

Chapter 3

Preferences and Utility

1. Indifference curves
 - a. are non-intersecting.
 - b. are contour lines of a utility function.
 - c. are negatively sloped.
 - d. all of these are correct.

ANSWER: d AACSB: NATL – Analytical LOC: Utility and consumer choice

2. For an individual who consumes only two goods, x and y , the opportunity cost of consuming one more unit of x in terms of how much y must be given up is reflected by
 - a. the individual's marginal rate of substitution.
 - b. the market prices of x and y .
 - c. the slope of the individual's indifference curve.
 - d. none of these is correct.

ANSWER: b AACSB: NATL – Analytical LOC: Utility and consumer choice

3. If bundles of goods A and B lie on the same indifference curve, one can assume the individual
 - a. prefers bundle A to bundle B .
 - b. prefers bundle B to bundle A .
 - c. enjoys bundle A and B equally.
 - d. bundle A contains the same goods as bundle B .

ANSWER: c AACSB: NATL – Analytical
choice

LOC: Utility and consumer

Questions 4 and 5 refer to an individual whose utility function is given by

$$U(x, y) = 4x + 2y$$

4. With this utility function, the bundle (3,2) provides the same utility as the bundle

- a. (2, 3).
- b. (2, 4).
- c. (2, 5).
- d. (3, 3).

ANSWER: b AACSB: NATL – Analytical
choice

LOC: Utility and consumer

5. For this utility function, the *MRS*

- a. depends on the values of x and y .
- b. is always 0.
- c. is always 2.
- d. is always 4.

ANSWER: c AACSB: NATL – Analytical
choice

LOC: Utility and consumer

6. Which of the following utility functions represent the same preferences as

$$U(x, y) = \sqrt{x \cdot y} ?$$

- a. $U(x, y) = 10\sqrt{xy}$.
- b. $U(x, y) = x \cdot y$.
- c. $U(x, y) = \ln x + \ln y$.
- d. All of these represent the same preferences.

ANSWER: d AACSB: NATL – Analytical LOC: Utility and consumer choice

7. If utility is given by $U(x, y) = \sqrt{xy}$, then the person's *MRS* at the point $x = 5, y = 2$ is given by
- a. 0.4.
 - b. 1.0.
 - c. 2.5.
 - d. 5.0.

ANSWER: a AACSB: NATL – Analytical LOC: Utility and consumer choice

8. If utility is given by $U(x, y) = x^2 + 2xy + y^2$, this person's indifference curves are
- a. parabolas.
 - b. hyperbolas.
 - c. concentric circles.
 - d. straight lines.

ANSWER: d AACSB: NATL – Analytical LOC: Utility and consumer choice

9. Which of the following utility functions best represents the idea that two goods, x and y , are perfect complements?
- a. $U(x, y) = \sqrt{xy}$
 - b. $U(x, y) = x + y$.
 - c. $U(x, y) = |x - y|$.
 - d. $U(x, y) = \min(x, y)$.

ANSWER: d AACSB: NATL – Analytical LOC: Utility and consumer choice

10. If an individual's utility function is quasi-concave, his or her *MRS* will

- a. diminish as x is substituted for y .
- b. increase as x is substituted for y .
- c. be undefined except in special cases.
- d. always depend only on the ratio of x to y .

ANSWER: a AACSB: NATL – Analytical
choice

LOC: Utility and consumer

11. If utility is given by $U(x, y) = \text{Min}(x, 3y)$ then the bundle (3,2) provides the same utility as the bundle

- a. (1, 3).
- b. (2, 3).
- c. (4, 1).
- d. (4, 2).

ANSWER: c AACSB: NATL – Analytical
choice

LOC: Utility and consumer

12. Which of the following utility functions *would not* be consistent with the notion that x and y are both "goods" with positive marginal utilities?

- a. $U(x, y) = x^2 y$.
- b. $U(x, y) = x + y$.
- c. $U(x, y) = x\sqrt{y}$.
- d. $U(x, y) = x/y$.

ANSWER: d AACSB: NATL – Analytical
choice

LOC: Utility and consumer