

CHAPTER 5

Consumer Choice and Utility Maximization

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1. A product has utility if it:
- A) takes more and more resources to produce successive units of it.
 - B) violates the law of demand.
 - C) satisfies consumer wants.
 - D) is useful.

Ans: C Level: Easy Main Topic: 5.1 The law of diminishing marginal utility
Page: 111-112 Subtopic: Terminology Type: Definition

2. Utility refers to the:
- A) satisfaction which a consumer derives from a good or service.
 - B) rate of decline in a product demand curve.
 - C) relative scarcity of a product.
 - D) usefulness of a product.

Ans: A Level: Easy Main Topic: 5.1 The law of diminishing marginal utility
Page: 111-112 Subtopic: Terminology Type: Definition

3. Which of the following statements is correct?
- A) Utility and usefulness are synonymous.
 - B) The marginal utility derived from successive units of a product tends to be similar for all consumers.
 - C) Because utility is not measurable, the utility-maximizing rule provides no useful insights as to consumer behaviour.
 - D) A product may yield utility, but not be functionally useful.

Ans: D Level: Easy Main Topic: 5.1 The law of diminishing marginal utility
Page: 111-112 Subtopic: Terminology Type: Application

4. Which of the following best defines the total utility?
- A) the change in marginal utility multiplied by the price of a product
 - B) the maximum amount of satisfaction from consuming a product
 - C) the total satisfaction received from consuming a particular amount of a product
 - D) the additional satisfaction received from consuming one more unit of a product

Ans: C Level: Easy Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Total utility and marginal utility Type: Definition

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5. Total utility may be determined by:

- A) multiplying the marginal utility of the last unit consumed by the number of units consumed.
- B) summing the marginal utilities of each unit consumed.
- C) multiplying the marginal utility of the last unit consumed by product price.
- D) multiplying the marginal utility of the first unit consumed by the number of units consumed.

Ans: B Level: Moderate Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Total utility and marginal utility Type: Application

6. Which of the following defines marginal utility?

- A) the change in total utility divided by the price of a product
- B) the maximum amount of satisfaction from consuming a product
- C) the total satisfaction received from consuming as much of the product that is available for consumption
- D) the additional satisfaction received from consuming one more unit of a product

Ans: D Level: Easy Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Total utility and marginal utility Type: Definition

7. Marginal utility is the:

- A) sensitivity of consumer purchases of a good to changes in the price of that good.
- B) change in total utility realized by consuming one more unit of a good.
- C) change in total utility realized by consuming another unit of a good divided by the change in the price of that good.
- D) total utility associated with the consumption of a certain number of units of a good divided by the number of units consumed.

Ans: B Level: Easy Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Total utility and marginal utility Type: Definition

8. The first Pepsi yields Craig 18 units of utility and the second yields him an additional 12 units of utility. His total utility from three Pepsis is 38 units of utility. The marginal utility of the third Pepsi:

- A) is 26 units of utility.
- B) is 6 units of utility.
- C) is 8 units of utility.
- D) is 38 units of utility.

Ans: C Level: Moderate Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Total utility and marginal utility Type: Calculation

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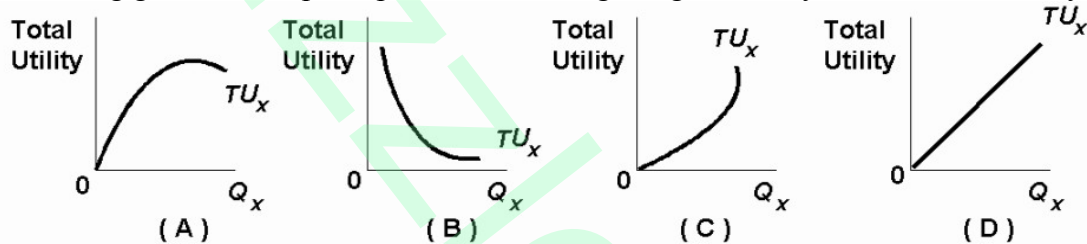
9. If the price of product X rises, then the resulting decline in the amount purchased will:
- A) necessarily increase the consumer's total utility from his total purchases.
 - B) increase the marginal utility of this good.
 - C) increase the total utility from purchases of this good.
 - D) reduce the marginal utility of this good.

Ans: B Level: Moderate Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Total utility and marginal utility Type: Application

10. Marginal utility:
- A) is equal to total utility divided by the number of units consumed.
 - B) is equal to total utility if the demand curve is linear.
 - C) increases as more of a product is consumed.
 - D) diminishes as more of a product is consumed.

Ans: D Level: Easy Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Total utility and marginal utility Type: Application

11. Consider the graphs A through D, which depict the total utility a consumer receives from consuming good X. The principle of diminishing marginal utility is best illustrated by:



- A) graph A.
- B) graph B.
- C) graph C.
- D) graph D.

Ans: A Level: Moderate Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Total utility and marginal utility Type: Graphic

12. Where total utility is at a maximum, marginal utility is:
- A) negative.
 - B) positive and increasing.
 - C) zero.
 - D) positive but decreasing.

