Economics 101	Name ANNOTATED KEY
Fall 2016	TA Name _____
October 18, 2016	Discussion Section # _____
First Midterm	Student ID # _____

Version 1

DO NOT BEGIN WORKING UNTIL THE INSTRUCTOR TELLS YOU TO DO SO.
READ THESE INSTRUCTIONS FIRST.

You have 75 minutes to complete the exam, **including filling in your scantron**. The exam consists of **9 binary choice questions worth 2 points each** and **20 multiple choice questions worth 4 points each**. Please accurately and completely provide your **name, ID number, discussion section number, version number, and TA name** on the scantron sheet and the exam booklet. Writing all this information correctly is **worth 2 points**. Answer all questions on the scantron sheet with a #2 pencil. There are 16 printed pages in this exam, including this cover sheet. **DO NOT PULL THE EXAM APART OR REMOVE THE STAPLE**.

WARNING: NO COMMUNICATION OR CALCULATING DEVICES, OR FORMULA SHEETS ARE ALLOWED. NO CONSULTATION AND CONVERSATION WITH OTHERS ARE ALLOWED WHILE YOU ARE TAKING THE EXAM OR IN THE EXAM ROOM. ACADEMIC MISCONDUCT IS A SERIOUS OFFENSE AND PUNISHABLE TO THE FULLEST EXTENT.
PICK THE BEST ANSWER FOR EACH QUESTION.

How to fill in the scantron sheet and other information:

1. Print your last name, first name, and middle initial in the spaces marked "Last Name," "First Name," and "MI." Fill in the corresponding bubbles below.
2. Print your student ID number in the space marked "Identification Number." Fill in the bubbles.
3. Write **the number of the discussion section you've been attending under "Special Codes" spaces ABC**, and fill in the bubbles. The discussion numbers can be found at the bottom of this page.
4. Write the **version number** of your exam booklet under "Special Codes" space D, and fill in the bubble. The version number is at the top of this page.

- **If there is an error on the exam or you do not understand something, make a note on your exam booklet and the issue will be addressed AFTER the examination is complete. No questions regarding the exam can be addressed while the exam is being administered.**
- **When you are finished, please get up quietly and bring your scantron sheet and this exam booklet to the place indicated by the instructors.**

Iuliia (Yulia) Dudareva	Taehoon Kim	Xiaoye (Phoebe) Tian	Wenqi Wu
301 Thurs 3:30 PM Ingraham 116	**302** Fri 2:25 PM Ingraham 225	**303** Fri 1:20 PM Van Vleck B219	**308** Fri 8:50 AM Sterling 1407
304 Fri 12:05 PM Van Hise 386	**305** Fri 12:05 PM Van Hise 207	**307** Fri 11:00 AM Van Hise 391	**310** Fri 11:00 AM Sterling 2403
312 Fri 9:55 AM Van Hise 219	**306** Thurs 4:35 PM Social Sciences 6322	**311** Fri 9:55 AM Van Hise 240	
314 Fri 1:20 PM Van Hise 209	**309** Fri 11:00 AM Sterling 2319	**313** Fri 8:50 AM Van Hise 123	

I, _____, agree to neither give nor receive any help on this exam from others. I understand that the use of a calculator or communication device on this exam is academic misconduct. I also understand that providing answers to questions on this exam to other students is academic misconduct, as is taking or receiving answers to questions on this exam from other students. Thus, I will cover my answers and not expose my answers to other students. It is important to me to be a person of integrity and that means ALL ANSWERS on this exam are my answers. Any violation of these guidelines will result in a penalty of at least receiving a zero on this exam.

Signed _____

Binary Choice (worth 2 points each)

EASY 1. What is economics?

a. The study of how people make choices under scarcity and the results of those choices for the society.

b. The study of how to run society, making it wealthier and redistributing goods and resources from those who have a surplus to those in need.

↳ no

↳ not necessarily

EASY 2. The statement: "An increase in the severity of punishment for cheating will result in fewer students cheating during the exam" is a:

a. Positive statement
b. Normative statement

EASY 3. Mad City Bank makes a loan of $5,000 to a local car washing company. The loan will appear on Mad City Bank's balance sheet (their t-account) as:

a. An asset
b. A liability

- The borrower sees the loan as a liability
- The bank sees the loan as an asset

TAKES SOME THINKING

4. It is known that potatoes are an inferior good for Irish peasants. Holding everything else constant, when the Irishmen expect an economic crisis and thus lower income next year, their demand curve for potatoes today shifts to the:

a. Left
b. Right

Expect lower income next year which would cause rightward shift in demand for potatoes ↑ ∴ higher P
Expect higher prices in future, D shifts right today

NOT HARD

5. After a report of pollution in the local tap water supply, the demand for bottled water shifts to the:

a. Left
b. Right

Pollution in local tap water → ↓ tastes ↑ preference for local tap water ↑ ↑ demand for close substitute

6. The chancellor of UW-Madison has just announced a major tuition change. According to her, the general costs (tuition, room and board, and administrative fees) of attending UW-Madison will increase by 10% from year 2016 to 2017.
A decomposition of the costs for this year and next year is provided below:

	2016	2017	Percentage Change
Tuition	$20,000	? 21,000	5%
Room and Board	$8,000	$10,200	? don't need this
Administrative Fees	? 2000	$1,800	-10%

$30,000 → 33,000

$-10\% = \left[\frac{1800 - x}{x}\right] 100\%$

Is the chancellor being honest in saying that the general costs will increase by 10%?

