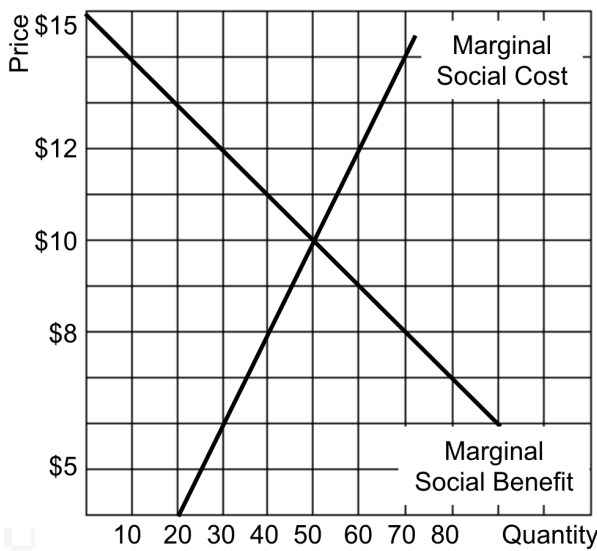




## BIG PICTURE IDEAS

- #1. Markets are socially optimal, with no deadweight loss, when the marginal **social** benefit equals the marginal **social** cost.
- #2. A **negative** externality occurs when the production or consumption of a product results in a cost to a third party.
- #3. A **positive** externality occurs when the production or consumption of a product results in a benefit to a third party.
- #4. Due to the free rider problem, private individuals usually lack the incentive to produce **public** goods.
- #5. The **government** enacts policies to address market failures and the problems that arise from externalities, public goods, monopolies, and income **inequality**.

### Topic 6.1- Socially Efficient and Inefficient Market Outcomes



Use the graph to complete the following:

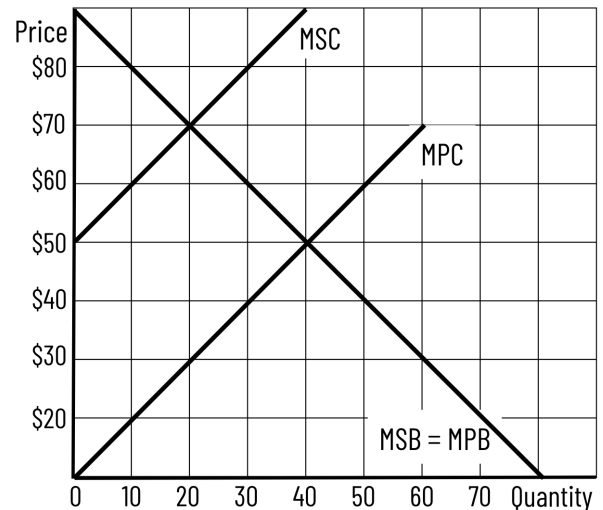
1. Identify the socially optimal price and quantity.  
**P = \$10, Q = 50**
2. Calculate the deadweight loss at output 20. Show work.  
**\$135 = 1/2 (30) x \$9**
3. Calculate the deadweight loss at output 60. Show work.  
**\$15 = 1/2 (10) x \$3**
4. Calculate the deadweight loss at output 50. Show work.  
**\$0. There is no deadweight loss. 50 is the socially optimal quantity.**
5. Calculate the deadweight loss at output 70. Show work.  
**\$60 = 1/2 (20) x \$6**
6. Assume a market produced 40 units. Identify a government policy that could eliminate deadweight loss. **Per-unit subsidy.**
7. Assume a market produced 70 units. Identify a government policy that could eliminate deadweight loss. **Per-unit tax.**

### Topic 6.2- Externalities

8. Externalities occur because rational decision makers often respond to **private** benefits and costs rather than **external** benefits and costs.

Use the graph of an externality to complete the following.

