

Economics 150

Fall 2001

Homework #8: Due Tuesday, November 6

1. A small-town factory produces parts for the computer industry. The parts sell for \$5.00 each. The daily production of the part is a function of the number of workers (L): $Q = 60L - 0.1L^2$. The supply of labor to the firm is given by $L = 4w$, where w is the daily wage.
 - a. If the factory were operating in a competitive labor market, what would be the formula for its demand for labor as a function of the daily wage?
 - b. Setting the demand formula you found equal to the firm's supply curve, what would the equilibrium wage and employment be if this firm operated competitively?
 - c. What would this factory's wage and employment be if it acted as a monopsony? Compare your answers with what you found in (b).

2. "When employers have monopsony power, their workers do not benefit from increases in productivity in the form of higher wages. All the gain goes to the employer's profits."

Using a diagram or diagrams, evaluate this quote. Show how the monopsony wage is affected (or not affected) by a productivity improvement (an upward shift in the marginal product of labor).

3. "The effect of the minimum wage on employment depends on how many workers the firms want to employ at that wage, so it depends only on the elasticity of labor demand, not on the elasticity of labor supply."

Evaluate this quote using diagrams. Consider both the competitive and monopsony models of the labor market.