Ans: C Level: Easy Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Total utility and marginal utility Type: Application

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13. Which statement is correct?

- A) When marginal utility is decreasing, an increase in the quantity consumed will decrease total utility.
- B) When marginal utility is positive, an increase in the quantity consumed will decrease total utility.
- C) When marginal utility is positive, an increase in the quantity consumed will increase total utility.
- D) When marginal utility is increasing, a decrease in the quantity consumed will increase total utility.

Ans: C Level: Difficult Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Total utility and marginal utility Type: Application

14. Which of the following is correct?

- A) There is no firm mathematical relationship between marginal utility and total utility.
- B) Total utility is equal to the change in marginal utility from consuming an additional unit of a product.
- C) If marginal utility is diminishing and is a positive amount, total utility will increase.
- D) If marginal utility is diminishing, total utility must also be diminishing.

Ans: C Level: Difficult Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Total utility and marginal utility Type: Application

15. If total utility is increasing, then marginal utility:

- A) must be declining.
- B) must be increasing.
- C) must be increasing at an increasing rate.
- D) may either be increasing or decreasing, but it must be greater than zero.

Ans: D Level: Difficult Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Total utility and marginal utility Type: Application

16. The law of diminishing marginal utility states that:

- A) total utility is maximized when consumers obtain the same amount of utility per unit of each product consumed.
- B) beyond some point additional units of a product will yield less and less extra satisfaction to a consumer.
- C) price must be lowered to induce firms to supply more of a product.
- D) it will take larger and larger amounts of resources beyond some point to produce successive units of a product.

Ans: B Level: Easy Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Total utility and marginal utility Type: Definition

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17. According to the law of diminishing marginal utility, the marginal utility associated with consuming successive units of a good will:
- A) increase as the amount consumed decreases.
 - B) remain constant as the amount consumed increases.
 - C) eventually decline as the amount consumed increases.
 - D) eventually increase as the amount consumed increases.

Ans: C Level: Easy Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Total utility and marginal utility Type: Definition

18. If a product has a diminishing but positive marginal utility, then:
- A) a reduction in consumption by one unit will increase total utility.
 - B) the product cannot be an inferior good.
 - C) total utility increases at a diminishing rate.
 - D) total utility decreases at a diminishing rate.

Ans: C Level: Moderate Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Total utility and marginal utility Type: Application

19. If total utility is increasing, marginal utility:
- A) is positive, but may be either increasing or decreasing.
 - B) must also be increasing.
 - C) may be either positive or negative.
 - D) will be increasing at an increasing rate.

Ans: A Level: Difficult Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Total utility and marginal utility Type: Application

20. Children who refuse to eat Brussels sprouts at dinner are making the statement that the marginal utility of Brussels sprouts is:
- A) zero.
 - B) negative.
 - C) positive, but decreasing.
 - D) less than the total utility.

Ans: B Level: Easy Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Total utility and marginal utility Type: Application

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Use the following to answer questions 21-22:

The table below shows the hypothetical utility schedule for a consumer of chocolate candy bars.

Number consumed	Total utility
0	0
1	5
2	11
3	18
4	24
5	30
6	35
7	32

21. Refer to the table above. This consumer begins to experience diminishing marginal utility when consuming the:
- A) first candy bar.
 - B) second candy bar.
 - C) third candy bar.
 - D) fourth candy bar.

Ans: D Level: Moderate Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Total utility and marginal utility Type: Calculation

22. Refer to the table above. Marginal utility becomes negative with the consumption of the:
- A) fourth candy bar.
 - B) fifth candy bar.
 - C) sixth candy bar.
 - D) seventh candy bar.

Ans: D Level: Moderate Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Total utility and marginal utility Type: Calculation

23. Other things equal, if the marginal utility from successive units of product Y yields to smaller and smaller amounts of extra satisfaction, we would expect the consumer:
- A) will buy additional units of Y if its price increases.
 - B) will buy less units of Y if its price decreases.
 - C) will buy additional units of Y if its price falls.
 - D) will not change the units of Y purchased.

Ans: C Level: Moderate Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Marginal utility and demand Type: Application

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24. The law of diminishing marginal utility for a product explains:
- A) why the total utility of the product increases regardless of how many units is consumed.
 - B) why the total utility decreases at a diminishing rate.
 - C) why the demand curve for the product is downward sloping.
 - D) whether it is a normal or an inferior good.

Ans: C Level: Moderate Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Marginal utility and demand Type: Application

25. A consumer's demand curve for a product is downward sloping because:
- A) total utility falls below marginal utility as more of a product is consumed.
 - B) marginal utility diminishes as more of a product is consumed.
 - C) time becomes less valuable as more of a product is consumed.
 - D) the income and substitution effects precisely offset each other.

Ans: B Level: Moderate Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Marginal utility and demand Type: Application

26. The downward slope of the demand curve for a product is the result of:
- A) diminishing marginal utility.
 - B) diminishing marginal productivity.
 - C) increasing marginal cost.
 - D) the work-leisure preferences of workers.