a. Yes
b. No

$-\frac{1}{10} = \frac{1800 - x}{x}$

20,000 × .05 = 1000 → So in 2017, tuition is 21,000

$-x = 1800(10) - 10x$

$9x = 1800(10)$

$x = 2000$

$\left[\frac{10,200 - 8000}{8,000}\right](100\%) =$ but we don't need this

NOT TOO HARD

7. Annie and Jack produce articles and power point presentations. Both Annie and Jack's production possibility frontiers are linear. Suppose Annie needs 4 hours to write an article, and 2 hours to create a power point presentation. Jack needs 6 hours to write an article, and 1 hour to create a power point presentation. Annie works 8 hours a day, while Jack works 3 hours a day. Which of the following statements is **TRUE**?

no it takes him more hours/article

a. Jack has absolute advantage in writing articles; Annie has absolute advantage in creating power point presentations

b. Annie has absolute advantage in writing articles; Jack has absolute advantage in creating power point presentations

$\frac{33,000 - 30,000}{30,000}(100\%) = \frac{3000}{30,000}(100\%) = 10\%$ = ↑ in general costs for college b/w 2016 + 2017

EASY: PREDICTABLE

8. Consider the market for laptops that was in equilibrium until 2007. In 2008, there was an innovation in the production process for laptops such that computer companies could produce more laptops with the same amount of inputs. In addition, people's incomes decreased significantly because of the global financial crisis in 2008. If laptops are normal goods and these are the only two things that have happened in the laptop market, what do you predict happened to the equilibrium quantity in the market for laptops after 2008?

a. The equilibrium quantity would decrease.
(b.) It is not certain whether the equilibrium quantity would increase or decrease.

EASY

9. Suppose last year there were 8000 students on campus who owned a MacBook. This year more people are choosing to using Windows 10, so the number of students owning a MacBook has fallen to 7600. What is the percentage change in the number of students owning a MacBook from last year to this year?

(a.) -5%
b. -0.5%

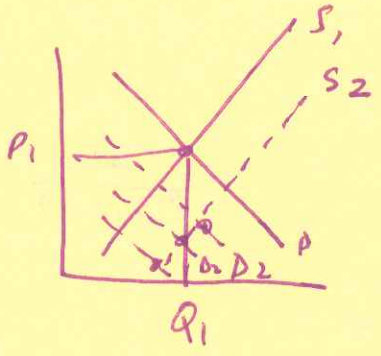
9.

$$\%\Delta = \left[\frac{7600 - 8000}{8000}\right] 100\%$$

$$\%\Delta = \left[\frac{-400}{8000}\right] 100\%$$

$$\%\Delta = \left(-\frac{40}{8}\right)\% = -5\%$$

8.



P↓, Q?

Multiple Choice (worth 4 points each)

Use the following information to answer the next <u>three (3)</u> questions.

Nora and Dori are famous at providing Halloween items. They can produce sweets and decorate pumpkins. Nora can produce 20 sweets per hour or decorate 4 pumpkins per hour, while Dori can produce 40 sweets per hour or decorate 2 pumpkins per hour. Every day they each spend 4 hours working on producing these Halloween items.

EASY

10. Given the above information and holding everything else constant, Nora has a comparative advantage in pumpkins, while Dori has an absolute advantage in sweets.

160 vs 80

a. Sweets; pumpkins
b. Sweets; sweets
c. Pumpkins; sweets
d. Pumpkins; pumpkins

Not hard, but some work

11. Assume that Nora and Dori decide to work together and share sweets and pumpkins. Which of the following statements is **<u>TRUE</u>**?

a. Every day Nora could consume 60 sweets and 10 pumpkins, while Dori could consume 120 sweets and 12 pumpkins. False - see below

b. Every day each of them could consume 40 sweets and 10 pumpkins. True [could stop here]

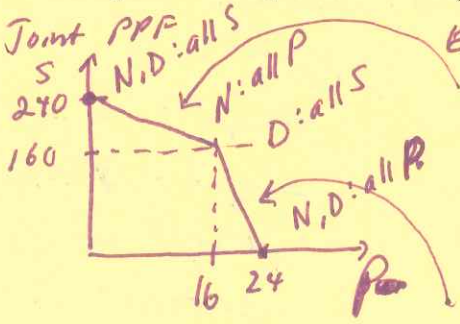
c. Every day each of them could consume 30 sweets and 11 pumpkins. False - see below

d. Every day Nora could consume 140 sweets and no pumpkins, while Dori could consume 40 sweets and 16 pumpkins. False - see below

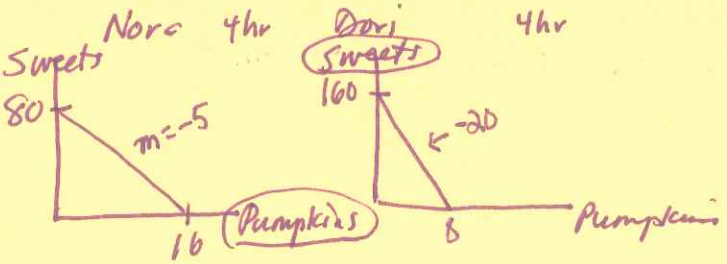
PREDICTABLE NOT HARD!

12. Now, assume that Nora and Dori have an argument about Halloween costumes and decide to trade with each other rather than working together and sharing. What is a possible trading price for a pumpkin in terms of sweets?

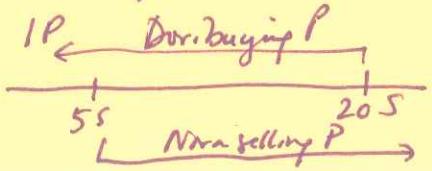
a. 32 sweets for a pumpkin ✗
b. 22 sweets for a pumpkin ✗
c. 12 sweets for a pumpkin ✓
d. 2 sweets for a pumpkin ✗



Equations for PPF:
$S = 240 - 5P$ for $P \le 16$
$S = b - 20P$
$0 = b - 20(24)$
$480 = b$
$S = 480 - 20P$ for $P \ge 16$



OC of 1P is 5S
OC of 1S is $\frac{1}{5}$P



OC of 1P is 20S
OC of 1S is $\frac{1}{20}$P

d) 180 sweets, 16 pumpkins
not possible
⇒ if P=16, then S=160!

