC).
  - J. The Justice Department.
  - K. The Securities and Exchange Commission (SEC).
  - L. The Internal Revenue Service (IRS).
45. A fixed cost:
- A. Is associated with any productive resource whose price is fixed.
  - A. Is any cost which increases proportionately with output.
  - B. Is any cost which a firm would incur even if output was zero.
  - C. Is associated with all inputs whose short-run supply is perfectly inelastic.

Use the following information to answer the Questions 44 - 46.

The Sunshine Corporation finds that its costs are \$40 when it produces no output. Its total variable costs (TVC) change with output as shown below:

<u>Output</u>	<u>TVC</u>
1	\$30
2	50
3	65
4	85
5	110

44. The total cost of producing 3 units of output is:
- A. \$65
  - D. \$105
  - C. \$145
  - D. \$185
45. The marginal cost of 3 units of output is:
- A. \$105
  - B. \$25
  - C. \$20
  - D. \$15
46. This firm:
- A. Is making an economic profit of \$260.
  - B. Is realizing a loss of \$125.
  - C. May be either realizing a profit or a loss.
  - D. Is selling its output in a perfectly competitive market.

47. EverOnward Motors manufactures three styles of passenger cars, and two models of trucks. During a given month in the life of EverOnward, which of the following would MOST LIKELY be classified as fixed input?
- I. Labor
  - J. Paint
  - K. Tooling equipment
  - L. The two models of trucks
48. Concentration ratios measure the:
- A. Geographic location of the largest corporations in each industry.
  - B. The degree to which product price exceeds marginal cost in various industries.
  - C. Percentage of total output accounted for by the four largest firms in the industry.
  - D. Number of firms in an industry.
49. Oligopoly industries are characterized by:
- A. A few dominant firms and substantial entry barriers.
  - B. A few dominant firms and no barriers to entry.
  - C. A large number of firms and low entry barriers.
  - D. A few dominant firms and low entry barriers.
50. OPEC is a cartel made up of oil exporting nations. What does "OPEC" stand for?
- A. Organization of Petroleum Exporting Countries
  - B. Oil & Petroleum Exporting Conglomerate
  - C. Organization for the Promotion of Exports and Commerce
  - D. The acronym has no direct translation in the English language.