

**ECON 402, Fall 2018**  
**Principle of Microeconomics**  
**Midterm 1**  
**Instructor: Travis Freidman**

**Part 1: Multiple Choice(40 points)**

1. Suppose the U.S. government encouraged new medical school graduates to take over existing practices from doctors wishing to retire by paying both the new and retiring doctors \$100,000. These doctors would be exemplifying the economic idea that:
  - (a) people respond to incentives.
  - (b) equity is more important than efficiency.
  - (c) people are rational.
  - (d) optimal decisions are made at the margin.
2. Marginal analysis:
  - (a) refers to decisions about whether or not to engage in a particular activity.
  - (b) is primarily used when making an either-or choice.
  - (c) is used primarily when deciding how much of an activity should be done.
  - (d) does not help when making a “how much” choice.
3. Use Figure: *Strawberries and Submarines*. Suppose the economy is operating at point G. This implies that:

**Figure: Strawberries and Submarines**

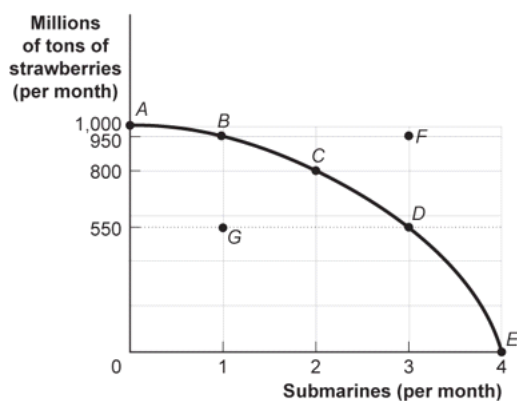


Figure 1: Strawberries and Submarines

- (a) the economy can move to a point such as *C* only if it improves its technology.
- (b) the economy has unemployment and/or inefficiently allocates resources.

- (c) the economy lacks the resources to achieve a combination such as *C*.
  - (d) people in this economy don't really like strawberries or submarines.
4. If the market for grapefruit is in equilibrium without any outside intervention to change the equilibrium price:
- (a) total surplus is minimized.
  - (b) there is some dead-weight loss.
  - (c) a few mutually beneficial trades are missed.
  - (d) consumer and producer surplus are maximized.
5. Suppose the Jamaican government sets coffee prices at \$1 per pound when the market price is \$10 per pound. The government's actions will:
- (a) improve efficiency since the low prices will force producers to find cheaper production methods.
  - (b) result in coffee surpluses, even in a coffee-rich country.
  - (c) cause coffee shortages, even in a coffee-rich country.
  - (d) improve equality between rich and poor since the poor can now afford coffee.
6. Scarcity exists when:
- (a) individuals can have more of one good but only by giving up something else.
  - (b) making choices among two or more alternatives is not necessary.
  - (c) individuals can have more of any good without giving up anything.
  - (d) resources are unlimited.
7. Use the table below to see the total production in one hour by USA and Japan. This information implies that:

	Steel	Automobiles
USA	25	250
Japan	30	275

- (a) Japan has a comparative advantage in the production of automobiles.
- (b) the United States has an absolute advantage in the production of steel.
- (c) Japan has a comparative advantage in the production of both goods.
- (d) the United States has a comparative advantage in the production of automobiles.

8. Use Figure: *Demand for Coconuts*. If coconuts are a normal good and consumers believe that the price of coconuts will rise significantly in the near future, it will be represented in the figure as a:

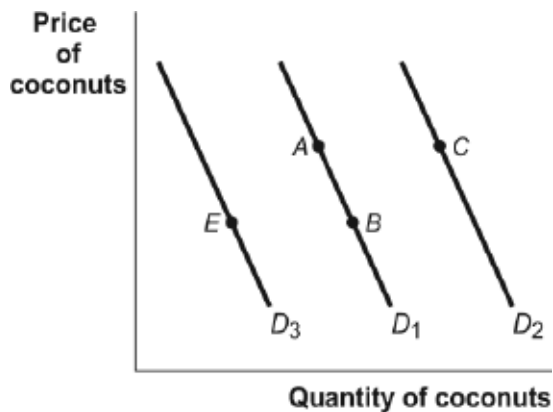


Figure 2: Demand for Coconuts

- (a) shift from D1 to D2.  
(b) movement from point B to point A.  
(c) shift from D1 to D3.  
(d) movement from point B to point E.
9. The law of demand implies that:
- (a) consumers are not responsive to price changes.  
(b) consumers will buy more at lower prices.  
(c) sellers will offer more on the market at higher prices.  
(d) sellers will offer less on the market at lower prices.
10. The problem of determining what goods and services society should produce:
- (a) exists because we can produce more than we need or want.  
(b) would not exist if all goods and services were scarce.  
(c) exists because there are not enough resources to provide all of the goods and services that people want.  
(d) would not exist if government owned all of the resources.

**Part 2: Long Answer (60 points)**

1. Below you'll find a Supply and Demand schedule for the first month after the launch of the iPhone X. Even though Apple is the only supplier of iPhone's we can think about all the cellphone provider companies as making it a bit closer to a competitive market. Use it to answer the following questions.

Price of iPhone X	Quantity of iPhone X Demanded (tens of thousands)	Quantity of iPhone X supplied (tens of thousands)
\$0	1200	0
\$100	1100	200
\$200	1000	400
\$300	900	600
\$400	800	800
\$500	700	1000
\$600	600	1200
\$700	500	1400
\$800	400	1600
\$900	300	1800
\$1000	200	2000

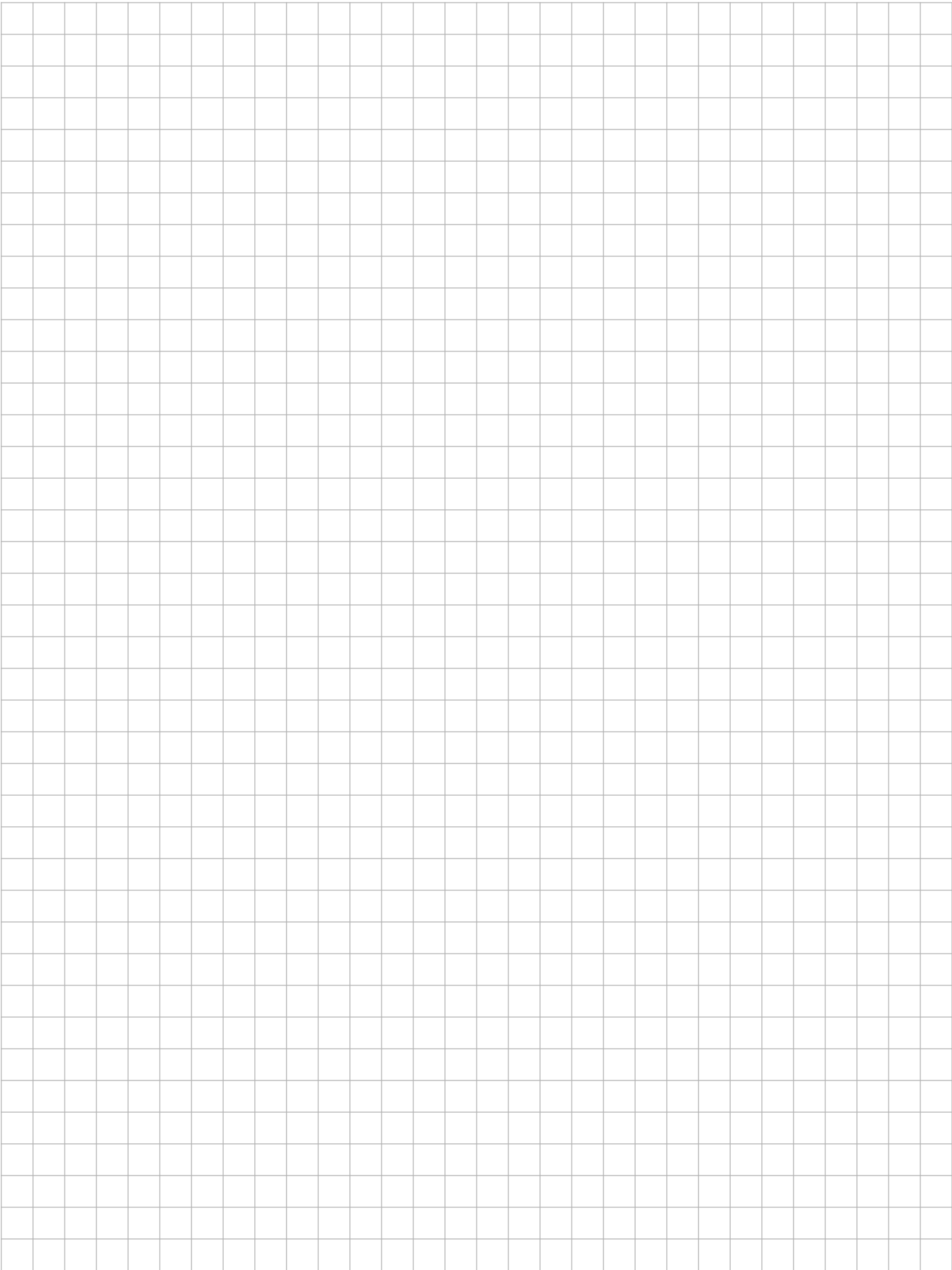
- (a) Attached to your exam is page of graphing paper, on it I want you to draw out a competitive supply and demand model. Make sure to label all axis. (6 points)
- (b) Illustrate on the graph and tell me on your answer sheet what is equilibrium price ( $P^*$ ) and equilibrium quantity ( $Q^*$ ). (4 points)
- (c) If sellers all decided to sell at a price of \$700 what would we call this (i.e. a shift or a movement in price) and why? (6 points)
- (d) Continuing with scenario of 1.C: would the market return to equilibrium, and if so, what would be the forces to return the market to equilibrium? That is, tell me what actions consumers and producers would take if the market would return to equilibrium (10 points)
- (e) Now imagine the market is back in equilibrium. What effect would an increase in the price of Google Pixel 2 phone have on the equilibrium quantity and price. That is, which curve will shift, which direction, and why? Explain your answer with the help of a diagram which you can roughly sketch in your answer sheet. (Note: I'm not looking for a shift to a specific price/quantity point. Just generally shift it like we did in class) (4 points)