11. a) 180 sweets, 22 pumpkins ⇒
if P = 22 ⇒ S = 240 - 5(22)
S = 240 - 110 = 130
So S = 130 and not 180

b) 80 sweets, 20 pumpkins ⇒
if P = 20 ⇒ S = 480 - 20(20)
S = 80 : 80 POSSIBLE
Can stop here!

c) 60 sweets, 22 pumpkins ⇒
if P = 22 ⇒ S = 480 - 20(22)
not possible S = 480 - 440 = 40

EASY - NO NEED to DO MUCH MATH HERE IF YOU USE LOGIC

13. The market for bikes in Smalltown is originally in equilibrium. The following equations describe the market for bikes in Smalltown where P is the price per bike and Q is the quantity of bikes:

Market demand: Qd = 30 - P

Market supply: Qs = P + 10

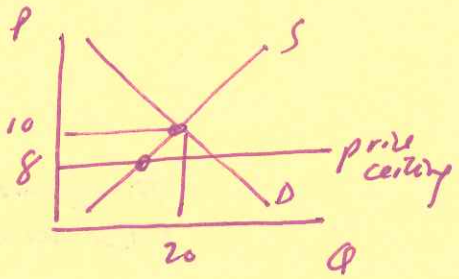
A new mayor in Smalltown wants to encourage people to ride bikes so the major imposes a price ceiling on bikes. What will happen in the market for bikes, if the mayor imposes a price ceiling at P = $8 per bike?

a. The equilibrium price and quantity will remain the same as it was initially: the price ceiling will have no impact on this market. X Price ceiling is effective

b. The quantity of bikes supplied in the market will increase by 2 bikes relative to the initial equilibrium quantity. X ↳ will ↓

c. There will be a shortage of 4 bikes in this market with the imposition of this price ceiling.

d. There will be a surplus of 4 bikes in this market with the imposition of this price ceiling. X ↳ No there will be a shortage!



$30 - P = P + 10$

$20 = 2P$

$10 = P$

$P_{ceiling} < P_e \Rightarrow$ price ceiling effective

Here's the math (do not need to do this if you use logic):

if $P = 8$

$\Rightarrow Q^D = 30 - P = 30 - 8 = 22$

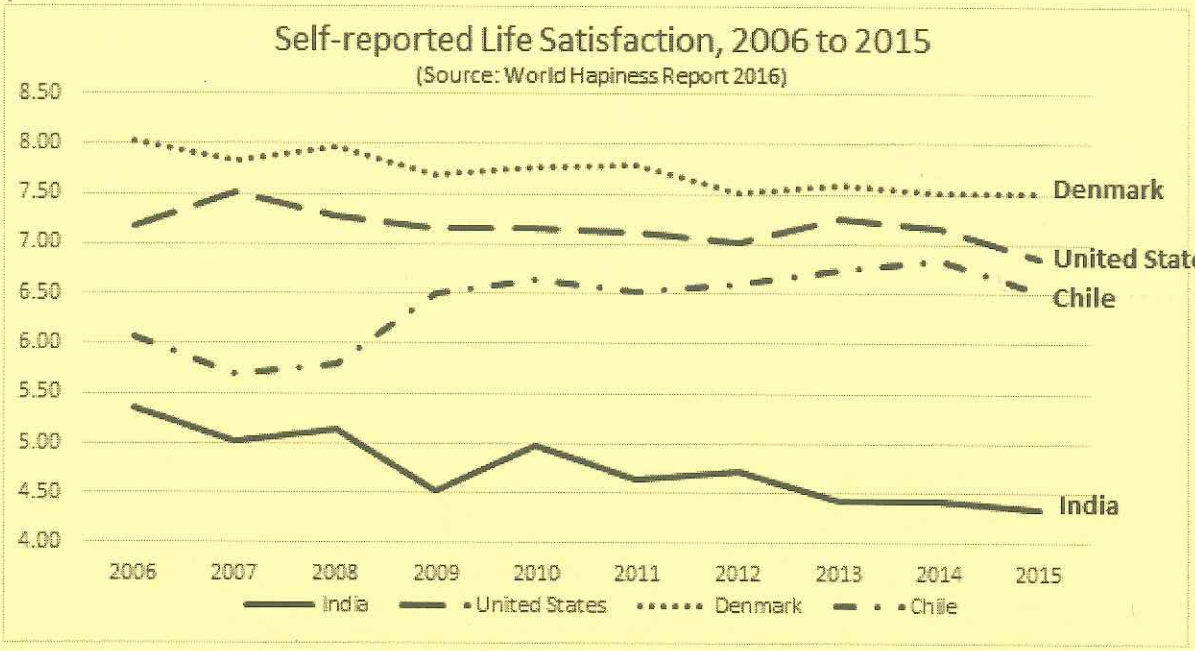
$\Rightarrow Q^S = P + 10 = 18$

$Q^D > Q^S \Rightarrow$ Shortage

Shortage $= Q^D - Q^S = 22 - 18 = 4$ units

JUST READING AND THINKING!

14. The figure below shows the self-reported life satisfaction in India, the United States, Denmark and Chile between the 2006 and 2015. The vertical axis is an index of life-satisfaction where a higher number indicates higher life satisfaction and a lower number represents lower life satisfaction. The horizontal axis measures time by specific year.