Ans: A Level: Moderate Main Topic: 5.1 The law of diminishing marginal utility
Page: 112 Subtopic: Marginal utility and demand Type: Application

27. The theory of consumer behaviour assumes:
- A) that consumers behave rationally, maximizing their satisfactions.
 - B) that the consumer has a limited income.
 - C) that consumers know how much marginal utility they obtain from successive units of various products.
 - D) all of the above.

Ans: D Level: Easy Main Topic: 5.2 The theory of consumer choice Page: 114
Subtopic: Consumer choice and budget constraint Type: Definition

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28. The theory of consumer behaviour assumes that consumers attempt to maximize:

- A) the difference between total and marginal utility.
- B) total utility.
- C) average utility.
- D) marginal utility.

Ans: B Level: Easy Main Topic: 5.2 The theory of consumer choice Page: 114
Subtopic: Consumer choice and budget constraint Type: Definition

29. When a consumer is maximizing total utility,

- A) the average utility from each dollar spent is the same.
- B) total utility cannot be increased by reallocating expenditures among various products.
- C) the total utility obtainable from each product is at a maximum.
- D) the marginal utility of the last unit of each product purchased is zero.

Ans: B Level: Easy Main Topic: 5.2 The theory of consumer choice Page: 115
Subtopic: Utility – maximizing rule Type: Application

30. The utility-maximizing rule:

- A) is inconsistent with the law of demand.
- B) implies a perfectly elastic demand curve.
- C) implies a leftward shifting demand curve.
- D) is consistent with the law of demand.

Ans: D Level: Easy Main Topic: 5.2 The theory of consumer choice Page: 115
Subtopic: Utility – maximizing rule Type: Application

31. A consumer having a limited budget will maximize utility or satisfaction when the:

- A) ratios of the marginal utility of each product purchased divided by its price are equal.
- B) total utility derived from each product purchased is the same.
- C) marginal utility of each product purchased is the same.
- D) price of each product purchased is the same.

Ans: A Level: Easy Main Topic: 5.2 The theory of consumer choice Page: 115
Subtopic: Utility – maximizing rule Type: Application

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32. A consumer, faced with a fixed income and constant prices for all goods consumed, can only increase total utility if:
- A) the ratios of marginal utilities to prices are not equal for all goods consumed.
 - B) all goods consumed have diminishing marginal utility.
 - C) total utility is less than marginal utility.
 - D) total utility is greater than marginal utility.

Ans: A Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 115 Subtopic: Utility – maximizing rule Type: Application

33. Mr. Solow has an income of \$20 which he is spending on wine and cheese in such amounts that he derives 25 utils of satisfaction from the wine and 25 utils of satisfaction from the cheese. On the basis of this information we:
- A) cannot say whether or not Solow is buying wine and cheese in equilibrium amounts.
 - B) can say that Solow should buy more cheese and less wine.
 - C) can say that Solow should buy more wine and less cheese.
 - D) can say that Solow is buying the utility-maximizing amounts of wine and cheese.

Ans: A Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 115 Subtopic: Utility – maximizing rule Type: Application

34. To maximize utility a consumer should allocate money income so that the:
- A) elasticity of demand on all products purchased is the same.
 - B) marginal utility obtained from the last dollar spent on each product is the same.
 - C) total utility derived from each product consumed is the same.
 - D) marginal utility of the last unit of each product consumed is the same.

Ans: B Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 115 Subtopic: Utility – maximizing rule Type: Application

35. Suppose you have a limited money income and you are purchasing products A and B whose prices happen to be the same. To maximize your utility you should purchase A and B in such amounts that:
- A) their marginal utilities are the same.
 - B) their total utilities are the same.
 - C) their marginal and total utilities are proportionate.
 - D) the income and substitution effects associated with each are equal.

Ans: A Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 115 Subtopic: Utility – maximizing rule Type: Application

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36. Assume a consumer purchases products A, B, and C in such quantities that the last dollar spent on each yields the same marginal utility and the consumer's income is totally spent. We can conclude that:
- A) total utility is being minimized.
 - B) production costs are being minimized.
 - C) marginal utility exceeds total utility.
 - D) total utility is being maximized.

Ans: D Level: Easy Main Topic: 5.2 The theory of consumer choice Page: 115
Subtopic: Utility – maximizing rule Type: Application

37. Consider Janice's consumption of wine and cheese. Suppose that the price of wine she buys is equal to the price of cheese she buys. If Janice is a rational consumer, then we know that:
- A) she buys equal quantities of each good.
 - B) she buys unequal quantities of each good.
 - C) the marginal utilities of the quantities she buys are equal.
 - D) the marginal utilities of the quantities she buys are unequal.

Ans: C Level: Easy Main Topic: 5.2 The theory of consumer choice Page: 115
Subtopic: Utility – maximizing rule Type: Application

38. An increase in the price of product A will:
- A) increase the marginal utility per dollar spent on A.
 - B) decrease the marginal utility per dollar spent on A.
 - C) not affect the marginal utility per dollar spent on A.
 - D) cause utility-maximizing consumers to buy more of A.

