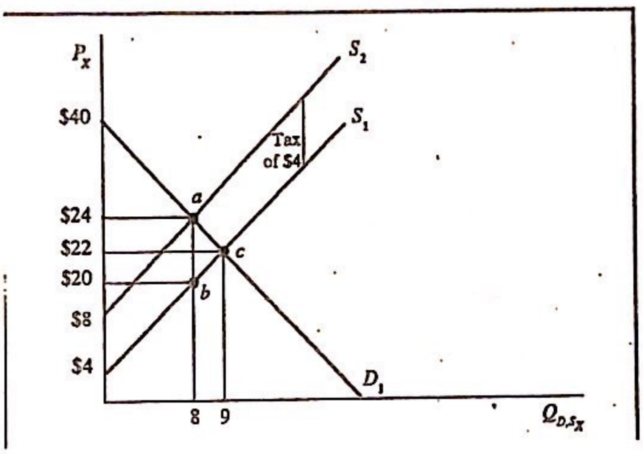
Chapter 7 Work

1. Explain how the invisible hand works.
2. How do firms maximize profits?
3. What function does a market play in economics?
4. What is marginal benefit?
5. How is price determined in a competitive equilibrium model?
6. Explain how consumer surplus is calculated.
7. Explain how producer surplus is calculated.

Figure 7.4



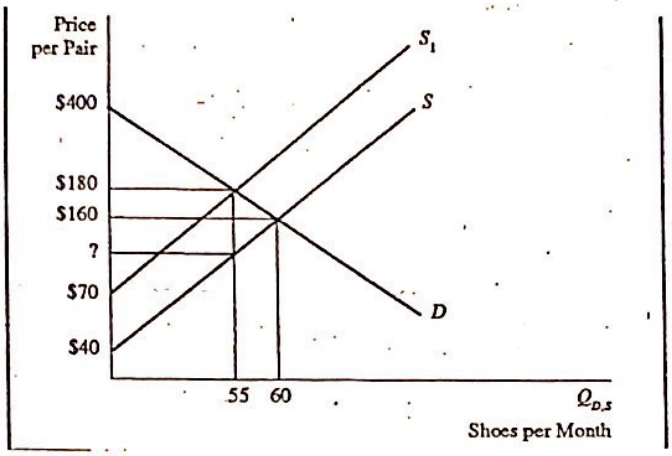
Questions 8 to 18 refer to Figure 7.4

8. What are the efficient equilibrium price and quantity?
9. What is the value of the consumer surplus?
10. What is the value of the producer surplus?
11. What is the sum of the consumer and producer surplus for this product?

Assume that the local government levies a tax of $4 per unit that is paid by sellers.

12. How does the tax affect Figure 7.4?
13. What are the new equilibrium price and quantity?
14. What price do sellers collect from buyers, and what do they keep to cover their costs and profit?
15. What is the new consumer surplus?
16. What is the new producer surplus?
17. What revenue does the government collect?
18. What is the deadweight loss?

Figure 7.5



Questions 19 to 29 refer to Figure 7.5

19. What are the efficient market equilibrium price and quantity?
20. What is the consumer surplus?
21. What is the producer surplus?
22. What is the sum of the consumer and producer surplus?

Assume that your local government plans a tax of $30 per pair of running shoes sold. The proceeds of the tax will be used to improve a local park.

23. How does this affect Figure 7.5?
24. What are the new equilibrium price and quantity?
25. What price do sellers get to keep to pay costs?
26. What is the new consumer surplus?
27. What is the new producer surplus?
28. What are the revenues collected by the government over an average month?
29. Does the tax create a deadweight loss? If yes, what is its value? How much of it do consumers pay?