

ECON 101

Quiz 1 Info

Chapter 1: (4-6 Questions)

- 4 principles:
 - o Cost benefit, Marginal choice/Sunk cost, Opportunity Cost, Interdependence.
- Thinking like an economist (unintended consequences, causation, fallacy of composition)

Chapter 2-3 (8-12 Questions)

- Demand Curves
 - o Demand vs. Quantity Demanded
 - Demand is the entire line, quantity demanded is one point on the line.
 - o What shifts demand curves: Income, Tastes, Price of related goods, expectations, network effects, number and composition of consumers.
 - o Change in Price moves us along the D curve.
 - o Marginal Utility, Prices, and demand (MU/P equal for all goods)
 - o Math! (equation for Demand and Inverse Demand)
- Supply Curves
 - o Supply vs. Quantity Supplied
 - Supply is the entire line, quantity supplied is one point on the line.
 - o What shifts supply curves: Technology, Prices of inputs, Price of alternative goods, Producer Expectations, number of producers.
 - o Change in Price moves us along the S curve.
 - o A bit about costs - diminishing marginal product, increasing marginal costs, fixed cost vs. variable costs, etc.
 - o MATH! (Equations for Supply and Inverse Supply)

Chapter 4: Market – Supply meets Demand (7-8 Questions)

- Find equilibrium.
- Understand shifting.
- Shortages and Surpluses.
- MATH! (Solving S and D Equations)

Chapter 5 Elasticities (5-7 Questions)

- Price elasticity of Demand and total revenue
- Income elasticity of demand (normal vs. inferior)
- Cross-price elasticity of demand (subs vs. comps)
- Price Elasticity of Supply
- Elasticity vs. slope (steeper=more inelastic)
- Know midpoint formula and elasticity formula and be able to interpret.

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Quiz 1 Review Worksheet

Name: _____ Discussion Section: _____

ELASTICITY & TOTAL REVENUE

1. The price elasticity of demand for lettuce has been estimated to be 2.58. If an insect infestation destroys 10% of the nation's lettuce crop, how will that affect total revenue from lettuce, all other things unchanged?
 - a) Total revenue will remain unchanged.
 - b) Total revenue will fall.
 - c) Total revenue will rise.
 - d) The information is insufficient to answer the question.

Your answer: _____ Explain your reasoning:

2. If the price elasticity of demand is 0.6 and the price rises by 47 percent, then by what percent does quantity fall? Round to one decimal place.

Your answer: _____ Explain your reasoning:

PERFECTLY COMPETITIVE MARKETS

3. Frank is a barley farmer in a perfectly competitive market. The market price of barley is \$250 per ton. If Frank charges \$245 per ton, he will:
- a) not sell any barley.
 - b) raise his profitability by \$5 per ton.
 - c) sell less barley than other farmers.
 - d) lower his profitability by \$5 per ton.

Your answer: _____ Why?

SURPLUS IN TABLE FORMAT

4. Use the table below. At what price does this market experience a surplus of 70 units?

Price	Quantity Demanded (units)	Quantity Supplied (units)
\$3	250	40
\$5	220	80
\$7	190	120
\$9	160	160
\$11	130	200
\$13	100	240
\$15	70	280

Your answer: _____

Show your work (How do you identify a surplus from a table?):

SHIFTING SUPPLY & DEMAND IN EQUATION FORMAT

5. Suppose Demand: $P = 48 - 4Q$ and Supply: $P = 6 + 2Q$

a) What is the equilibrium price?

b) Now suppose supply shifts BACK by 3 units. What is the new equilibrium price?

(Hint: It might be easier if you rearrange the equations to $Q = f(P)$)

CONSUMER CHOICE & MARGINAL UTILITY

6. Suppose for a consumer, $MU_x/P_x > MU_y/P_y$ for goods x and y, and the consumer is spending all income. What should this consumer do?

a) Buy more of good x and less of good y

b) Buy more of good y and less of good x

c) Buy ONLY good x

d) Buy more of both

e) Buy ONLY good y

Your answer: _____ Why?

DOUBLE SHIFTS (Don't overthink the elasticity!)

7. Suppose supply shifts out (increases) and demand shifts back (decreases). What happens to the equilibrium price and quantity?
- a) Price falls. The effect on quantity is uncertain.
 - b) Quantity falls. The effect on price is uncertain.
 - c) Both price and quantity fall.
 - d) Quantity rises. The effect on price is uncertain.
 - e) Price rises. The effect on quantity is uncertain.
 - f) Both price and quantity rise.

Your answer: _____

Draw the graph showing both shifts:

Key Tips:

- For Q1-2: Remember the relationship between elasticity and total revenue!
- For Q3: What is the defining characteristic of a perfectly competitive market?
- For Q4: $\text{Surplus} = \text{Quantity Supplied} - \text{Quantity Demanded}$ (when positive)
- For Q5: When supply shifts back, the entire supply curve moves. Adjust your equation!
- For Q6: You want to get the most 'bang for your buck' — equalize MU/P across goods
- For Q7: Draw the graph! Don't get distracted by elasticity — just follow the curves.