

MICROECONOMICS, MISCELLANEOUS, FINAL EXAM PRACTICE PROBLEMS

(The attached PDF file has better formatting.)

*Question 1.1: Fair Odds

When an individual is offered fair odds in a gamble, all but which of the following are true?

- A. Both choices in the gamble have the same level of riskiness.
- B. Both choices in the gamble have the same expected value.
- C. A risk-loving individual may prefer to gamble.
- D. A risk-neutral individual is indifferent between the two choices (all else being equal).
- E. A risk-averse individual prefers not to gamble.

Answer 1.1: A

With fair odds, all choices have equal expected value, so the risk-loving person gambles, the risk averse person does not gamble, and the risk neutral person is indifferent. The choices have different levels of risk, so Statement A is the correct answer.

~Question 1.2: Fair Odds

If a person is offered a bet with fair odds, both outcomes

- A. Have the same level of risk.
- B. Have the same expected value.
- C. Are equally desirable.
- D. Offer the same level of diversification.
- E. Have the same utility.

Answer 1.2: B

The budget line shows what the consumer can afford. If the consumer is offered fair odds, all baskets at the same price have the same expected value. They have the same utility (they are equally desirable) only if the consumer is risk-neutral.

Jacob: When is the answer “E: Have the same utility” if the person is not risk-neutral?

Rachel: If the person is indifferent between the two outcomes, they have the same utility for that person.

~ For a risk averse person, the outcome with the greater expected value must have higher risk.

~ For a risk loving person, the outcome with the greater expected value must have lower risk.

*Question 1.3: Favorable Odds and Risk Aversion

Suppose an individual is given an opportunity to place a bet at favorable odds. How will he respond if he is risk-averse?

- A. He will decline the bet.
- B. He will accept the bet.
- C. He will accept the bet if it is sufficiently small, but he will decline the bet if it is too large.
- D. He will accept the bet if it is sufficiently large, but he will decline the bet if it is too small.
- E. He will accept the bet if it is sufficiently large, but he will be indifferent about the bet if it is too small.

Answer 1.3: C

If the bet is small, the favorable odds out-weigh the risk; if the bet is large, the risk out-weighs the favorable odds.

Know the theoretical relation to insurance. The risk averse consumer buys insurance if it is offered at the actuarial pure premium, but may not buy if it has a high expense loading. Since insurance is sold in a competitive market, the price of insurance does not depend on the consumers' risk aversion; it depends on the insurers' cost curves.

*Question 1.4: Dental Insurance

Because people needing dental work are more likely to seek dental insurance, insurers may have 12 month waiting periods before coverage begins or pre-existing conditions exclusions that exclude coverage for dental work in the first 12 months of the policy period. (Actual policy provisions vary; the policy may exclude new employees from coverage under a group dental policy for the first 12 months of employment.) The need for these policy provisions reflects which of the following?

- A. Adverse selection
- B. Cartel pricing
- C. Morale hazard
- D. Monopolistic pricing
- E. Anti-trust violation.

Answer 1.4: A

Jacob: Putting off dental work for a year lets the teeth rot and raises ultimate costs. Why would insurers do this?

Rachel: Some insurers pay for fillings and cleanings the first year as well; they don't pay for elective work, like bridges and caps. Some insurers say that the increased cost of employees who take a job to have dental work done and then quit after six months more than offsets the higher cost of employees who put off dental work for a year.

Jacob: Which lines of business have or don't have adverse selection?

Rachel: The lines with have, in order from greatest to less: dental insurance, health insurance, life insurance, products liability, general liability, employers' liability.

The lines which don't have adverse selection, in order from least to more: auto insurance, Homeowners, workers' compensation.

*Question 1.5: *Ex Ante* Preferences

When are an individual's *ex ante* preferences under uncertainty illustrated using convex indifference curves?

- A. They are always convex.
- B. When the individual is risk-preferring.

- C. When the individual is risk-neutral.
- D. When the individual is risk-averse.
- E. They are never convex.

Answer 1.5: D

*Question 1.6: Morale Hazard

Which of the following is an example of morale hazard?

- A. Persons with dental insurance are more likely to see dentists.
- B. Persons with dental insurance get dental cleanings more frequently.
- C. Persons without dental insurance are more likely to have rotting teeth.
- D. Persons with dental insurance are less likely to brush their teeth.
- E. Persons with bad teeth are more likely to seek jobs with dental insurance.

Answer 1.6: D

*Question 1.7: Factor Shares

Suppose an industry is in long run competitive equilibrium and production has constant returns to scale. The factor shares paid to labor, capital, land, or entrepreneurs add up to

- A. The firm's marginal cost
- B. The firm's variable cost
- C. The firm's revenues
- D. Producers' surplus
- E. Net after-tax profits

Answer 1.7: C

All the firm's revenues are paid to some factor: labor, capital, land, or entrepreneurs.

*Question 1.8: Vertical Merger

A vertical merger takes place between two monopolists: a computer manufacturer and a memory chip supplier. The merger may increase social welfare because the new firm

- A. Gets both consumers' surplus from buying memory chips and producers' surplus from selling memory chips.
- B. Earns monopoly profits in both the memory chip market and the computer market.
- C. Can force the memory chip supplier to sell at below cost to the computer manufacturer.

- D. Will behave competitively in the market for computers.
- E. Has the resources to spend more on research and development.

Answer 1.8: A

Jacob: What does statement A mean?

Rachel: Before the merger, the memory chip supplier set quantity to maximize producers' surplus. After the merger, the firm sets quantity to maximize the sum of producers' surplus and consumers' surplus.