According to this figure, which country has the highest percentage change in absolute value in their self-reported life satisfaction between 2006 and 2015?

a. India
b. United States
c. Denmark
d. Chile

India starts w/ smaller base than other countries & has large drop in life satisfaction

EASY!

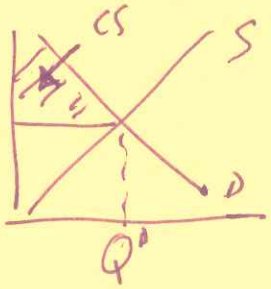
15. A consequence of a binding (effective) price floor is:

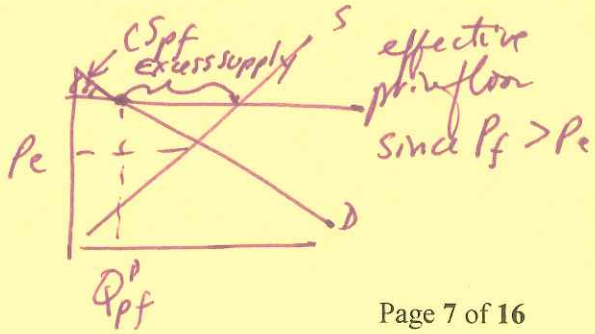
a. An increase in consumer's surplus relative to the consumer surplus when there is no intervention in the market. False

b. An increase in the quantity demanded and a decrease in the quantity supplied relative to the market equilibrium where there is no intervention in the market. No FALSE

c. Excess supply of the good. TRUE

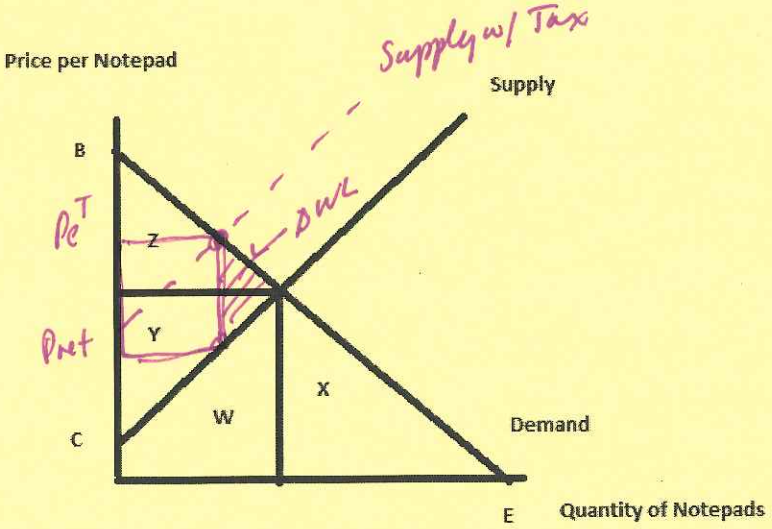
d. Excess demand for the good. FALSE





Use the following information to answer the next <u>two (2)</u> questions.

The graph below describes the market for notepads in Xerbville.



NOT VERY HARD!

16. Suppose that the government of Xerbville implements an excise tax on producers of notepads in this economy. Which of the following statements is **<u>TRUE</u>** given the above graph and the implementation of this excise tax?

I. With the implementation of the excise tax, the government will receive a part of area Z and area Y. True

II. With the implementation of the excise tax, part of area W will now be part of the deadweight loss due to the excise tax. False

III. With the implementation of the excise tax, part of area Z will be part of the deadweight loss due to the excise tax. True

a. Statement III is correct.
b. Statement II is correct. X
c. Statements I, II and III are correct. No X
(d.) Statements I and III are correct. ✓

(Continue on next page)

HARDER: REQUIRES THOUGHT AND A DEPTH OF UNDERSTANDING

17. Consider the excise tax implemented in this market. Which of the following statements is **TRUE** given the above graph and the information you have about the excise tax?

I. The implementation of this excise tax will result in the area of consumer surplus with the excise tax and government tax revenue from the excise tax exceeding the area of producer surplus with the tax. True

II. Since the tax is implemented on producers of the notepads, the producers will bear the full economic burden of this excise tax. False - there is CT as well as PT

III. Since the tax is implemented on producers of the notepads, the producers will bear the full legal incidence of this excise tax. True

IV. The implementation of this excise tax leaves society better off. In your answer assume that there are no negative attributes from consuming or producing notepads. False - there is a DWL

V. If the production and consumption of notepads create substantial pollution that society ignores in the marketplace, then the implementation of this excise tax could actually make this society better off. True [this requires some thinking!]

a. Statements I and III are true.
b. Statements II and IV are true.
c. Statements I, II, III and V are true.
d. Statements I, III, and V are true.