Ans: B Level: Easy Main Topic: 5.2 The theory of consumer choice Page: 115
Subtopic: Utility – maximizing rule Type: Application

39. Assume that product Alpha and product Beta are both priced at \$1 per unit and that Ellie has \$20 to spend on Alpha and Beta. The marginal utility of Alpha is 40 and the marginal utility of Beta is 20. This indicates that:
- A) Ellie should make no change in consumption.
 - B) given another dollar, Ellie should buy an additional unit of Beta.
 - C) in order to maximize utility, Ellie should buy more of Beta and less of Alpha.
 - D) in order to maximize utility, Ellie should buy more of Alpha and less of Beta.

Ans: D Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 115-116 Subtopic: A numerical example Type: Calculation

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40. Rosenbaum is purchasing products C and D in utility-maximizing amounts. If the price of C is \$4 and the price of D is \$2, then:
- A) the marginal utility of D is twice that of C.
 - B) the marginal utility of D is the same as that of C.
 - C) the marginal utility of C is twice that of D.
 - D) the marginal utility of C is four times that of D.

Ans: C Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 116 Subtopic: A numerical example Type: Calculation

41. A consumer is in equilibrium and is spending income in such a way that the marginal utility of product X is 40 units and Y is 16 units. The unit price of X is \$5. The price of Y is:
- A) \$1 per unit.
 - B) \$2 per unit.
 - C) \$3 per unit.
 - D) \$4 per unit.

Ans: B Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 116 Subtopic: A numerical example Type: Calculation

42. Sharon Jones purchases two products, mineral water and popcorn. The marginal utility of mineral water is 60 and the marginal utility of popcorn is 30. The price of a bottle of mineral water is \$2.00 and the price of a box of popcorn is \$1.00. The utility-maximizing rule suggests that Sharon should:
- A) increase consumption of popcorn and decrease consumption of mineral water.
 - B) increase consumption of popcorn and increase consumption of mineral water.
 - C) decrease consumption of popcorn and increase consumption of mineral water.
 - D) make no change in the consumption of mineral water or popcorn.

Ans: D Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 116 Subtopic: A numerical example Type: Calculation

43. Betty Johnson is maximizing her satisfaction consuming two goods, A and B. If the marginal utility of A is twice that of B, what is the price of A if the price of B is \$.80?
- A) \$.40
 - B) \$.80
 - C) \$1.20
 - D) \$1.60

Ans: D Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 116 Subtopic: A numerical example Type: Calculation

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44. Mrs. Schultz is spending all her money income by buying bottles of soda and bags of pretzels in such amounts that the marginal utility of the last bottle is 60 utils and the marginal utility of the last bag is 30 utils. The prices of soda and pretzels are \$.60 per bottle and \$.40 per bag respectively. It can be concluded that:
- A) the two commodities are substitute goods.
 - B) Mrs. Schultz should spend more on pretzels and less on soda.
 - C) Mrs. Schultz should spend more on soda and less on pretzels.
 - D) Mrs. Schultz is buying soda and pretzels in the utility-maximizing amounts.

Ans: C Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 116 Subtopic: A numerical example Type: Calculation

45. The marginal utility of the last unit of A consumed is 12 and the marginal utility of the last unit of B consumed is 8. What set of prices for A and B respectively would be consistent with consumer equilibrium?
- A) \$4 and \$6
 - B) \$6 and \$4
 - C) \$8 and \$12
 - D) \$16 and \$9

Ans: B Level: Difficult Main Topic: 5.2 The theory of consumer choice
Page: 116 Subtopic: A numerical example Type: Calculation

46. Suppose that Ms. Spencer is **currently** exhausting her money income by purchasing 10 units of A and 8 units of B at prices of \$2 and \$4 respectively. The marginal utility of the last units of A and B are 16 and 24 respectively. These data suggest that Ms. Spencer:
- A) has preferences which are at odds with the principle of diminishing marginal utility.
 - B) considers A and B to be complementary goods.
 - C) should buy less A and more B.
 - D) should buy less B and more A.

Ans: D Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 116 Subtopic: A numerical example Type: Application

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47. A consumer makes purchases of an existing product X such that the marginal utility is 10 and the price is \$5. The consumer also tries a new product Y and at the current level of consumption it has a marginal utility of 8 and a price of \$1. The utility-maximizing rule suggests that this consumer should:
- A) increase consumption of product X and decrease consumption of product Y.
 - B) increase consumption of product X and increase consumption of product Y.
 - C) increase consumption of product Y and decrease consumption of product X.
 - D) decrease consumption of product Y and decrease consumption of product X.

Ans: C Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 116 Subtopic: A numerical example Type: Calculation

48. Assume that a consumer purchases a combination of product A and product B such that the $MU_a/P_a = 8$ and $MU_b/P_b = 6$. To maximize utility without spending more money, the consumer should:
- A) purchase less of product A and more of product B.
 - B) purchase more of product A and less of product B.
 - C) purchase more of both product A and product B.
 - D) make no change in purchases of products A and B.

