

Econ 311 - Intermediate Microeconomics

Midterm Exam

University of Oregon

April 30, 2025

Version 2

- Complete *all* questions and parts. All questions will be graded.
- Carefully explain all your answers on short and long answer questions.
An incorrect answer with clear explanation will earn partial credit, an incorrect answer with no work will get zero points.
- If you do not understand what a question is asking for, ask for clarification.

Allowed Materials:

- A single 5" by 3" note card
- A non-programmable calculator
- Pencils, color pens, eraser, ruler/straight-edge etc.

Name _____

Answer the questions in the spaces provided on the question sheets. If you run out of room for an answer, continue on the back of the page or another sheet of paper.

Multiple Choice

Question 1. (4 P.)

Choose the MRS for the utility function $U(x, y) = 3x + 2y + 10$:

- a) $\frac{3}{2}$
- b) $\frac{10}{3}$
- c) $\frac{2}{10}$
- d) $\frac{3}{2} + 10$

Question 2. (4 P.)

For the utility function $U(x, y) = x^{1/2}y^{1/2}$, which of the following bundles would place you on the same indifference curve as the bundle $(x = 4, y = 4)$?

- a) $(4, 12)$
- b) $(1, 16)$
- c) $(8, 8)$
- d) $(1/2, 4)$

Question 3. (4 P.)

The units of the MRS are in _____.

- a) Quantity of good y per unit of good x
- b) Dollars per quantity of x
- c) Dollars
- d) Utils

Question 4. (4 P.)

If x is a **good** and y is a **bad**, then on the (x, y) plane, moving in which direction represents moving to **more preferred** bundles?

- a) Up, Right
- b) Up, Left
- c) Down, Right
- d) Down, Left

Question 5. (4 P.)

Assuming we are not at a corner solution and the consumer is already using all of their budget, if $\frac{MU_x}{p_x} > \frac{MU_y}{p_y}$, what does this tell us?

- a) They should consume more of y and less of x
- b) They should consume more of x and less of y
- c) They are maximizing their utility
- d) They should consume more of both x and y

Question 6. (4 P.)

The price elasticity of demand, ϵ_{x^*, p_x} , should always be:

- a) Positive
- b) Less than one
- c) Greater than one
- d) Negative

Question 7. (4 P.)

The sign of the slope of the Engel Curve...

- a) will always be negative
- b) will always be zero
- c) depends on whether the good is normal or inferior
- d) depends on the cross-price elasticity of the good

Question 8. (4 P.)

Which of the following would cause the demand curve to shift **outward**?

- a) Increase in the supply of the good
- b) Increase in the supply of the good
- c) Decrease in the price of a substitute good
- d) Decrease in the good's own price

Question 9. (4 P.)

Suppose a consumer is indifferent between the bundles $(x = 3, y = 1)$, and $(x = 1, y = 3)$. If their preferences satisfy (strict) *convexity* and *more is better*, what can we say about their preference for the bundle $(x = 2, y = 2)$?

- a) $(2, 2)$ is preferred to $(3, 1)$
- b) $(1, 3)$ is preferred to $(2, 2)$
- c) There is not enough information to say anything about $(2, 2)$
- d) They are indifferent between $(2, 2)$ and $(3, 1)$

Question 10. (4 P.)

A decrease in the price of good x will _____ the maximum possible consumption of x and _____ the maximum possible consumption of y .

- a) leave unchanged : increase
- b) leave unchanged : decrease
- c) increase : leave unchanged
- d) decrease : leave unchanged

<u>Answers:</u> 1:a, 2:b, 3:a, 4:c, 5:b, 6:d, 7:c, 8:d, 9:a, 10:c

Long Answer