

Midterm Exam

Instructions: This exam has 7 questions and is worth 120 points. Point values for each question are indicated to the right of the question number. Calculators, notes and books are not allowed. Good luck.

1. (18 points)
 - a. Consider a perfectly competitive labor market. Draw a graph showing the equilibrium wage and employment levels in this labor market.
 - b. Suppose that the labor market becomes unionized, and the union wage is greater than the competitive wage. Overall, are the workers in the union sector better off or worse off than they were at the competitive equilibrium? How can you tell? Explain.
 - c. How does the establishment of the union wage affect the nonunion sector? Show your answer graphically. (Assume that the initial wages for the union and nonunion sectors were the same.) Are the workers in the nonunion sector better off or worse off?
2. (15 points) List five instances in which government intervention might be justified.
3. (15 points)
 - a. Using equations show how the value of life can be estimated from consumers' willingness-to-pay for safety devices.
 - b. Evaluate the willingness-to-pay approach for valuing life.
4. (15 points)
 - a. Explain and show graphically why total surplus is maximized in perfect competition.
 - b. How does part (a) relate to the first theorem of welfare economics?
5. (15 points)
 - a. Define present value of expected net benefits.
 - b. Explain how it relates to public decision-making.

6. (28 points) Circle T if the statement is true, or F if the statement is false.

- T F a. According to the article "Do Speed Cameras Produce Net Benefits?" the greatest cost of the Photo Radar Program is cost of cameras and equipment.
- T F b. The authors of the article, "The Humanitarian Foundation of Public Support for Social Welfare," identify humanitarianism as a prosocial orientation and egalitarianism as a norm.
- T F c. Local irrigation had the highest net benefits of the alternatives considered in the article "Agriculture Reuse of Wastewater."
- T F d. Traditional State Renewable Portfolio Standard (RPS) programs are based on obtaining a certain percentage of energy demanded from renewable sources.
- T F e. In "Geography of Medicine" the authors use the standard deviation of Medicare payments to measure spending variation across regions.
- T F f. The authors of "Economic Benefits of Rare and Endangered Species" found that people are willing to pay more for land mammals than for marine mammals.
- T F g. The 4-firm concentration ratios in agriculture-related industries have been rising, but prices have been falling, according to "Consolidation in U.S. Agriculture: The New Rural Landscape and Public Policy."
- T F h. In "Assessing the Effect of Rent Control on Homelessness," the authors find that the existence of a rent control law is associated with a 13% increase in a city's homeless counts.
- T F i. According to "Salmon Stock Variability and the Political Economy of the Pacific Salmon Treaty," Alaska has a greater incentive to cooperate than British Columbia, Canada.
- T F j. The value of life used in "Equitable CBA of Climate Change Policies" increased with per capita income.
- T F k. The article, "Broadband Internet Access, Awareness and Use: Analysis of U.S. Household Data," used willingness-to-pay as a measure of utility.
- T F l. According to "Cost-Benefit Analysis on Health Effects of Contraceptive Methods," any of the 13 contraceptive methods studied provided substantial health care savings over no contraception.
- T F m. The paper "Can Police Deter Drunk Driving?" illustrates the importance of omitted variables in estimation for policy work.
- T F n. The model in "Growth, Longevity and Public Policy" assumes that people want to live longer without accounting for quality of life in the extended lifeyears.

7. (14 points) In the presentation by Becky Knudson, she discussed the method of Integrated Analysis used by the Oregon Department of Transportation.

- a. In her discussion of "Decision-making using Integrated Analysis-Four Step Iterative Process," what were the four steps?
- b. What was the purpose or purposes of her discussion of the car-buying example?

{Becky bought a Toyota Forerunner.}