

Study Problems in Economics for Monday, Week 2

Answer these questions at home and bring to class on Monday morning, Oct. 1. Be prepared to compare your answers with those of other students in your study group.

1. Draw a diagram for rental housing in Olympia, incorporating “normal” supply and demand curves, and indicate the equilibrium price and quantity of housing. (Assume, to make things easy, that all apartments are equal in economic terms; each rents for exactly the same price.) Now, for each of the following, shift either the demand curve or the supply curve in the correct direction and show how this changes the equilibrium price and quantity. Show the old and new curves, and the old and new equilibria, in the same diagram.

- Evergreen increases its size from 3800 to 5000, in line with state mandates.
- Large apartment complexes are built along the bay, replacing existing industrial sites.
- The city of Olympia institutes rent control, requiring rents below the equilibrium level. (Tricky!)
- (a) and (b) both happen at the same time, resulting in no change in the equilibrium price.

2. Moe, Curly and Larry are three rational consumers. This table shows how many cups of cappuccino they will buy per week depending on the price:

Price	Moe	Curly	Larry
\$1.75	2	5	6
\$2.00	1	4	0
\$2.25	1	2	0

a. If the price is \$2.00, is it correct to say that $P = MB$ (price equals marginal benefit) for all consumers? (Since we have increments of whole cups of cappuccino and 25¢ in price, don’t get hung up on fractions; is this approximately true?) Explain.

c. Draw, in a single diagram, the three individual demand curves as well as the market demand curve, assuming there are only three individuals in this market.

3. Answer the four parts in Application 4.0 on p. 57 of the Goodstein text.

4. The following table presents demand information for a potential recreation area; in it, P represents the admission price that might be charged, and Q represents the number of people (in thousands) willing to pay that admission.

P	\$8	\$6	\$4	\$2	\$0
Q	0	4	8	12	16

Suppose there is no marginal cost of any sort associated with the recreation; the only cost is the initial (fixed) expense of buying the land, which is \$32,000.

(a) Assuming that all the cost and willingness-to-pay information represents true social costs and benefits, is it in society’s interest that this recreation area be provided?

(b) What is the optimum number of people who should be using this area?

(c) What is the optimum price that should be charged for admission?

5. Give an example of one benefit (loosely defined — anything you might value) you have received in the last week that illustrates the nonexhaustion (nonrivalry) characteristic of a public good. (Try to think of something that's not in the reading.)

6. The following diagram depicts the demand and supply for newsprint under the assumption that $D = MSB$, while $S < MSC$. Shade in the area representing the net social cost of the free-market equilibrium ($S = D$) compared to the true social optimum (according to conventional economic analysis).

