

Homework 5

Questions

1. What are property rights?
2. Which of the following represents the true economic cost of production when firms produce goods that cause negative externalities?
3. Private Costs:
4. Which of the following is an example of a positive externality?
5. Suppose the current market equilibrium output of Q_1 is not the economically efficient output because of an externality. The economically efficient output is Q_2 . In that case, the diagram shows:

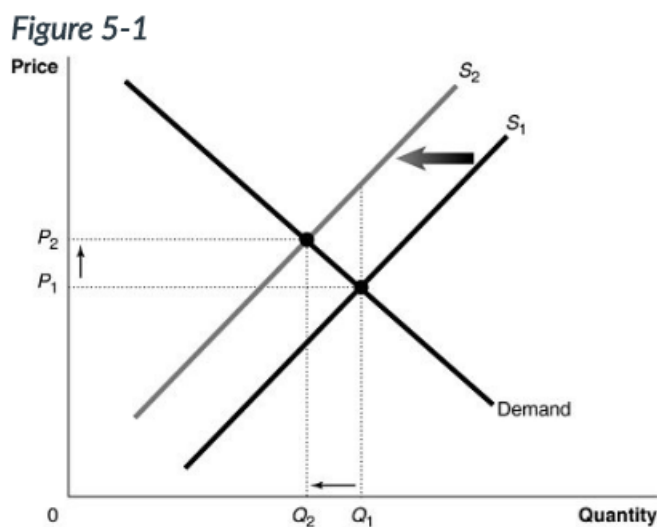


Figure 1: Figure 5-1 shows a market with an externality. The current market equilibrium output of Q_1 is not the economically efficient output. The economically efficient output is Q_2 .

6. Refer to figure 5-1. If because of an externality, the economically efficient output is Q_2 and not the current equilibrium output of Q_1 , what does S_2 represent?
7. The deadweight loss due to the externality is represented by the area:
8. Pollution is an example of a:

Figure 5-2

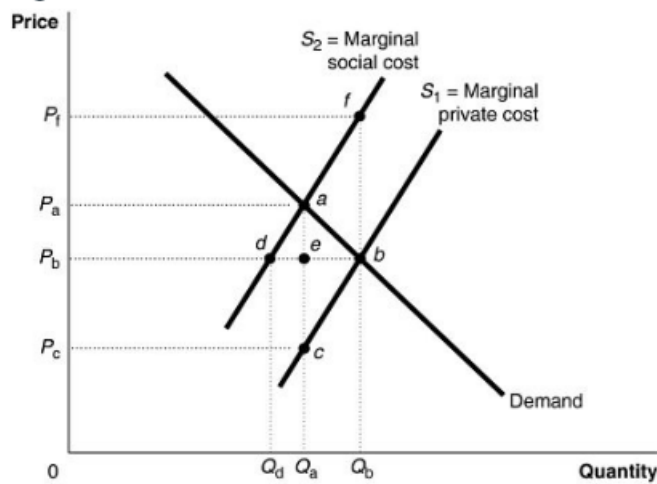


Figure 2: Figure 5-2 shows a market with a negative externality.

9. The cost borne by a producer in the production of a good or service is called:
10. What does D_1 represent?

Figure 5-6

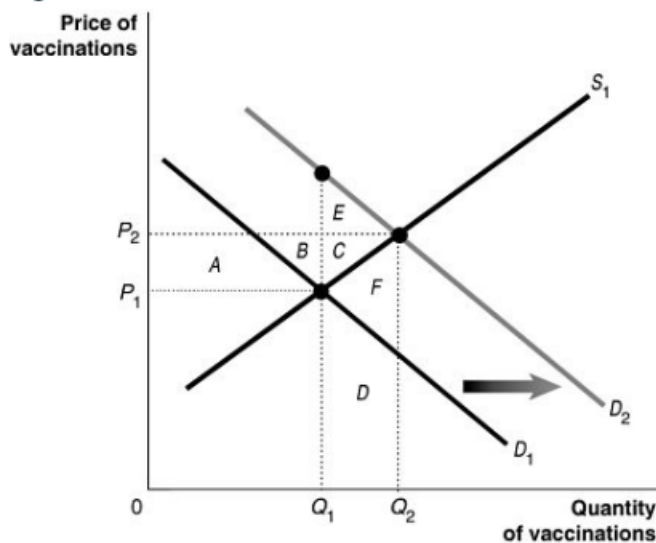


Figure 3: Figure 5-6 shows the market for measles vaccinations, a product whose use generates positive externalities.

