

Exam 1 Review

ECON 101

Summer I 2016

Opportunity Costs

Suppose your expenses for this term are as follows. Tuition: \$5,000; Room and Board: \$3,000; Books and supplies: \$500. Further, assume that you can only work part-time and earn \$4,000 instead of your full-time salary of \$10,000. Finally, room & board if you didn't go to college would cost \$2,500. What is the opportunity cost of going to college this term?

\$12,000

Marginal Analysis

Jill loves shoes and would be willing to pay for each additional shoe as detailed in the table.

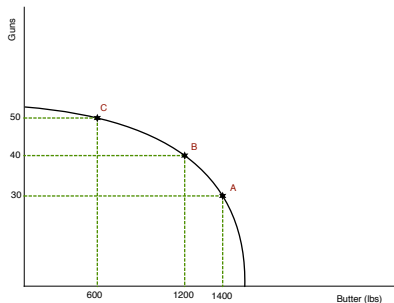
Shoes	Willingness to Pay
1st shoe	\$50
2nd shoe	\$40
3rd shoe	\$30
4th shoe	\$20
5th shoe	\$10

If shoes cost \$29.99, how many shoes should Jill buy?

3

Production Possibilities Frontier

Consider the PPF below. The opportunity cost of moving from point A to point B is _____, while the opportunity cost of moving from point B to point C is _____.



200 lbs of butter; 600 lbs of butter

Trade

The table below shows the output per person per day in the US and Japan, who make either drugs or TVs. Assume worker skills are not specialized.

	Drugs	TVs
US	2	10
Japan	1	3

What is the opportunity cost of producing one TV in each country?

US. 1 TV: $1/5$ drugs; Japan. 1 TV: $1/3$ drugs

What is the expected trade pattern?

The US will export TVs to Japan and import drugs.

How many of the following terms of trade would be acceptable to the US, but Japan? Which would be acceptable to both?

- (i) 10 TVs : 20 drugs
- (ii) 45 TVs: 180 drugs
- (iii) 50 TVs: 300 drugs
- (iv) 60 TVs : 10 drugs

3; None

Supply and Demand

- ▶ Suppose ramen noodles are an inferior good. If incomes increase, then the equilibrium price of ramen noodles will _____ and the equilibrium quantity will _____.

decrease; decrease

- ▶ Hot dog buns and hot dogs are complements. If the price of hot dogs decreases, then demand for hot dog buns will _____ causing a(n) _____ in the equilibrium price and a(n) _____ in the equilibrium quantity of hot dog buns.

increase; increase; increase

Supply and Demand

- ▶ Consider the market for orange juice. A drought hits Florida, causing the price of oranges to increase. As a result, there will be a decrease in the _____ of orange juice. Before prices are able to adjust, there will be a _____ of orange juice at the original market price. Thus, there will be _____ pressure on prices.

supply; shortage; upward

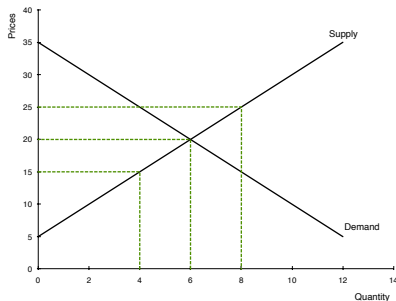
- ▶ Is the following statement true or false?
“Increased demand for cookies has resulted in higher prices. Due to higher prices, the supply of cookies increases.”

False

Welfare

What is the consumer surplus realized in the market below? The producer surplus?

If a shift in demand caused the price to increase to \$25, what is the change in PS?



CS = \$45; PS = \$45
PS increases by \$35.

The supply of beachfront properties is inelastic and the supply of new cars is elastic. Suppose population growth causes demand for both goods to double.

1. For which good will price change the most?

Beachfront property

2. For which good will quantity change the most?

New cars

1. Cab rides have an income elasticity of demand of -1.25 . Additionally, the cross-price elasticity of demand between cab rides and the subway is 2. Would an increase in income and a decrease in the price of subway tickets unambiguously decrease the demand for cab rides?

Yes

2. The price of good X decreases by 6%. Due to this, the quantity supplied of this good decreases from 10 to 5. What is the price elasticity of supply?

11.11

Government Policy

There are 11 buyers and 11 sellers in a used textbook market. Each seller has one book to sell and each buyer wants to buy a book.

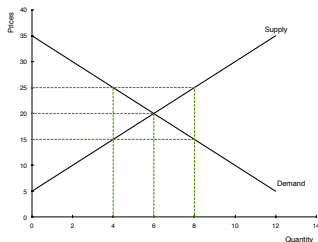
Buyer values	Seller costs
\$51	\$32
\$48	\$17
\$53	\$43
\$40	\$10
\$58	\$21
\$35	\$45
\$43	\$36
\$55	\$13
\$60	\$28
\$38	\$40
\$45	\$25

1. What is the equilibrium price and quantity in the market?

\$40; 9

2. Suppose the government imposes a price ceiling of \$28 on used textbooks. What is the equilibrium quantity and the size of the deadweight loss?

$P_C = \$28$; $Q_c = 6$; $DWL = \$20$ (lost gains from trade).



If a price ceiling of \$25 is imposed, the DWL in this market would be _____.

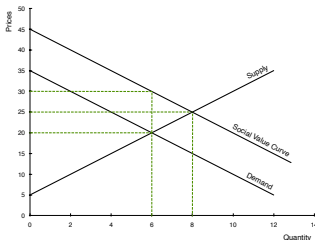
\$0

If a price ceiling of \$15 is imposed, the DWL in this market would be _____.

\$10

Externalities

Consider the figure below.

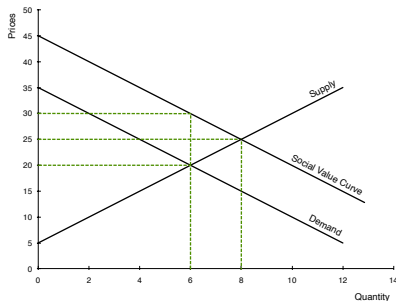


What is the external benefit per transaction in this market?

\$10

The total external benefit realized at the market equilibrium is _____.

\$60



What is the deadweight loss in this market?

\$10

The socially efficient quantity to produce is _____.

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Perfect Competition

The table below shows the cost structure of a firm in a perfectly competitive market.

Quantity of Output	Total Costs
0	\$30
1	33
2	38
3	45
4	54
5	65
6	79
7	93

If the current market price is \$6, how many units of output will the firm produce?

What will be the firm's profits?

—\$26

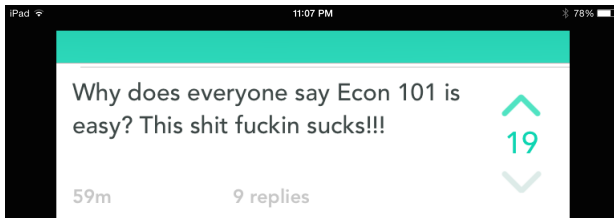
What will the firm do in the long run?

Exit the market

What will be the long run market price?

\$13

And remember gang, if you think this stuff is hard...



you are not alone.