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Cooleconomics.com: Principles of Microeconomics, First Exam Answers

You have 70 minutes to complete this 100-point exam. Be sure to completely label your graphs. Write legibly. Show your calculations for partial credit. Good luck!

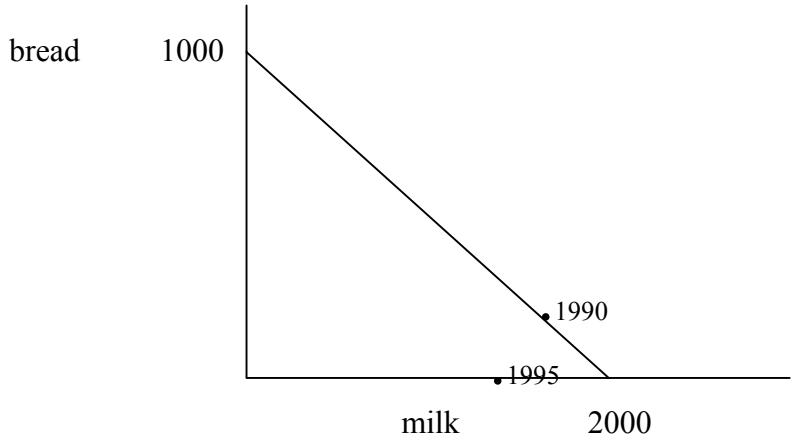
1. (20 points). Match each term below with the 1 letter preceding its correct definition.

__f__ Economics
__r__ Total Revenue
__g__ Capital
__v__ Short Run
__n__ Law of Demand
_x___ Complements
_m___ Price Ceiling
_k___ Production Possibilities Frontier
__e__ Inferior Good
_s___ Opportunity Cost

a. As the price of a good rises, buyers are willing to buy more of it.
b. Two goods with a positive cross price elasticity of demand
c. Time period too short for producers to vary their quantity of production.
d. Financial assets such as stocks and bonds.
e. A good with a negative income elasticity of demand.
f. The study of how individuals and societies should best use their limited resources to try to satisfy their unlimited wants.
g. Manufactured aids to production, such as machines and buildings.
h. A graph showing how production of a good increases as its price increases.
i. A poorly-produced good.
k. A graph showing the maximum possible output combinations of an economy.
m. A legal maximum price.
n. As the price of a good falls, buyers are willing to buy more of it.
o. The profits of a firm.
p. The study of demand, supply, and markets.
r. The total dollar value of a firms' sales
s. The next best alternative surrendered when a choice is made.
t. The cost of producing a product.
v. Time period in which a producer has at least one fixed resource.
w. A legal minimum price.
x. Two goods with a negative cross price elasticity of demand.

2. (18 points) Cuba is a fake economy which produces only 2 goods--bread and milk. Cuba has 200 workers; each worker can produce 5 bread or 10 milk.

a) Draw Cuba's Production Possibilities Frontier. Include at least 4 numbers on your graph.



b) In 1990, Cuba was producing 300 bread and some milk. All workers are fully employed and optimally used. Illustrate Cuba's 1990 production on the graph you drew above. Label it "1990," and calculate precisely how much milk is being produced. Write the amount of milk below.
300 bread/5 = 60 bread workers 200-60 = 140 milk workers x 10 = 1400 milk

c) In 1995 Cuba was producing 1500 units of milk and some bread. Only 150 workers are employed. Illustrate Cuba's 1995 production on the graph you drew above. Label it "1995," and calculate precisely how much bread is being produced. Write the amount of bread below.
1500 milk/10 = 150 milk workers 150-150 = 0 bread workers →no bread produced

3. (10 points) Stafford residents consumed 200 cans of root beer per week when its price was 50 cents. When the price rose to $1, Stafford residents consumed 50 cans of root beer per week.

a) Calculate the price elasticity of demand for root beer in Alief using the 'midpoint formula.'