*Question 1.9: Competitive Strategy

Borrowing, "lying low," and future re-entry are strategies that a firm can use to counter

- A. The effects of regulation
- B. A supplier's imposition of resale price maintenance
- C. Predatory pricing
- D. A proposed buy-out
- E. Arbitrage opportunities

Answer 1.9: C

*Question 1.10: Resale Price Maintenance

Firms may practice resale price maintenance to enforce a cartel among retailers. Why else might a firm practice resale price maintenance?

- A. To guarantee high monopoly prices.
- B. To guarantee that retailers will supply customer service.
- C. To prevent retailers from appropriating part of the firm's monopoly profit.
- D. To force retailers to absorb the cost of selling the good.
- E. To prevent retailers from forming a cartel.

Answer 1.10: B

This is Landsburg's alternative explanation. See the discussion forum postings for the standard explanation.

*Question 1.11: Resale Price Maintenance

Who gains from resale price maintenance?

- A. The manufacturer, but not the retailers or consumers.
- B. The retailers, but not the manufacturer or consumers.
- C. The manufacturer and the retailers, but not the consumers.
- D. The retailers and the consumers, but not the manufacturer.
- E. The retailers gain, and the manufacturer and consumers may also gain.

Answer 1.11: E

Landsburg shows a scenario where all three parties gain in his alternative explanation.

*Cournot Oligopoly and Number of Firms

In a Cournot oligopoly with two firms, a linear demand curve, and constant marginal costs, a total of 2,400 units are produced. If there were three firms in this Cournot oligopoly, how many units would be produced?

- A. 1,800 units
- B. 2,400 units
- C. 2,700 units
- D. 3,000 units
- E. 3,600 units

Answer 1.11: C

In a two Cournot oligopoly, each firm produces $\frac{1}{3}$ the competitive quantity; in a three firm Cournot oligopoly, each firm produces $\frac{1}{4}$ the competitive quantity.

- The competitive quantity is $2,400 \times \frac{1}{2} \times 3 = 3,600$.
- In the three firm Cournot oligopoly, each firm produces $3,600 \times \frac{1}{4} = 900$.
- The total units are $3 \times 900 = 2,700$.

*Question 1.12: Entry and Exit

Which model highlights the effect that costless entry and exit have on firms' behavior?

- A. The Prisoner's Dilemma model of cartels
- B. The contestable market model of oligopoly
- C. The Cournot oligopoly model
- D. The Bertrand oligopoly model
- E. The monopolistic competition model

Answer 1.12: B

*Question 1.13: Monopolistic Competition

Which of the following is the defining characteristic of monopolistic competition?

- A. Tit-for-tat strategies
- B. High levels of vertical integration
- C. Price-taking behavior
- D. High levels of horizontal integration
- E. Product differentiation

Answer 1.13: E

*Question 1.14: Oligopoly Models

What may be inferred from comparing the Cournot and Bertrand oligopoly models?

- A. An oligopolistic equilibrium is always less efficient than a competitive equilibrium.
- B. Free entry and exit causes oligopolies to have excess capacity in the long run.
- C. The outcome depends on the assumptions about firms' reactions to rivals' behavior.
- D. Tit-for-tat is a superior strategy to predatory pricing, buy-outs, or collusion.
- E. Successful oligopolies produce the monopolistic quantity at the monopoly price.

Answer 1.14: C

*Question 1.15: Cournot Oligopoly

Let Q_C be the competitive quantity, Q_M be the monopolistic quantity, Q_B be the Bertrand oligopolistic quantity, and Q_R be the Cournot oligopolistic quantity. Rank these quantities in order of size.

- A. $Q_M < Q_B < Q_R < Q_C$
- B. $Q_M < Q_R < Q_B < Q_C$
- C. $Q_M < Q_B < Q_R = Q_C$
- D. $Q_M < Q_R < Q_B = Q_C$
- E. $Q_M < Q_B = Q_R < Q_C$

Answer 1.15: D

*Question 1.16: Bertrand Model

In the Bertrand model of oligopoly, firms produce

- A. The competitive quantity.

- B. The monopoly quantity.
- C. More than the monopoly quantity, but less than the competitive quantity (but not necessarily the average).
- D. Less than the monopoly quantity.
- E. The average of the competitive quantity and the monopoly quantity.

Answer 1.16: A

*Question 1.17: Monopolistic Competition and Social Welfare

What are the welfare consequences of monopolistic competition?

- A. The Invisible Hand Theorem shows that monopolistic competition, like competition, makes social gain as large as possible.
- B. Social welfare would be improved if a monopolistically competitive industry were replaced by a competitive industry.
- C. The welfare consequences of monopolistic competition, like those of monopoly, depend on the firms' source of market power.
- D. The welfare consequences of monopolistic competition are ambiguous, because its inefficiencies must be weighed against the benefits of having differentiated products.
- E. The dead weight loss is reduced by a reduction in prices.

Answer 1.17: D

*Question 1.18: Free-Rider Problem

Which of the following situations is the best example of a free-rider problem?

- A. Positive externalities cause beekeepers and orchard growers to establish elaborate contracts.
- B. Property rights to a smoke free workplace are given nonsmokers in general instead of to a specific group of nonsmokers.
- C. Mine owners are unable to observe if their workers follow safety guidelines.
- D. Only about 10% of the viewers of public television contribute money to pay for its costs.
- E. Property owners may higher taxes to compensate for their rent.

Answer 1.18: D

*Question 1.19: Principal-Agent Problem

A principal-agent problem occurs when

- A. Transaction costs are too high to permit private bargaining among agents.
- B. An employer is unable to effectively monitor an employee's behavior.
- C. An agent attempts to avoid paying for benefits received from the principal.
- D. Property rights are assigned to vague groups instead of to specific agents.
- E. Exclusive agents are less efficient than career agents.

Answer 1.19: B