

1. Analyze how the following would affect the demand for hospital nurses. Consider both scale and substitution effects. Make sure to distinguish movements along the demand curve from shifts in the demand curve.
 - a. A decrease in the wages of nurses
 - b. An increase in the salaries of doctors
 - c. An increase in the cost of medical equipment

2. The hourly production of meals at a local McDonald's is a function of the number of workers:
 $Q = 30L - 2L^2$. The average revenue (price) of a meal is \$4.00.
 - a. Calculate the formula for the demand for labor as a function of the hourly wage.
 - b. How many workers should this McDonald's employ if the wage is \$6.00 per hour? (Fractional workers are OK— they're just part-timers.)
 - c. If there are 50 restaurants in the market for restaurant labor operating under the same conditions, what is the market demand for labor?

3. Assume that there are two grades of professional football players. There are a limited number of "stars," whom the fans most want to watch, and an unlimited number of "nonstars." There are too few stars to fully staff each team, but there are enough for a few to be on each team if an owner decided to hire them.
 - a. Assume that football teams keep all the ticket revenue and TV revenues they generate and that players are free to choose their teams at the end of any season. Do stars earn more than nonstars? How are the wages of each group determined?
 - b. Continue to assume that players are free to choose their teams, but assume now that teams agree to share all their ticket and TV revenues equally (they put them into a "pool" and divide it equally among the team owners). What happens now to salaries of stars and nonstars?

4. In industry A, wages recently rose from \$8 per hour to \$10 per hour, and the firms decreased their employment from 15,000 workers to 10,000 workers. In industry B, the wage rose from \$6 per hour to \$8 per hour, and firms decreased their employment from 19,000 to 15,000 workers.
 - a. Calculate the demand elasticity for labor in each industry.
 - b. Which of the following could account for the difference in demand elasticity you found? (Explain.)
 - C Labor is a larger share of costs in industry B than in industry A.
 - C Demand for the product of industry A is more elastic than for industry B
 - C There are good ways to mechanize the production process in industry B, but not industry A.

5. Which do you think would be more elastic: the demand for farm labor or the demand for software engineers? Consider all the factors that affect demand elasticity.