(200 – 50) / [(200+50)/2] / (.50 – 1)/[(.50+1)/2]
=150 /125 / -.50/.75
= 6 / 5 x -3/2 = -8/10 = -1.8

b) Is Root Beer demand in Alief price elastic or price inelastic? Explain in 1 sentence.

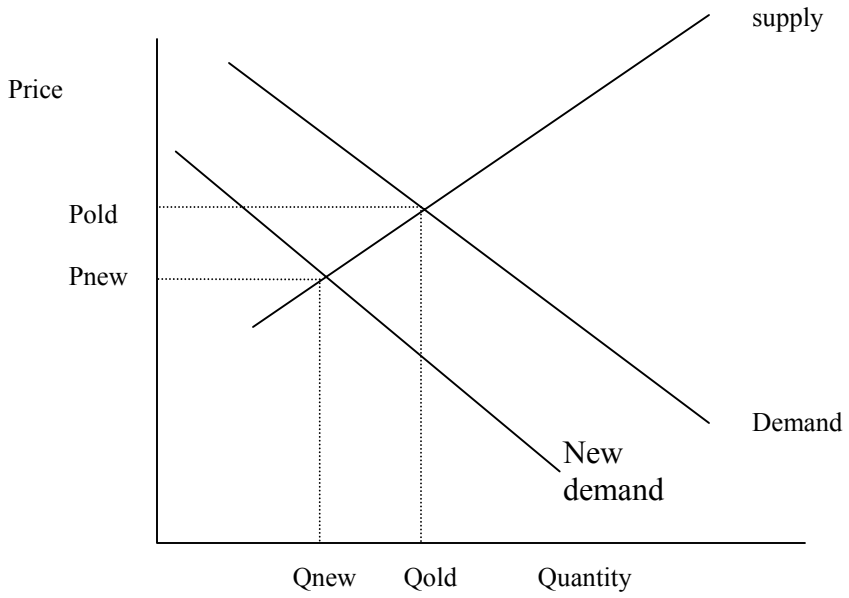
Elastic. Value of elasticity is more negative than -1

4. (5 points) Good X and Good Y are substitutes. If the price of Good X rises, then what will happen to the price of Good Y? Explain in 1 sentence.

Higher price for X increases demand for its substitute, Y, causing the price of Y and its quantity to rise

5. (15 points) The (competitive) market for ramen noodles (an inferior good) is in equilibrium.

a) Graph the market in equilibrium. (Numbers aren't required)



Now, ramen noodles buyers' income increases.

b) Illustrate how this increase affects the equilibrium price and quantity of ramen noodles on the graph you drew above.

c) Should ramen noodles producers be happy about the change in equilibrium? Explain in one or two sentences.
No. Reduced prices and quantity sold will reduce their total revenue.

6. (15 points) The market for corn is represented as follows:

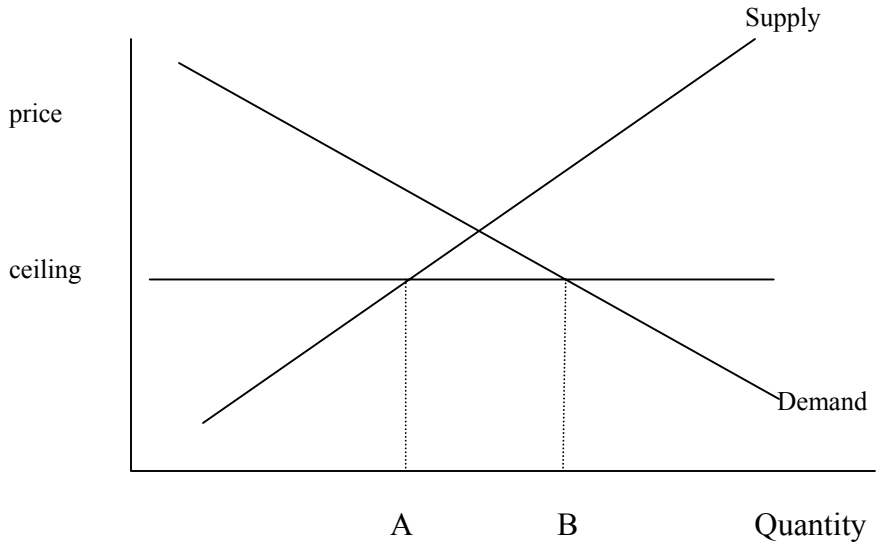
$Q_d = 1000 - 3P$ $Q_S = -200 + P$

The government has imposed a price ceiling of $250.

a) Will an equilibrium occur? Demonstrate your answer with precise numerical calculations.