Ans: B Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 117 Subtopic: Algebraic restatement Type: Application

49. If $MU_a/P_a = 100/\$35 = MU_b/P_b = 300/? = MU_c/P_c = 400/?$, the prices of products b and c in consumer equilibrium:
- A) cannot be determined from the information given.
 - B) are \$105 and \$140 respectively.
 - C) are \$105 and \$175 respectively.
 - D) are \$100 and \$200 respectively.

Ans: B Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 117 Subtopic: Algebraic restatement Type: Calculation

50. A consumer is maximizing her utility with a particular money income when:
- A) the total utility derived from each product consumed is the same.
 - B) $MU_a/P_a = MU_b/P_b = MU_c/P_c = \dots = MU_n/P_n$.
 - C) $MU_a = MU_b = MU_c = \dots = MU_n$.
 - D) $P_a = P_b = P_c = \dots = P_n$.

Ans: B Level: Easy Main Topic: 5.2 The theory of consumer choice Page: 117
Subtopic: Algebraic restatement Type: Formula

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51. Suppose that MU_x/P_x exceeds MU_y/P_y . To maximize utility the consumer who is spending all her money income should buy:
- A) less of X only if its price rises.
 - B) more of Y only if its price rises.
 - C) more of Y and less of X.
 - D) more of X and less of Y.

Ans: D Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 117 Subtopic: Algebraic restatement Type: Application

52. Ben is exhausting his money income consuming products A and B in such quantities that $MU_a/P_a = 5$ and $MU_b/P_b = 8$. Ben should purchase:
- A) more of A and less of B.
 - B) more of B and less of A.
 - C) more of both A and B.
 - D) less of both A and B.

Ans: B Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 117 Subtopic: Algebraic restatement Type: Application

53. If a rational consumer is in equilibrium, which of the following conditions will hold true?
- A) $MU_a = MU_b = MU_c = \dots = MU_n$.
 - B) The marginal utility of each good purchased will be zero.
 - C) The marginal utility of the last dollar spent on each good purchased will be the same.
 - D) The total utility obtained from each good purchased will be the same.

Ans: C Level: Easy Main Topic: 5.2 The theory of consumer choice Page: 117
Subtopic: Algebraic restatement Type: Application

54. Assume MU_c and MU_d represent the marginal utility which a consumer gets from products C and D, the respective prices of which are P_c and P_d . The consumer will increase his total utility from a specific money outlay by spending more on C and less on D if initially:
- A) $MU_d < MU_c$
 - B) $MU_c/P_c < MU_d/P_d$
 - C) $MU_c/P_c > MU_d/P_d$
 - D) $MU_c > MU_d$

Ans: C Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 117 Subtopic: Algebraic restatement Type: Formula

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55. In purchasing products A and B, a consumer is in equilibrium when:

- A) $MU_a/P_a = MU_b/P_b$
- B) $MU_a/P_b = MU_b/P_a$
- C) $MU_a - MU_b = P_a/P_b$
- D) $MU_a \times P_a = MU_b \times P_b$

Ans: A Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 117 Subtopic: Algebraic restatement Type: Formula

56. Assume that a consumer purchases a combination of products A and B and that the $MU_A/P_A = 150$ and $MU_B/P_B = 100$. To maximize utility, without spending more money, the consumer should purchase:

- A) less of A and more of B.
- B) less of B and more of A.
- C) more of both A and B.
- D) less of both A and B.

Ans: B Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 117 Subtopic: Algebraic restatement Type: Application

Use the following to answer questions 57-59:

The following two schedules show the amounts of additional satisfaction (marginal utility) which a consumer would get from successive quantities of products J and K.

Units of J	MU_j	Units of K	MU_k
1	56	1	32
2	48	2	28
3	32	3	24
4	24	4	20
5	20	5	12
6	16	6	10
7	12	7	8

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57. Refer to the data. If the consumer has a money income of \$52 and the prices of J and K are \$8 and \$4 respectively, the consumer will maximize her utility by purchasing:
- A) 2 units of J and 7 units of K.
 - B) 5 units of J and 5 units of K.
 - C) 4 units of J and 5 units of K.
 - D) 6 units of J and 3 units of K.

Ans: C Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 117 Subtopic: Algebraic restatement Type: Calculation

58. Refer to the data. What level of total utility is realized from the equilibrium combination of J and K determined in the previous question?
- A) 156 utils
 - B) 124 utils
 - C) 36 utils
 - D) 276 utils

Ans: D Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 117 Subtopic: Algebraic restatement Type: Calculation

59. Refer to the data. If the consumer's money income were cut to \$28, she would maximize her satisfaction by purchasing:
- A) 3 units of J and 3 units of K.
 - B) 1 unit of J and 3 units of K.
 - C) 4 units of J and 1 unit of K.
 - D) 2 units of J and 3 units of K.

Ans: D Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 117 Subtopic: Algebraic restatement Type: Calculation

Use the following to answer questions 60-61:

The following total utility data is for products L and M. Assume that the prices of L and M are \$3 and \$4 respectively and that the consumer's income is \$18.