9. Identify the price and quantity produced by the free market.  
**P = \$50, Q = 40**
10. Identify the socially optimal price and quantity.
11. **P = \$70, Q = 20**
12. Is this a positive externality or a negative externality? Explain. **Negative externality. The MSC > MPC. There are external costs on a third party.**
13. Is this a consumption externality or production externality? Explain. **Production externality. The external cost arises from the production process resulting in two cost curves instead of two benefit curves.**
14. Using numbers on the graph, identify the marginal external benefit or external cost. **\$40. The external cost is vertical distance between the cost curves.**
15. Calculate the deadweight loss. **\$400 = 1/2 (20) x \$40**

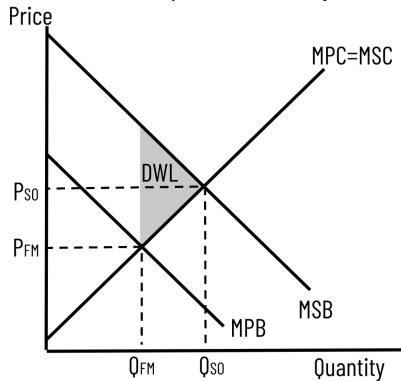




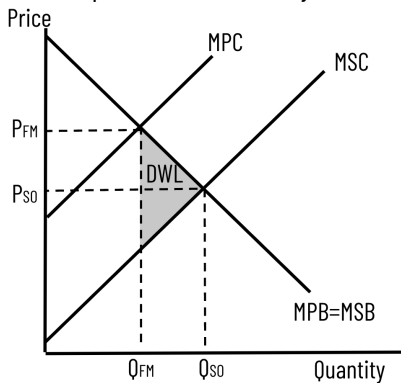
## ■ Topic 6.2- Externalities (continued) ▶

For each of the following, label the free market price and quantity  $P_{FM}$  and  $Q_{FM}$ , the socially optimal price and quantity  $P_{SO}$  and  $Q_{SO}$  and deadweight loss.

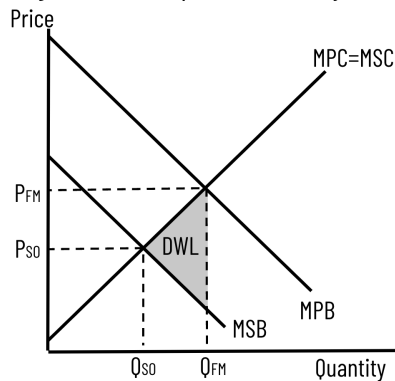
15. Positive consumption externality.



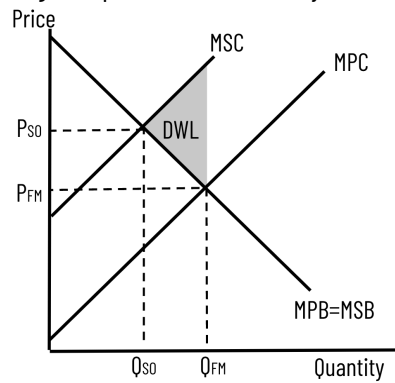
16. Positive production externality.



17. Negative consumption externality.



18. Negative production externality.



19. Explain the difference between a production externality and a consumption externality. **A production externality arises from the production process resulting in two cost curves. A consumption externality arises from the consumption process resulting in two benefit curves.**

20. Positive externalities generate a quantity that is **less** than the socially optimal quantity.

21. Negative externalities generate a quantity that is **greater** than the socially optimal quantity.

22. Identify two policies that can mitigate the effects of a positive externality. **A Per unit subsidy, regulation promoting more output**

23. Identify two policies that can mitigate the effects of a negative externality. **A Per unit tax, regulation limiting output**

## ■ Topic 6.3- Public and Private Goods ▶

24. Why are public goods considered a market failure? **Profit-seeking firms in the free-market don't provide enough public goods and services since they don't generate profit. If society wants public goods, the government often needs to step in.**

25. Define nonexclusion. **It is impossible to exclude individuals or groups from enjoying the benefits of a good or service, regardless of whether or not they have paid for it.**

26. Define non-rivalry (shared consumption). **Multiple individuals can use or consume the good or service simultaneously without diminishing its availability or quality for others**

## ■ Topic 6.4- Government Intervention ▶

27. **Antitrust** laws are designed to prevent monopolies and make markets more competitive.