11. Explain how mandatory seat belt laws may reduce the negative externalities of risky behavior.
12. If there is pollution in producing a product, then the market equilibrium price:
13. Consider the following characteristics:
 - low transaction costs

- small levels of pollution
- high levels of pollution
- clear assignment of property rights

Which of the above are assumptions behind the Coase Theorem?

14. What is the economic efficient level of pollution reduction?

Figure 5-8

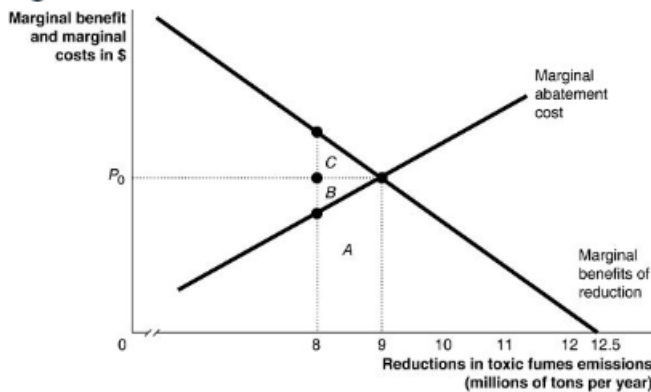


Figure 4: Consider a chemical plant that discharges toxic fumes over a nearby community. To reduce the emissions of toxic fumes the firm can install pollution abatement devices. Figure 5-8 shows the marginal benefit and the marginal cost from reducing the toxic fumes emissions.

15. Refer to figure 5-8. Suppose the emissions reduction target is currently established at 8 million tons. What is the area that represents the cost of eliminating an additional 1 million tons?
16. State and local governments subsidize college students with grants and low-interest loans. The loans and subsidies are example of:
17. Refer to figure 5-13. The efficient equilibrium quantity of gasoline is ___ million gallons per month.
18. Refer to figure 5-13. The market equilibrium quantity of gasoline is ___ million gallons per month.

Answers

1. The rights individuals or firms have to the exclusive use of their property, including the right to but or sell it.
2. The social cost of production.
3. Are borne by producers of a good while social costs are borne by society at large.

Figure 5-13

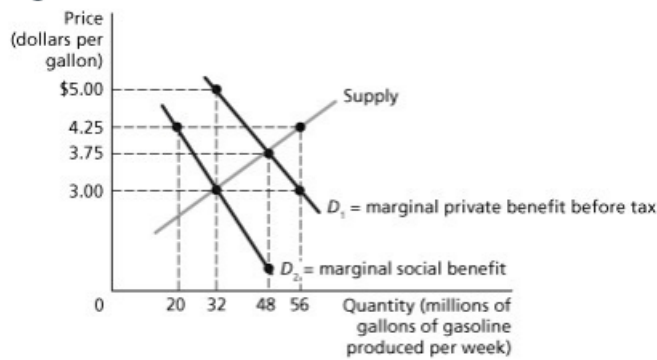


Figure 5: Figure 5-13 illustrates the market for gasoline before and after the government imposes a tax to bring about the efficient level of gasoline production.

4. Planting trees along a sidewalk which add beauty and shade.
5. The effect of a negative externality in the production of a good.
6. The market supply curve reflecting marginal social cost.
7. abf.
8. Negative externality.
9. Private cost.
10. The demand curve reflecting private benefits.
11. Seat belt laws help reduce injuries related to motor accidents. This results in less costs in medical bills and less time spent in hospital, or could save the lives of those involved.
12. Is too low and equilibrium quantity is too high.
13. A and D.
14. 9 million tons.
15. A
16. Pigovian subsidies.
17. 32
18. 48
19. \$5.00

- 20. \$1.25
- 21. A good that is rivalrous and excludable.
- 22. Nonrivalry and nonexcludability.
- 23. True.
- 24. $P_2 - P_0$