ECON 101

2018W1 Final Review Package

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commerce
undergraduate
society

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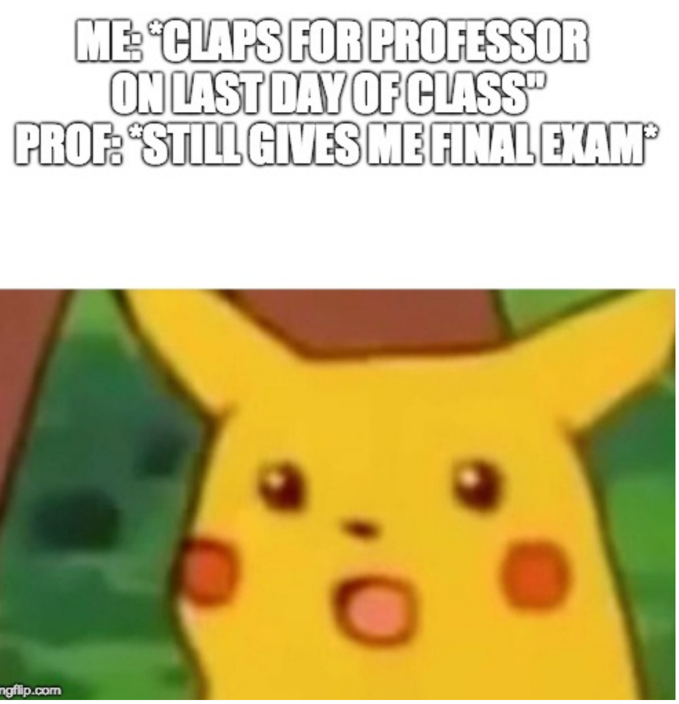


Few Notes about ECON 101, and review package ☺

1. ECON 101 has a lot of graphs. MANY graphs, and they all look the same. When preparing for your exam, please try to familiarize yourself with the graphs and do not get confused by them. It will help you to remember what you are trying to illustrate. It's not all D and S curves!

2. There are different professors teaching this course, so I tried my best to include topics I thought were relevant to all course outlines. I apologize in advance if it seems too basic for you (but maybe that means you're really smart ☺). I tried to base this off what I remember my course being like, and if anything, I hope this helps you somehow in testing how familiar you are with the material. I also tried to incorporate different styles of questions as I remember being given different question styles back when I took this course. I hope it helps.

3. If you want more review questions, visit the CMP Website -> Resource Centre.

4. Good luck on your exam! I hope you'll have learned something this term about economics.

Intro to Economics

1. Name the Factors of Production

2. Explain what a rational choice is

3. Describe the difference between a positive statement, and a normative statement

4. If policymakers decide to invest a road, instead of building, it is an example of "a big tradeoff". True or False?

Make sure you understand these concepts:

- "The Economic Way of Thinking": definitions of words such as **trade-off, opportunity cost, rational choice, marginal benefit, marginal cost**

Production Possibilities Curve

Interdependence, and Trade

1. Assume that Country A and Country B both produce cars and televisions. Country A is limited to 500 unit of labour hours, and can produce a maximum of 300 cars, or 250 televisions. Meanwhile, Country B has a maximum of 600 units of labour and can produce a maximum of 500 cars, or 400 televisions.

a. Which country has an absolute advantage in car production?

b. Which country has an absolute advantage in television production?

c. Which country has a comparative advantage in car production?

d. Which country has a comparative advantage in television production?

Make sure you understand the following Concepts:

- Outward shift the Production Possibilities Curve… illustrates economic growth due to change in resources and technology
- Points on the Production Possibilities Curve: outputs produced with lower cost; these points are therefore more preferable
- Attainable, unattainable areas of the PPF
- Absolute advantage when:
- Comparative advantage when:

<u>Demand and Supply</u>

1. **Assume** that rice crackers and potato chips are substitutes. They also require the same production resources. One day, the demand for potato chips suddenly rises. What happens to the market of potato chips and rice crackers, referencing the Supply and Demand curve action.