2. In order to increase his popularity with voters, the mayor of Gotham City decides to lower the price of taxi rides. Assume, for simplicity, that all taxi rides are the same distance and therefore cost the same. The accompanying table shows the demand and supply schedules for taxi rides.

Fare (per ride)	Quantity of rides(mil per yr)	
	Quantity Demanded	Quantity Supplied
\$9.00	6	16
\$8.50	7	15
\$8.00	8	14
\$7.50	9	13
\$7.00	10	12
\$6.50	11	11
\$6.00	12	10
\$5.50	13	9
\$5.00	14	8
\$4.50	15	7
\$4.00	16	6
\$3.50	17	5
\$3.00	18	4
\$2.50	19	3
\$2.00	20	2
\$1.50	21	1
\$1.00	22	0

- (a) At the end of this exam is a graph of the supply and demand schedule from above. On the graph label all lines, axis, and the equilibrium price & quantity. (6 points)
- (b) Suppose the mayor sets a price ceiling at \$5.50. Illustrate this policy on the graph. Will this create a shortage or a surplus? How big will it be? (6 points)
- (c) Illustrate consumer surplus and producer surplus under this price ceiling. Who is gaining more from this policy? (6 points)
- (d) Illustrate dead-weight loss under this policy on the graph. (6 points)
- (e) Suppose that the stock market crashes and, as a result people in Gotham City are poorer. This reduces the quantity of taxi rides demanded by 6 million rides per year at any given price. Graph this new demand curve and label it. What effect will the mayor's new policy have now? Why? (6 points)

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