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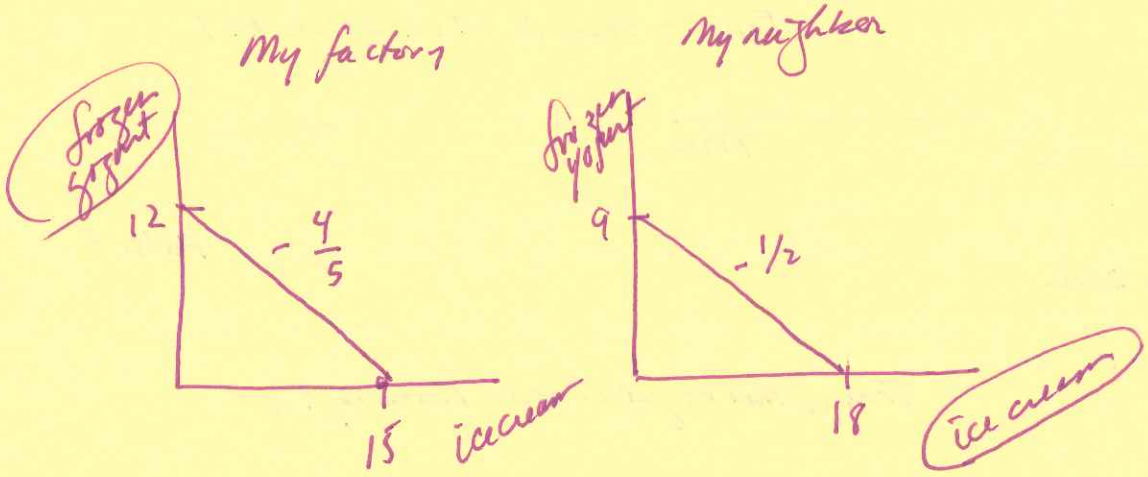
EXAM CONTINUES ON NEXT PAGE



OC of 1 ice cream is $\frac{4}{5}$ Y OC of 1 ice cream is $\frac{1}{2}$ Y
OC of 1 Y is 5/4 ice cream OC of 1 Y is 2 ice cream

a) 2 ice cream cost $2(\frac{4}{5})Y$
$= \frac{8}{5}Y$
$= 1.6Y$

b) 1 ice cream cost $\frac{4}{5}Y$

c) 2 tons cost $2(\frac{1}{2})Y = 1Y$

d) 1 ice cream costs $\frac{1}{2}Y$

EASY! PREDICTABLE

18. Suppose you have a magic factory at your home that can produce 5 tons of ice cream per hour, or 4 tons of frozen yogurt per hour. Your neighbor also has a factory, but with different production capacities. His factory can make 6 tons of ice cream per hour, or 3 tons of frozen yogurt per hour. Each factory only operates for 3 hours every night. Which of the following statements is **TRUE**?

a. Your opportunity cost of producing 2 tons of ice cream is 1.6 tons of frozen yogurt. T
b. Your opportunity cost of producing 1 ton of ice cream is 1.25 tons of frozen yogurt. F
c. Your neighbor's opportunity cost of producing 2 tons of ice cream is 0.5 tons of frozen yogurt. F
d. Your neighbor's opportunity cost of producing 1 ton of ice cream is 2 tons of frozen yogurt. F

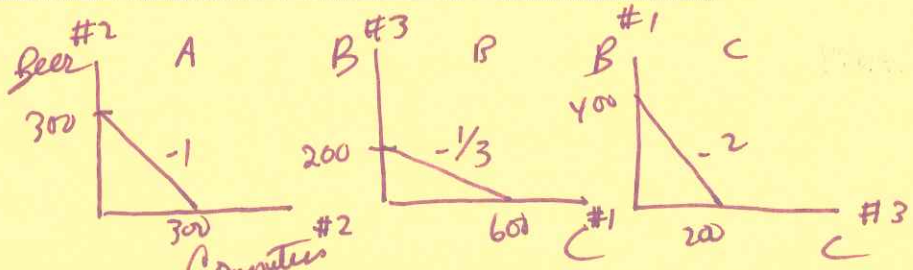
TAKES SOME WORK

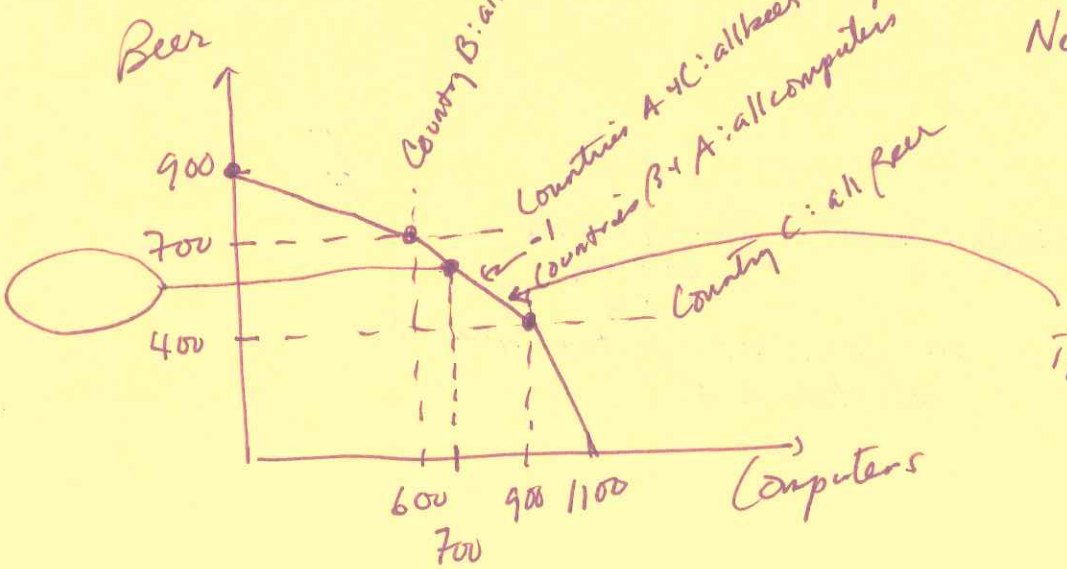
19. The following table describes the per capita production of beer and computers in three countries, as well as each country's population. (For example, a person can produce either 10 bottles of beers or 10 computers in country A, and the maximum amount of beer that can be produced in the world?

Assume that the three countries start to jointly produce beers and computers. Given that 700 computers are produced, what is the maximum amount of beer that can be produced in the world?