Units of L	Total utility	Units of M	Total utility
1	9	1	16
2	15	2	28
3	18	3	36
4	20	4	40
5	21	5	42

Chapter 5 Consumer Choice and Utility Maximization

60. Refer to the above data. How many units of the two products will the consumer purchase?

- A) 3 of L and none of M
- B) 4 of L and 2 of M
- C) 3 of L and 5 of M
- D) 2 of L and 3 of M

Ans: D Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 117 Subtopic: Algebraic restatement Type: Application

61. Refer to the above data. What level of total utility does the consumer realize in equilibrium?

- A) 87 utils
- B) 51 utils
- C) 114 utils
- D) 58 utils

Ans: B Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 117 Subtopic: Algebraic restatement Type: Application

Use the following to answer questions 62-65:

The marginal utility schedules for product X and product Y for a hypothetical consumer. The price of product X is \$4 and the price of product Y is \$2. The income of the consumer is \$20.

<u>Product X</u>		<u>Product Y</u>	
Quantity	MU _x	Quantity	MU _y
1	32	1	24
2	28	2	20
3	24	3	16
4	20	4	12
5	16	5	8

62. Refer to the table. If the consumer can only buy product X, how much will the consumer buy and what will be the total utility per dollar spent?

- A) 4 units and 20
- B) 4 units and 104
- C) 5 units and 16
- D) 5 units and 120

Ans: D Level: Easy Main Topic: 5.2 The theory of consumer choice Page: 117
Subtopic: Algebraic restatement Type: Calculation

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63. Refer to the table. If the consumer buys both product X and product Y, how much will the consumer buy of each to maximize utility?
- A) 4X and 2Y
 - B) 3X and 4Y
 - C) 4X and 3Y
 - D) 5X and 3Y

Ans: B Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 117 Subtopic: Algebraic restatement Type: Calculation

64. Refer to the table. When the consumer purchases the utility-maximizing combination of product X and product Y, total utility will be:
- A) 72.
 - B) 84.
 - C) 136.
 - D) 156.

Ans: D Level: Difficult Main Topic: 5.2 The theory of consumer choice
Page: 117 Subtopic: Algebraic restatement Type: Calculation

65. Refer to the table. Suppose that the consumer's income increased from \$20 to \$30. What would be the utility-maximizing combination of products X and Y?
- A) 3X and 3Y
 - B) 4X and 4Y
 - C) 5X and 4Y
 - D) 5X and 5Y

Ans: D Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 117 Subtopic: Algebraic restatement Type: Calculation

Use the following to answer questions 66-68:

The following marginal utility data is for products X and Y. Assume that the prices of X and Y are \$4 and \$2 respectively and that the consumer's income is \$18.

Units of X	Marginal utility, X	Units of Y	Marginal utility, Y
1	20	1	16
2	16	2	14
3	12	3	12
4	8	4	10
5	6	5	8
6	4	6	6

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66. Refer to the data. What quantities of X and Y should be purchased to maximize utility?

- A) 2 of X and 1 of Y
- B) 4 of X and 5 of Y
- C) 2 of X and 5 of Y
- D) 2 of X and 6 of Y

Ans: C Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 117 Subtopic: Algebraic restatement Type: Calculation

67. Refer to the data. What level of total utility will the utility-maximizing consumer realize?

- A) 96 utils
- B) 108 utils
- C) 72 utils
- D) 142 utils

Ans: A Level: Difficult Main Topic: 5.2 The theory of consumer choice
Page: 117 Subtopic: Algebraic restatement Type: Calculation

68. Refer to the data. If the price of X decreases to \$2, then the utility-maximizing combination of the two products is:

- A) 2 of X and 5 of Y.
- B) 4 of X and 6 of Y.
- C) 6 of X and 3 of Y.
- D) 4 of X and 5 of Y

Ans: D Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 117 Subtopic: Algebraic restatement Type: Calculation

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69. Refer to the table below. If the price of X and Y are \$2 and \$4 per unit, respectively, to maximize total utility this consumer should buy:

Units of X	MU _x	MU _x / P _x = \$2	Units of Y	MU _y	MU _y / P _y = \$4
1	20	—	1	48	—
2	18	—	2	40	—
3	16	—	3	36	—
4	14	—	4	32	—
5	12	—	5	24	—
6	11	—	6	12	—

- A) 1 units of X and 1 units of Y.
- B) 2 units of X and 2 units of Y.
- C) 1 units of X and 2 units of Y
- D) 5 units of X and no units of Y.

Ans: C Level: Moderate Main Topic: 5.2 The theory of consumer choice
Page: 117 Subtopic: Algebraic restatement Type: Calculation

Use the following to answer question 70:

The following marginal utility data is for products X and Y. Assume that the prices of X and Y are \$4 and \$2 respectively and that the consumer's income is \$18.

Units of X	Marginal utility, X	Units of Y	Marginal utility, Y
1	20	1	16
2	16	2	14
3	12	3	12
4	8	4	10
5	6	5	8
6	4	6	6

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70. Refer to the data above. Which of the following represents the demand schedule for X?

