A resource is NOT "scarce" when:
1. the price is kept below the equilibrium price.
2. the price is kept above the equilibrium price.
3. there is enough of the resource to satisfy all our needs (even if all our luxuries aren't satisfied).
4. there are no conflicts among its many users about how to use the resource.

Which of the following will cause the demand for electricity to increase?
1. the price of electricity.
2. decrease in the price of electricity.
3. increase in the price of electricity.
4. increase in the price of TVs, washing machines and other goods which use lots of electricity.
5. decrease in the price of equipment used to make electricity.
6. is kept below the equilibrium price.
7. is kept above the equilibrium price.

In the mid-1970s in some US states, only citizens with even-numbered license plates on cars were allowed by government to buy gasoline on even-numbered days of the month. This leads us to believe that:
1. there was a surplus of gasoline.
2. there was a shortage, gasoline was not that scarce.
3. gasoline prices were kept too low.
4. gasoline prices were kept too high.
5. gasoline was scarce, there was no shortage.

A certain baker makes and sells both bread and buns. Suppose there is a sudden increase in the demand for bread. This means:
1. the cost of making buns has increased.
2. the baker of his leisure has decreased. (cost of producing the good will decrease).
3. a surplus of bread will decrease.
4. the producer surplus will increase. (cost of making bread has increased.)
5. the consumer surplus will increase more than the producer surplus will decrease.
6. the height of bread will decrease.
7. that people buy more will increase.

What is a reason that a business loss (a negative profit) could be "healthy" for an economy?
1. a company from becoming a monopoly.
2. a company is telling this producer to release his control of resources to other businesses.
3. a company will be forced to have a sale because lower prices are necessary to reduce losses.
4. the distribution of income in an economy more equal.

Suppose a company is trying to decide whether to produce Q=4 or Q=5. In order to sell Q=4, the company must lower its price from $8 (the price for Q=5) to $7. What is the marginal revenue of moving to Q=4?

\[ TR = \frac{\Delta Q}{\Delta P} \]
\[ TR = \frac{8 - 7}{8 - 7} = 1 \]
\[ \Delta Q = 1 \]
\[ \Delta P = 1 \]
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What is the best description of a "monopoly"?
A. A company which has a large amount of sales (sales quantity is large).
B. A company which has a large sales revenue.
C. A company which has a large market share (sells a large proportion of a certain good).
D. A company which uses lots of predatory pricing.
E. A company which can raise prices a lot and still keep most of its customers.

What is the major economic criticism of laws which prevent large companies from merging?
A. Larger companies will increase cost and reduce efficiency for the economy.
B. Collusion will usually allow companies to earn more producer surplus and increase efficiency in the economy.
C. It is not possible to know ahead of time, what size company best serves the public.
D. Larger companies can reduce costs more easily than smaller companies.
E. We need "anti-trust" because consumers don't trust large companies.

A minimum wage law is likely to:
A. Decrease employment for high skilled workers and increase employment for low skilled workers.
B. Cause companies not to worry so much about the quality of workers they hire.
C. Cause workers applying for less skilled jobs to spend extra time and money in their attempt to get hired.
D. Cause employers to use fewer machines and other labor saving devices.
E. Reduce the productivity of workers who are hired.

Demand and Supply (39 pts)

<table>
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<th>PER UNIT</th>
<th>30</th>
<th>60</th>
<th>90</th>
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<td>16</td>
<td>10</td>
<td>4</td>
<td>Etc.,</td>
</tr>
<tr>
<td>QUANTITY SUPPLIED</td>
<td>8</td>
<td>18</td>
<td>28</td>
<td>Etc.,</td>
</tr>
</tbody>
</table>

\[
\frac{d}{dP} = 22 - \frac{1}{5}P
\]

What is the demand equation (Qd=f(P))?

\[
\frac{d}{dP} = -2 + \frac{1}{3}P
\]

What is the supply equation Qs=f(P)?

\[
\Delta P = +30 \quad \frac{\Delta d}{dP} = -6 \quad \frac{\Delta Q}{dP} = +10
\]

What is the consumer surplus at equilibrium?

\[
\frac{1}{2}(65)^2 = 422.5
\]

What is the "cost" at equilibrium?

\[
\text{Suppose the government brings in a price floor at $60. What is quantity traded if the government does NOT buy the surplus?}
\]

\[
\frac{1}{2}(10+13)^2 = 172.5
\]

At this price floor, what is the CHANGE in the consumer surplus?

\[
\text{Calculate the new producer surplus if there is a price floor at $60.}
\]

\[
P = 110 - 5Q_c
\]

What is the marginal revenue curve (MR=f(Q))?

\[
P = 6 + 3Q_c
\]

What is the marginal cost curve (MC=f(Q))?

\[
Q = \frac{110 - 6}{13} = \frac{104}{13} = 8
\]

What is the Q that maximizes producer surplus for a monopoly?

\[
P = \frac{110 - 5(8)}{8} = 20
\]

What is the P that maximizes producer surplus for a monopoly?

\[
MR = 110 - 4(8) = 60 \quad MC = 6 + 3(8) = 30
\]

What is the producer surplus that a monopoly will earn?

\[
\frac{1}{2}(40)^2 = 100
\]

What is the waste (dead weight loss) caused by the monopoly?
C. Short Definition (6 pts) What is a “shortage”? Give an example and illustrate it in a diagram.

D. Short Essay (15 pts) Maximum 200 words! A diagram will help your answer. Make sure you explain your diagram in your answer.

Many politicians are worried that the price of housing in Vancouver has become too high and it is becoming increasingly difficult for workers here to afford to live here. Some politicians are asking the government to save houses in Vancouver for residents of Vancouver (they want to stop foreign buyers from buying so many local houses). What do you think will happen to the market for housing in Vancouver if we pass a new law so that all new buyers must provide proof that they have lived in the Vancouver area for more than one year. Would you be in favour of such a law? Why or why not?