	Bottles of Beer Per Capita (max beer)		Computers Per Capita (max computers)		Population
Country A	10	300	10	300	30
Country B	20	200	60	600	10
Country C	20	400	10	200	20

a. 500 bottles of beer.
b. 600 bottles of beer.
c. 700 bottles of beer.
d. 800 bottles of beer.





Need equation for middle segment of joint PPF:
Beer = (-1) Computers + b
700 = (-1)(600) + b
1300 = b
Beer = 1300 - Computers
If Computer = 700
Beer = 1300 - 700 = 600

Use the following information to answer the next <u>two (2)</u> questions.

The following equations describe the market for solar cars where P is the price per car and Q is the quantity of cars:

Market demand: P = 100 – Q

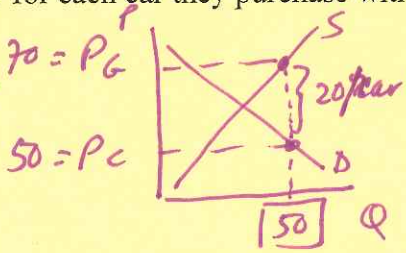
Market supply: P = 20 + Q

Assume that the government implements a price guarantee program that grants a subsidy to producers of $20 for each solar car produced.

SOMEWORK: MEDIUM DIFFICULTY

20. How much in total will the government spend under this price guarantee program? How much do consumers pay for each car they purchase with this price guarantee program?

a. $10; $45
b. $1000; $50 ✓
c. $800; $70
d. $2000; $20



$P_C + 20 = P_G$

$100 - Q + 20 = 20 + Q$

$100 = 2Q$

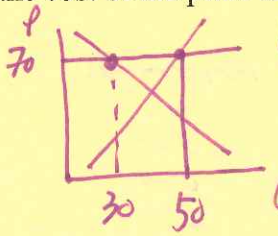
$50 = Q$

$P_C = 100 - Q = 100 - 50 = 50$ could stop here ⇒ Answer B!

NOT VERY HARD

21. Suppose that the government abolishes the price guarantee program, but subsequently starts a price support program such that the solar car producers are indifferent between the two programs. What is the cost of the price support program to the government?

a. $1000
b. $1200
c. $1400
d. $1600



If P = 70 ⇒ $Q^D = 30$

Cost to govt = 70(20) = $1400

$P_G = 20 + Q = 20 + 50 = 70$

Cost to govt = $(P_G - P_C)(Q)$

$= (70 - 50)(50)$

$= (20)(50)$

$= 1000$

NOT HARD!

22. Consider the market for toys described by the following market demand and market supply curves where P is the price per toy and Q is the quantity of toys:

Market demand: P = 70 - 2Q

Market supply: P = 10 + Q

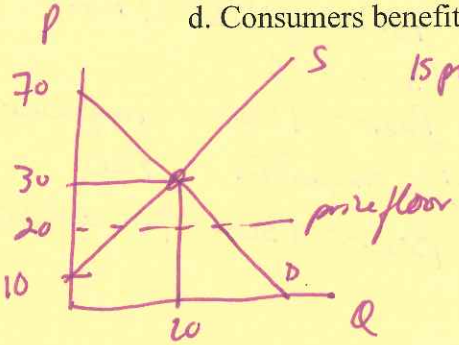
The government enacts a price floor with the floor set at $20. Which of the following statements is true given this information and holding everything else constant?

a. The enactment of this price floor does not alter the value of consumer surplus in this market. T

b. The enactment of this price floor results in a reduction in producer surplus in this market. F

c. The enactment of this price floor creates a deadweight loss in this market. F

d. Consumers benefit from enactment of this price floor in the toy market. F

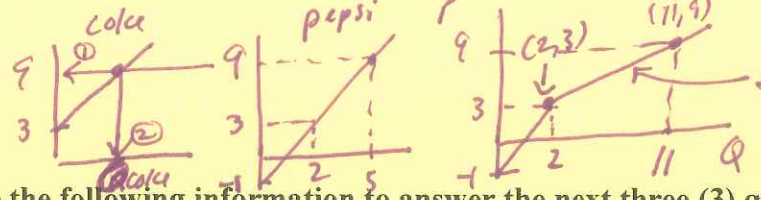


Is price floor effective? $70 - 2Q = 10 + Q$

$60 = 3Q$

$20 = Q$

price floor is not effective since the price floor < P_e!



$y = mx + b$
$P = \frac{2}{3}Q + b$
$3 = \frac{2}{3}(2) + b$
$\frac{5}{3} = b$
$P = \frac{5}{3} + \frac{2}{3}Q$

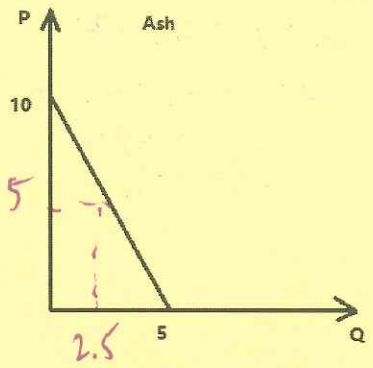
Use the following information to answer the next <u>three (3)</u> questions.