(A)		(B)		(C)		(D)	
P	Qd	P	Qd	P	Qd	P	Qd
\$4	2	\$4	2	\$4	3	\$4	3
2	5	2	4	2	6	2	5

- A) column (A)
- B) column (B)
- C) column (C)
- D) column (D)

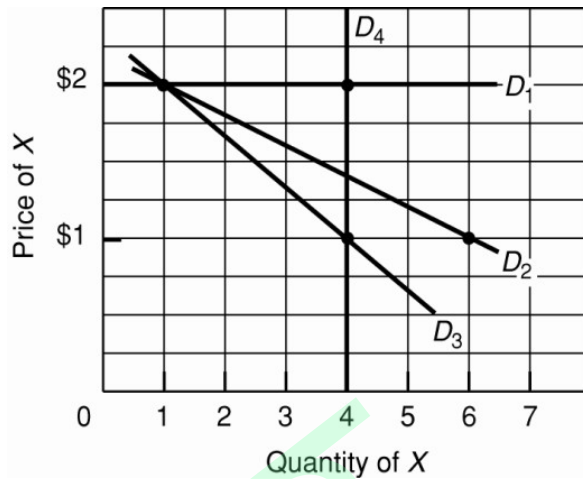
Ans: B Level: Difficult Main Topic: 5.3 Utility maximizing and the demand curve
Page: 118 Subtopic: Deriving the demand schedule and curve Type: Calculation

Use the following to answer question 71:

Units of X	MU _x	MU _x / P _x = \$2	MU _x / P _x = \$1	Units of Y	MU _y	MU _y / P _y = \$4
1	20	—	—	1	48	—
2	18	—	—	2	40	—
3	16	—	—	3	36	—
4	14	—	—	4	32	—
5	12	—	—	5	24	—
6	11	—	—	6	12	—

Chapter 5 Consumer Choice and Utility Maximization

71. Refer to the graph below and using the above information, suppose that the price of X falls from \$2 to \$1, while the price of Y remains at \$4. Which of the following represents the demand curve for X?



- A) D₁
- B) D₂
- C) D₃
- D) D₄

Ans: B Level: Difficult Main Topic: 5.3 Utility maximizing and the demand curve
Page: 118 Subtopic: Deriving the demand schedule and curve Type: Graphic

72. The "income effect" indicates that:

- A) a rise in money income will cause consumers to buy smaller quantities of normal goods.
- B) when the price of a product falls, the lower price will induce the consumer to buy more of that product now that it is relatively cheaper.
- C) consumers should substitute among various products until the marginal utility from the last unit of each product purchased is the same.
- D) when the price of a product falls, a consumer will be able to buy more of it with a specific money income.

Ans: D Level: Easy Main Topic: 5.3 Utility maximizing and the demand curve
Page: 118 Subtopic: Income and substitution effects Type: Definition

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73. If the price of normal good X rises, the income:
- A) and substitution effects will both induce the consumer to buy less of X.
 - B) and substitution effects will both induce the consumer to buy more of X.
 - C) effect will induce the consumer to buy more of X and the substitution effect will induce him to buy less.
 - D) effect will induce the consumer to buy less of X and the substitution will induce him to buy more.

Ans: A Level: Easy Main Topic: 5.3 Utility maximizing and the demand curve
Page: 118 Subtopic: Income and substitution effects Type: Application

74. "If the price of a product falls, that product becomes cheaper and people will want to purchase more of it in place of other goods." This statement best describes:
- A) the income effect.
 - B) the substitution effect.
 - C) a complementary good.
 - D) an inferior good.

Ans: B Level: Easy Main Topic: 5.3 Utility maximizing and the demand curve
Page: 118 Subtopic: Income and substitution effects Type: Definition

75. "A fall in the price of a good increases the real income or purchasing power of consumers so that they are able to buy more of the product." This statement best describes:
- A) the income effect.
 - B) a complementary good.
 - C) the substitution effect.
 - D) an inferior good.

Ans: A Level: Easy Main Topic: 5.3 Utility maximizing and the demand curve
Page: 118 Subtopic: Income and substitution effects Type: Application

76. Which of the following is correct? When the price of normal good Z falls:
- A) both income and substitution effects cause the consumer to buy more.
 - B) both income and substitution effects cause the consumer to buy less.
 - C) the income effect causes the consumer to buy less, but the substitution effect causes her to buy more.
 - D) the income effect causes the consumer to buy more, but the substitution effect causes her to buy less.

Ans: A Level: Moderate Main Topic: 5.3 Utility maximizing and the demand curve
Page: 118 Subtopic: Income and substitution effects Type: Application

Chapter 5 Consumer Choice and Utility Maximization

77. George consumes only two goods, pizza and compact discs. Both are normal goods for George. Suppose the price of pizza decreases. George's consumption of compact discs will:

- A) increase due to the income effect.
- B) increase due to the substitution effect.
- C) increase due to a negative income elasticity.
- D) remain unchanged, since the income elasticity of pizza is greater than 0.

Ans: A Level: Moderate Main Topic: 5.3 Utility maximizing and the demand curve Page: 118 Subtopic: Income and substitution effects Type: Application

78. Which statement is correct?

- A) The income effect for a change in the price of any normal good offsets the substitution effect.
- B) The income effect shows a decrease in real income is associated with a decrease in the price of a good.
- C) The income effect of a normal good will reinforce its substitution effect.
- D) The substitution effect measures the increase in the quantity demanded of a good because of a decrease in the price of all other goods.

