In General:

Know the definitions of all the things in the Chapter Outlines on the powerpoint slides at the start of each chapter.

Chapter 7

Given the market price and a demand schedule or demand curve, you should be able to figure out what the consumer surplus is at any quantity. Note that the demand curve is identical to the willingness to pay curve when there are no distortions (tax, externality, etc.).

Given the market price and a supply schedule or supply curve, you should be able to figure out what the producer surplus is at any quantity.

Efficiency occurs when the total surplus for society as a whole is maximized. Know that in the absence of distortions (tax, externality, etc.) that the efficient allocation will be the price and quantity where quantity supplied exactly equals quantity demanded. Note that an allocation consists of a quantity as well as the corresponding price that goes with it.

To maximize consumer surplus, give the goods to the people who are willing to pay the most (ie the people that want it the most). To maximize producer surplus, have the lowest cost producers make the goods.

Draw a diagram that shows a supply and demand curve and be able to identify which areas on the diagram represent consumer surplus, producer surplus, cost of production, and total surplus when we have an efficient allocation.

Chapter 8

When you put the statutory incidence of a tax on an agent, you will make that agent behave differently. Note that the tax affects what they do, but the tax does not change consumers' willingness to pay or firms' true costs of production. Taxes and subsidies are a side thing that get tacked onto the true underlying supply and demand curves.

Why are taxes and subsidies bad? They are only bad if you started at an efficient allocation. If there are no problems in a particular market, then obviously you want to leave it alone. Applying a tax or a subsidy will cause someone to change their behavior. But we were at the best possible place, so moving away must be bad.

Draw a diagram showing the effects of each of the four possibilities: tax on suppliers, tax on demanders, subsidy to suppliers, subsidy to demanders. Identify in the before and after states of the world: the price and quantity of the allocation that actually ends up being picked, consumer surplus, producer surplus, total surplus, change in each of the three surpluses, and the deadweight loss.

You should also make sure you can do the other policy effects on surplus and be able to figure out the deadweight loss from them: quantity restrictions, price floor, price ceiling.

Chapter 9

Trade only matters if the world price is different from the domestic (no trade) price. If the world price is higher, then obviously suppliers want to sell more but demanders want to buy less. Thus, exporting occurs if world price is higher than domestic price. If the world price is lower, then obviously demanders want to buy more (think Law of Demand) and suppliers want to sell less. Thus, importing occurs if world price is lower than domestic price.

Draw a diagram that shows what happens when world price is *higher* than domestic price and the country opens to trade. Identify quantity demanded, quantity supplied, consumer surplus, producer surplus, and total surplus both before and after the opening up to trade. Also identify which part of the diagram is the change in total surplus after the country opens up to trade.

Draw a diagram that shows what happens when world price is *lower* than domestic price and the country opens to trade. Identify quantity demanded, quantity supplied, consumer surplus, producer surplus, and total surplus both before and after the opening up to trade. Also identify which part of the diagram is the change in total surplus after the country opens up to trade.

Note that not everybody needs to win when a country opens up to trade. You should be able to tell who wins and who loses

from your diagrams in each case.

Chapter 10

An externality occurs when an action taken by an agent has a different effect on itself than on society as a whole. A positive externality is one where the agent's action gives a bonus to everyone around him. A negative externality is one where the agent's action harms everyone around him.

The problem with an externality is that the agent will only take private benefits and costs into account when choosing his actions. From society's point of view, we would like for him to consider the effects on everyone else from his actions - the social benefits and costs - but unfortunately he doesn't.

Draw diagrams that show the difference between the socially efficient allocation and the actual allocation that the market produces when: social cost is less than private cost, social cost is more than private cost, social benefit is less than private benefit, and social benefit is more than private benefit. You should be able to identify the price and quantity for both the efficient and market allocations in the four different case.

In one sentence, be able to explain what the deadweight loss from any externality is if you have the diagram in front of you. Also, be able to identify in the diagram which area represents the deadweight loss.

In chapter 8 we said that taxes were bad if we started at the efficient allocation. But when there is an externality, we do not start at the efficient allocation. It is possible that a tax or subsidy could move us closer to the efficient allocation. Be able to identify on any diagram involving an externality exactly how much of a subsidy or a tax should be applied to "fix" the externality problem. The goal is to bring private and social costs and benefits in line with each other so that agents behave with society's best interests in mind.

Be sure you understand how to do Coase Theorem type problems. You must be able to figure out if it is efficient for the two parties to negotiate and also to tell us exactly what the range of the offer can be and still get cooperation.

Chapter 11

Goods have two dimensions: rivalness and excludability. Know what both mean and also know what the difference between a public good and a common resource is.

Public goods and common resources have the same problems as externalities. Social and private costs or social and private benefits are not in line. The congested road example from class is the case of a common resource where social cost > average cost. Be able to draw similar diagrams if social cost < average cost, or social benefit > average benefit, or social benefit < average benefit.

As in externality problems, you should be able to identify the deadweight loss in any public good or common resource diagram. Also like in externality problems, you should be able to identify a toll/usage fee/rebate type payment that can "fix" the problem in any public good/common resource diagram you have in front of you.

Chapter 21

When you are given some income and prices for goods, you should be able to figure out what the budget line looks like. Be able to show what happens when any of the three things (income, price of X, price of Y) or any combination of those three things change. This will involve showing the original pre-change budget line and then the new post-change budget line.

Understand the different effects in a diagram of giving someone goods (sweaters) instead of giving them money (increase income). You should be able to explain why the person is at least as well off if he gets the money but is potentially better off (options are good).

The rule for making purchasing decisions for a consumer is to keep buying something until the willingness to pay *for the next unit* exactly equals the price he has to pay to get *that next unit.* Given a price and marginal willingness to pay

schedule, you should be able to figure out how much the guy buys and how much consumer surplus he gets.

Remember that decisions are made at the margin. The consumer is looking at marginal benefit and marginal cost. The firm is looking at marginal revenue and marginal cost. If there is some kind of sunk cost that the agent can't do anything about, then the agent should ignore that when making his decision.

Chapter 13

Know the difference between explicit and implicit costs. Also, you should know the difference between accounting and economic profit. What's different in the way these two are computed?

Fixed costs will be incurred even if the firm produces nothing. It will not vary with the level of production - only variable costs will vary with the quantity produced. Most of this chapter is understanding the difference between the various types of costs: Fixed Cost, Variable Cost, Total Cost, Average Fixed Cost, Average Variable Cost, Average Total Cost, Marginal Cost. If we give you say Average Variable Cost, you should be able to figure out what Variable Cost is, etc.

The difference between the short run and the long run is that in the long run there are no fixed costs. Anything that used to be a fixed cost in the short run becomes a variable cost in the long run.

Be able to figure out if Average Total Cost is rising, falling, or staying the same if we tell you what Marginal Cost is. Also, if we tell you how Average Total Cost is changing as output rises, you should be able to tell us if that's Economies of Scale, Diseconomies of Scale, or Constant Returns to Scale.