2. If polyester is an inferior good, and household income goes up, what happens in a Supply/Demand graph?

Make sure you understand the following Concepts:

- Difference between the **change in quantity** demanded and supplied, versus **change** in demand and supply.
- Also, know the reasons for shift in Demand and Supply Curves
- Effects given increase in price of **substitute, complements**
- Effects given increase in income for **normal, inferior** goods
- How to find equilibrium quantity when given demand and supply curves

Elasticity

1. Given the following equation, calculate the price elasticity of demand for donuts from Q_D=5 to Q_D=10. Based on these curves, do donuts have an elastic or inelastic demand?

Demand Equation: -3q

Supply Equation: 2 + 2q

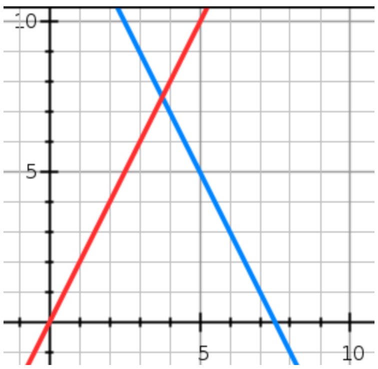
Also find the equilibrium quantity demanded, supplied.

Make sure you understand the following Concepts:

- The ranges to determine the elasticity classification ("whether it is perfectly elastic or not")
- The formula to calculate elasticity of demand, supply

Supply and Demand: Government Policies

Assume that there is an implementation of a minimum wage of $9. Find the number of unemployed hours based on the following supply and demand curves.



The government decides to create a subsidy for the market on sweet potatoes. For every production of ___lbs, there is a subsidy of $2. Calculate the price received by suppliers and the price paid by consumers based on the following supply and demand curves.

Make sure you understand the following concepts:

- Effects of a price ceiling and price floor; depending on your professor, and time spent in class on it, look into the qualitative effects on the government policies on society
- Know how to calculate the surplus, and shortage and what that means (interpretation of the graph)
- Consider the effects of subsidies and taxes, and why either group (suppliers vs consumers may prefer one of the other)

International Trade

Compare the graphs of markets with, and without **imports,** and **exports.**

Draw out the graphs of a market with free trade, and tariffs

Effects of an import quota

Some key terms to understand:

- Infant-Industry Argument

- Offshore outsourcing

- Dumping

Make sure you understand the following concepts:

- Comparative advantage, and "national" comparative advantage
- Gains, and losses of consumer or producer surplus due to International Trade
- A "free trade" international market that allows for imports is supposed to create larger consumer surplus, but lower producer surplus
- A "free trade" international market that allows for exports is supposed to create larger producer surplus, but lower consumer surplus
- The main arguments of trade restrictions regard the following: domestic price changes, decrease/ increase surplus, create DWL

Costs of Production

Describe the difference between the short run, and the long run.

Given the following information, find the product schedules:

	Labour (workers per day)	TP	MP	AP
A	0	0		
B	1	5		
C	2	8		
D	3	14		
E	4	15		

Translate the information to create (a) Total Product Curve, (b) Marginal Product Curve

Now Assume you given the Fixed Cost is $30, and VC is $5. Calculate the TC with the above chart. Can we also find the Average Fixed Cost, Average Variable Cost and Average Total Cost?

Draw out the graph and Average Costs

Make sure you understand the following concepts:

- Total Cost Equation: TC = TFC + TVC
- Marginal Cost equation: increase in TC / increase in Output
- What can cause changes in Cost Curves: Technology and Prices of factors of production
- Behaviour of Long-Run costs, and its relation to production functions of firms
    - Economies and Diseconomies of scale, and Constant Returns to Scale

Competitive Market

Output, Price, and Profit in the Short Run

- In the SR, # of firms, and plant size are fixed
- Equilibrium market price and quantity reliant on the industry

Draw out the 3 possible Short-Run outcomes

If a firm is experiencing **economic profit,** and MR > MC, what will the firm do?