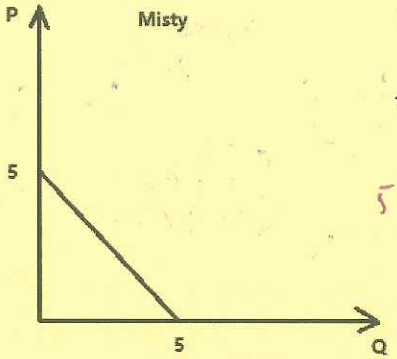
Coke and Pepsi are the only soft drinks available in a small rural community. The following equations describe the supply relationships for these two firms in this market where P is the price per drink and Q is the quantity of drinks:

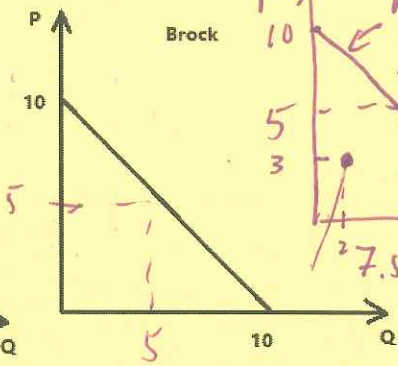
Coke: P = Q + 3
Pepsi: P = 2Q - 1 → if P = 3 ⇒ 3 = 2Q - 1, 4 = 2Q, 2 = Q

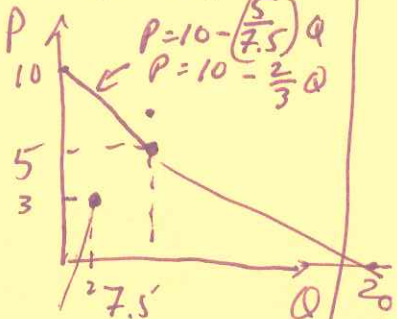
~~if Q pepsi = 3 ⇒ P = 2(1)~~
if Q pepsi = 5 ⇒ P = 10 - 1 = 9
if P = 9 ⇒ Q coke ⇒ 9 = Q + 3, 6 = Q coke

The community consists of three residents: Ash, Misty and Brock. The graphs below depict Ash, Misty, and Brock's linear demand curves for soft drinks.









$P = 10 - \left(\frac{5}{7.5}\right)Q$
$P = 10 - \frac{2}{3}Q$

SOME WORK HERE!

23. Given the above information and holding everything else constant, what is the slope intercept form of the market supply curve for the price range between \$4 and \$6?

a. P = 2Q – 1 ✗
b. P = (2/3)Q + 5/3 ✓
c. P = (3/2)Q – 5/2
d. P = 3Q + 2

Alternative Method:
$Q_{coke} = P - 3$
$Q_{pepsi} = \frac{1}{2}P + \frac{1}{2}$
$Q_{TOTAL} = P - 3 + \frac{1}{2}P + \frac{1}{2}$
$Q_{TOTAL} = \frac{3}{2}P - \frac{5}{2}$

PREDICTABLE: NOT HARD

24. Draw the market demand curve for soft drinks on your scratch paper. What are the coordinates of the "kink point"?

$\frac{2}{3}\left[\frac{3}{2}P = Q + \frac{5}{2}\right]$
$P = \frac{2}{3}Q + \frac{5}{3}$

a. (Q, P) = (2.5, 5)
b. (Q, P) = (5, 2.5)
c. (Q, P) = (7.5, 5) ✓
d. (Q, P) = (20, 0)

HARD

25. Find the market equilibrium quantity (Qe) at the intersection of the market demand and market supply curves.

a. Qe = 33/8
b. Qe = 15/4
c. Qe = 25/4 ✓
d. Qe = 95/16

Which equations do I need?
Thought experiment ⇒ if Q = 7.5 ⇒ what is price on S side?
$P = \frac{5}{3} + \frac{2}{3}\left(\frac{15}{2}\right)$
$P = \frac{5}{3} + 5 = 7\frac{2}{3}$ ⇒ this is "above" the kink point!

I need S: $P = \frac{2}{3}Q + \frac{5}{3}$ and D: $P = 10 - \frac{2}{3}Q$ to find equilibrium

$\frac{2}{3}Q + \frac{5}{3} = 10 - \frac{2}{3}Q$
$2Q + 5 = 30 - 2Q$
$4Q = 25$
$Q = \frac{25}{4}$

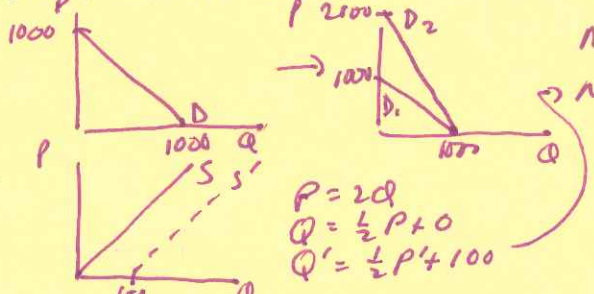
SOME THOUGHT NEEDED HERE

26. The following equations describe the initial demand and supply for cars in Detroit where P is the price per car and Q is the quantity of cars:

Market demand: P = 1000 – Q
Market supply: P = 2Q

Suppose that due to an economic recovery, the car manufacturers are now willing to produce 100 more cars than before at every price level. The consumers, on the other hand, are willing to pay twice as much at every quantity now, then they were willing to pay initially. Given this information and holding everything else constant, the new equilibrium quantity in this market will be:

a. 633 cars.
b. 475 cars.
c. 733 cars.
d. 550 cars. ✓



$P = 2Q$
$Q = \frac{1}{2}P + 0$
$Q' = \frac{1}{2}P' + 100$

new D: $P = 2000 - 2Q$
new S: $P = 2Q - 200$
$2000 - 2Q = 2Q - 200$
$2200 = 4Q$
$550 = Q$

SOME THOUGHT

27. Suppose that in town A, the average salary in 2007 was $60,000. In 2008, due to an economic crisis the average salary dropped to $57,000. Then in 2012 the average salary was back to $60,000. Which of the following statements is **TRUE** given this information?

a. The percentage change in average salary from 2007 to 2008 is 3%. ✗
b. The absolute value of the percentage change in average salary from 2007 to 2008 is larger than the absolute value of the percentage change in average salary from 2008 to 2012. ✗ (smaller)
c. The absolute value of the percentage change in average salary from 2007 to 2008 is smaller than the absolute value of the percentage change in average salary from 2008 to 2012.
d. The percentage change in average salary from 2008 to 2012 is 5%. see explanation for (b)

27.a) $\left[\frac{57{,}000 - 60{,}000}{60{,}000}\right] 100\% = \left[\frac{-3000}{60000}\right] 100\% = -5\%$

b) |% Δ in salary 2007 to 2008| = 5%
|% Δ in salary 2008 to 2012| = $\left[\frac{60{,}000 - 57{,}000}{57{,}000}\right] 100\%$
$= \frac{3000}{57000}(100\%) > 5\%$

EASY!