NO. Qd = 1000 – 3(250) = 250, while Qs = -200 + 250 = 50 → shortage of 200

b) Illustrate the corn market using a completely-labeled graph. (Numbers aren't required.)



Shortage is horizontal sitance between A and B

c) Should all potential corn buyers be pleased with the price ceiling? Explain in 1 sentence.
No. Some will be unable to obtain corn.

7. (17 points) Politicians have proposed increasing the minimum wage.

Question: **Is this minimum wage proposal a good idea or a bad idea?** Include the following in your answer to this underlined, boldfaced, 17-point question:

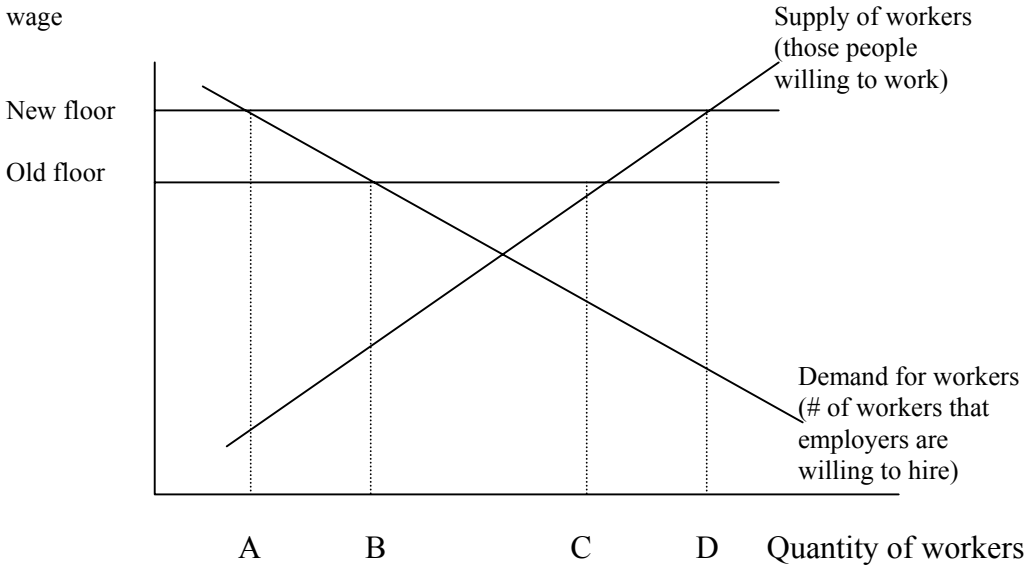
--Tell me whether this is a good idea or a bad idea by explaining the important costs and benefits of this proposal.

--Mention at least two groups of people who will BENEFIT and two groups of people who will LOSE as a result of a minimum wage hike. (Note: companies, markets and geographic areas (such as "the nation as a whole") are NOT groups of people. Examples of groups of people: red-haired people, stock brokers, owners of companies, etc.)

--Illustrate on a graph the effects of the minimum wage increase on the low-skilled labor market.

It's either a good idea or a bad idea. Those minimum wage workers who still have jobs will benefit; those who lose their jobs will lose. Other workers who are substitutes for minimum wage workers will benefit, since demand for them will increase. Other workers who are complements to minimum wage workers will lose, since demand for them will fall. Buyers of things that require minimum wage workers to produce will ose, since they

will face higher prices. Those who own companies that employ minimum wage workers will lose, since they will have higher costs of production and lower profits. Etc.



Old surplus of workers is horizontal distance between B and C

New surplus or workers is horizontal distance between A and D