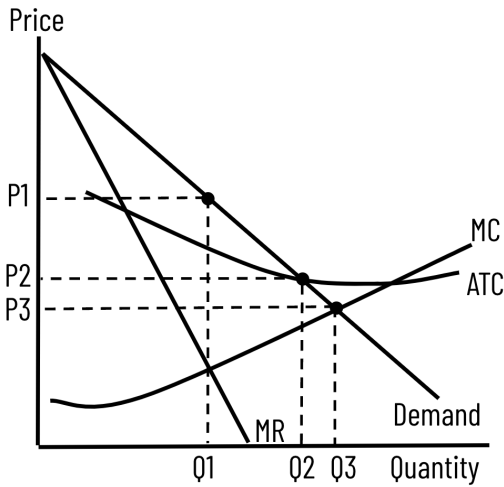
28. What is the difference between a per-unit tax and a lump-sum tax? **A per-unit tax is a tax for each unit produced. If more units are made, the amount of the tax increases. A lump-sum tax is a fixed one-time tax. The tax is the same no matter how many units are made.**

29. For each scenario, identify how each will change (↑, ↓, or no change).

	Variable Costs	Fixed Costs	MC	ATC	Output
Lump-sum tax	NC	↑	NC	↑	NC
Per-unit subsidy	↓	NC	↓	↓	↑
Lump-sum subsidy	NC	↓	NC	↓	NC
Per-unit tax	↑	NC	↑	↑	↓



## ■ Topic 6.4- Government Intervention (continued) ▶



Use the graph of a natural monopoly to complete the following.

- 30. Identify the unregulated price and quantity.  $P = P1, Q = Q1$
- 31. Identify the fair-return price and quantity.  $P = P2, Q = Q2$
- 32. Identify the allocatively efficient price and quantity.  $P = P3, Q = Q3$
- 33. Would a lump-sum tax cause the deadweight loss to increase, decrease, or stay the same. Explain. **Deadweight loss would stay the same. A lump sum tax would increase the ATC but not change the MC or MR so the quantity would stay the same.**
- 34. If the government sets a price ceiling at the socially optimal price, will the monopoly need a per-unit tax, a lump-sum tax, a per-unit subsidy, or a lump-sum subsidy? Explain. **Lump-sum subsidy. At the socially optimal quantity the firm is making a loss. A lump-sum subsidy would keep the firm from closing.**

## ■ Topic 6.5- Inequality ▶

35. What is the difference between income inequality and wealth inequality? **Income inequality involves annual earnings. Wealth inequality looks at how accumulated assets are distributed.**

36. Identify three sources of income inequality. **Abilities, human capital, inheritance, effects of discrimination, access to financial markets, mobility, etc.**

37. What are progressive taxes? **Taxes that take a larger percent of income from high income groups. Takes more percent from rich people.**

38. What are proportional taxes? **Taxes that take the same percent of income from all income groups. Takes the same percent from everyone.**

39. What are regressive taxes? **Taxes that take a larger percent of income from low income groups. Takes more percent from poor people.**

Use the Lorenz Curve to the right to complete the following.

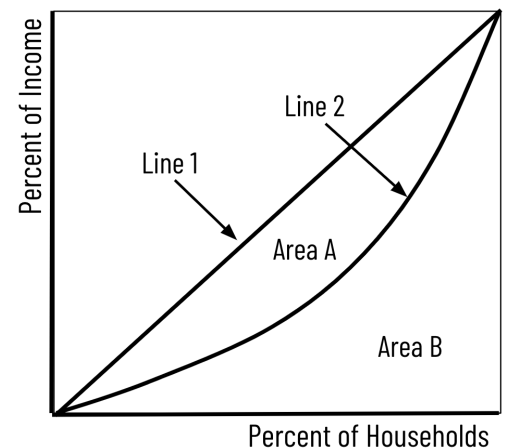
40. What does Line 1 represent? **Line 1 represents perfect income equality**

41. What does Line 2 represent? **Line 2 represents actual income equality in the country.**

42. Define Gini Coefficient. **A statistical measurement of income equality where perfect equality is 0 and perfect inequality is 1. On the graph, it is Area A divided by the sum of areas A and B.**

43. Would the Gini Coefficient increase, decrease or stay the same if the government made income taxes more progressive and increased payments to those in poverty? **The Gini Coefficient would decrease.**

44. How would an increase in job training for low-skilled workers affect income inequality and the Gini coefficient? **Inequality would decrease and the Gini Coefficient would decrease.**



## ■ Thank you! ▶

Wow, you did it! You reviewed everything in microeconomics. Now it's time to practice. Be sure to check out my practice sheets, free response questions, and practice exams. Thank you for watching my videos and getting my Ultimate Review Packet. You rock! -Jacob Clifford