If a firm is experiencing **economic losses,** how do we determine if it will continue producing?

Output, Price and Profit in the Long Run

Entry and Exit:

- Entry- due to a signaling of economic profits, new firms may decide to enter the market
  - What happens next?
- Exit- due to the occurrence of economic losses, firms may decide to exit the market
  - What happens next?
- Together, with Entry and Exit, the LR Equilibrium would be as follows:

Competitive Market- Efficiency

Draw out the relation between a single firm and the market, and identify why it is an efficient use of resources

Monopoly and Price Discrimination

Draw out the graphs of a monopoly vs. a market in perfect competition

Reasons why single-price monopoly is inefficient:

Practice Questions:

1. A profit-maximizing monopoly would never produce at an output level
   a. where it marginal revenue is less than price
   b. where AC > MC
   c. in the inelastic range of its demand curve

2. The output for a (not-perfect) price discriminating monopoly will be
   a. more than a perfect competition market
   b. less than a single-price monopoly
   c. the same amount as a perfect competition market

3. Assume there is a single monopolist who wanted to increase sales from 7 units to 8 units. If they drop their price from $10 to $9, what is the MR?

Make sure you understand the following concepts:

- When do monopolies arise? Consider natural monopoly, no close substitutes, and barriers to entry, legal
- Single-price vs. Price Discrimination price-setting strategies
- Perfect price discrimination
- In a single-monopoly, monopoly's demand curve is the industry's
- Profit-maximizing monopoly chooses output **MR=MC**

Oligopoly, Game Theory

Describe the following: (a) Nash Equilibrium, (b) Prisoner's Dilemma, (c) Pareto-Optimal

(1) Prisoner's Dilemma

	SUSPECT ONE		
SUSPECT TWO		CONFESS	KEEP QUIET
	CONFESS	(-1, -1)	(0, -5)
	KEEP QUIET	(-5, 0)	(2, 2)

Given the following information, what is the Nash Equilibrium? Is it Pareto-efficient?

*If it helps, for future ref, make notes for yourself on how to "read" a matrix

Collusion and why firms may choose to do it…Profit Maximization

- Firms may engage in a cartel agreement, which would raise prices, restrict output, and increase profits for themselves.
- Common lesson in basic economics is looking into the *strategies of firms in a cartel.*
- Two strategies, and four possible outcomes: **cheat/cheat, comply/comply, cheat/comply, comply/cheat**
- Collusion achieves _________ outcome

For a one-time game, illustrate the effect of output if one firm decide to cheat. Assume two firms.

Game of Chicken: where there is no Nash Equilibrium

Make sure you understand the following concepts:

- What is an oligopoly, and its occurrence/ relation to cartels
- Game Theory vocab:
  - Strategies
  - Pay-off matrix – and how to read one
  - Nash Equilibrium
- Repeated Games vs One-Time
  - Tit-for-tat strategy: doing what the last player did
  - Trigger: complying until the other cheats; then cheats ongoing (harsh)

Externality

True or False Questions:

1. Externalities only arise from production from firms.

2. With negative externalities exist, Marginal social cost and marginal external cost are equal

3. Something like a copyright should be deemed a negative externality

An externality is the _______________ that is created from an activity, but it affects a party that was not part of the original group performing the activity.

Good with negative externalities are usually (overproduced/ under-produced), whereas goods that impose a positive externality are usually (overproduced/ under-produced). Assume a market economy.

Graph with external cost, and find DW Loss

Graph with external benefit, and find DW Loss

Make sure you understand the following concepts:

- Examples of negative externality – which creates an external cost
- Examples of positive externality – which creates an external good/ benefit
- Why externalities create market failure