

AAEC 3315 Final Exam Review

Covering material from Chapters 1-8 and 10

Chapters 1-7

Refer to the reviews for the first two midterms, the quizzes and the midterms to study for this section of the exam. Any questions on the final addressing topics from chapters 1-8 will be taken directly from the first two midterms.

Chapters 8, 10:

Conceptual questions

- Define: producer and consumer surplus
- Know how to find producer/consumer surplus
- Define: deadweight loss
- Know how to find deadweight loss
- Know how to identify deadweight loss in the presence of a tax/subsidy/price control
- Define: Pareto-optimal outcome/allocation
- What is the (1st) fundamental theorem of welfare economics?
- Be able to interpret an Edgeworth box graph and identify Pareto-optimal allocations within
- Know the condition that guarantees Pareto optimality in exchange
- Define: production possibilities frontier curve
- Know how to find on the PPF, the production bundle that will be produced given world prices
- Define: monopoly and market power
- Know the formula for marginal revenue for a monopolist
- Know how to find marginal revenue given a demand curve
- Know the decision rule a monopolist uses in choosing how much to produce
- Be able to find the production level and price a monopolist chooses for given demand and MC curves

- Be able to identify the DWL created when a monopoly is formed
- Understand the sources of monopoly
- Be able to explain why a society might want to let monopolies to persist

Example Problems

1. Calculate consumer surplus if the demand curve is

- a. $Q_D = -4P + 24$

- b. $Q_D = -0.5P + 6$

- c. $Q_D = -3P + 12$

When $P = \$2$ and when $P = \$3$

2. Calculate producer surplus if the supply curve is

- a. $Q_S = 12P - 6$

- b. $Q_S = 20P - 10$

- c. $Q_S = 10P - 15$

When $P = \$2$ and when $P = \$3$

3. Find the sum of producer and consumer surplus if $Q_D = -4P + 20$ and $Q_S = 8P - 16$. Find the deadweight loss caused by a \$1 tax.
4. Find the monopolist's quantity and price if $MC = .25q + 2$ and demand is
 - a. $q_D = -5p + 30$
 - b. $q_D = -.25p + 5$
 - c. $q_D = -p + 15$

How are those quantities and prices different from a perfectly competitive outcome (assuming the monopolists MC curve is the same as the industrywide MC curve)?