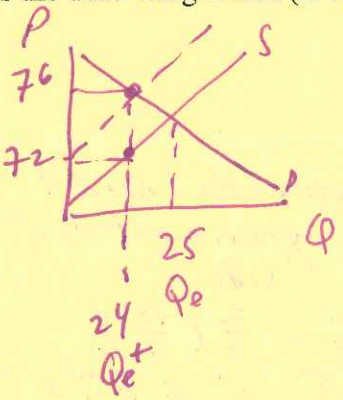
28. The following equations describe the market for hamburgers in New York City where P is the price per hamburger and Q is the quantity of hamburgers:

Market demand: P = 100 – Q
Market supply: P = 3Q

$100 - Q = 3Q$
$100 = 4Q$
$25 = Q$

To curb obesity in New York City, Mayor Bloomberg decides to impose a $4 tax on each burger consumed. What is the dead weight loss (DWL) associated with this tax?

a. $1
b. $2
c. $3
d. $4



ST: $P = 3Q + 4$
$3Q + 4 = 100 - Q$
$4Q = 96$
$Q = 24$

$DWL = \frac{1}{2}(76 - 72)(25 - 24)$
$= \frac{1}{2}(4)(1) = \$2$

JUST READING GRAPHS & APPLYING A DEFINITION

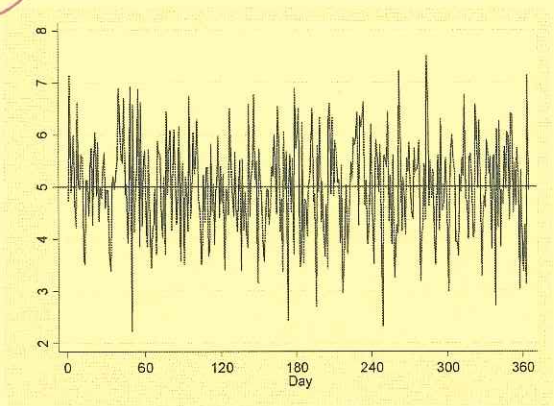
29. The government decides to regulate the rental price of housing for a year by imposing a price ceiling for rent of $5000 per year. The following graphs show the daily rents for the rental housing after this price ceiling is imposed. Which of the graph(s) below **cannot** possibly represent housing prices given that the regulation is strictly enforced? In the graphs assume that price is measured in thousands of dollars.

a. II
b. II and III
c. I and II
d. II and IV

price ceiling is a maximum ⇒ can't go above it

I & II since price cannot be greater than 5000

I.



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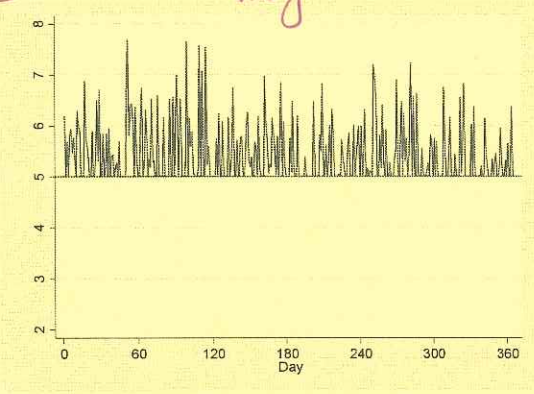

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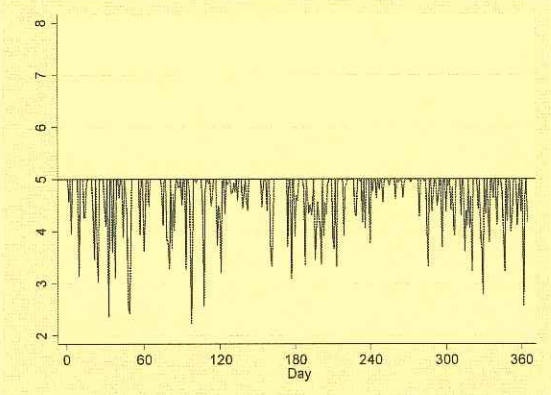
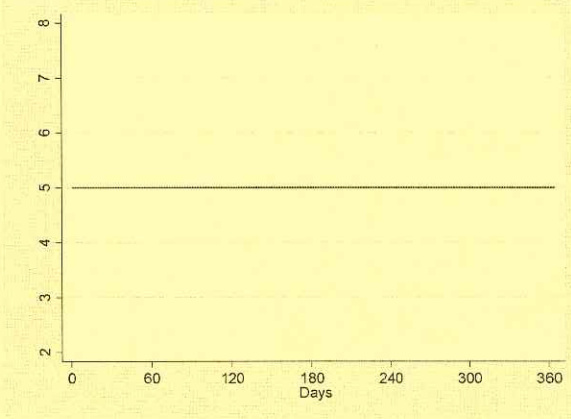


IV.



END OF EXAM

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EXAM CONTINUES ON NEXT PAGE