Ans: C Level: Moderate Main Topic: 5.3 Utility maximizing and the demand curve Page: 118 Subtopic: Income and substitution effects Type: Application

79. Which statement is false?

- A) The substitution effect measures the change in the quantity demanded of a good brought about only by a change in its relative price.
- B) The income effect for a change in the price of any normal good offsets the substitution effect, so the demand curve is positively sloped.
- C) The income effect shows a change in the real income associated with a change in the price of a good.
- D) The income effect of a normal good will reinforce its substitution effect.

Ans: B Level: Easy Main Topic: 5.3 Utility maximizing and the demand curve Page: 118 Subtopic: Income and substitution effects Type: Application

Chapter 5 Consumer Choice and Utility Maximization

80. If steak is a normal good and its price rises:

- A) the amount purchased may either increase or decrease depending on the relative importance of the income and substitution effects.
- B) both the income and substitution effects suggest that less will be purchased.
- C) the substitution effect suggests more will be purchased, but the income effect suggests less will be purchased.
- D) the income effect suggests more will be purchased, but the substitution effect suggests less will be purchased.

Ans: B Level: Moderate Main Topic: 5.3 Utility maximizing and the demand curve Page: 118 Subtopic: Income and substitution effects Type: Application

81. The "substitution effect" indicates that:

- A) a decline in money income will cause the consumer to buy more inferior goods and fewer superior goods.
- B) consumer equilibrium can only be achieved when the consumer is buying substitute goods.
- C) when the price of a product falls, the lower price will induce the consumer to buy more of that product at the expense of other products.
- D) when the price of a product falls, a consumer will be able to buy more of it with a specific money income.

Ans: C Level: Easy Main Topic: 5.3 Utility maximizing and the demand curve Page: 118 Subtopic: Income and substitution effects Type: Definition

82. The substitution effect causes a consumer to buy less of a product when its price rises because the:

- A) consumer's real income has decreased.
- B) consumer's real income has increased.
- C) product is now less expensive compared to other products.
- D) product is now more expensive compared to other products.

Ans: D Level: Moderate Main Topic: 5.3 Utility maximizing and the demand curve Page: 118 Subtopic: Income and substitution effects Type: Application

83. Diminishing marginal utility explains why:

- A) the income effect exceeds the substitution effect.
- B) the substitution effect exceeds the income effect.
- C) supply curves are upsloping.
- D) demand curves are downward sloping.

Ans: D Level: Easy Main Topic: 5.3 Utility maximizing and the demand curve Page: 118-119 Subtopic: Income and substitution effects Type: Application

Chapter 5 Consumer Choice and Utility Maximization

84. A downward sloping demand curve can be derived for a normal product by increasing its price in the consumer-behaviour model and noting:
- A) the increase in the utility-maximizing quantity of that product demanded.
 - B) the decrease in the utility-maximizing quantity of that product demanded.
 - C) a substitution effect that encourages more consumption of that product.
 - D) an income effect that encourages more consumption of that product.

Ans: B Level: Moderate Main Topic: 5.3 Utility maximizing and the demand curve Page: 118-119 Subtopic: Income and substitution effects Type: Application

85. Which of the following has been a significant factor in iPod replacing CD player in the retail music market?
- A) iPods are now cheaper than CD players.
 - B) A scarcity of vinyl has curtailed the manufacture of CD players.
 - C) Most consumers perceive iPods audio reproduction to be of higher quality.
 - D) The price of CD players has increased dramatically.

Ans: C Level: Easy Main Topic: 5.4 Applications and extensions Page: 119-120 Subtopic: iPods Type: Application

86. The consumer demand for iPods has increased over time because the iPods:
- A) can store and play back several thousand songs-where as a CD only has a 74 minute recording capacity.
 - B) have a higher marginal-utility-to-price ratio than the ratios for alternative products.
 - C) are much more compact than the portable CD players.
 - D) all of the above.

Ans: D Level: Easy Main Topic: 5.4 Applications and extensions Page: 119-120 Subtopic: iPods Type: Application

87. The increase in demand for iPods can be explained by:
- A) an increase in the supply of CD players.
 - B) technological changes that make CD players more attractive to consumers than iPods.
 - C) technological changes that make iPods more attractive to consumers than CD players.
 - D) a rise in the price of CD players.

Ans: C Level: Easy Main Topic: 5.4 Applications and extensions Page: 119-120 Subtopic: iPods Type: Application

Chapter 5 Consumer Choice and Utility Maximization

88. Understanding the water and diamond paradox is valuable because it explains why:
- A) diamonds have many substitutes.
 - B) water is more important than diamonds.
 - C) the prices of products may not measure their usefulness.
 - D) consumer spending on diamonds has increased while spending on water has decreased in the past century.

Ans: C Level: Easy Main Topic: 5.4 Applications and extensions Page: 120
Subtopic: The diamond – water paradox Type: Application

89. The total utility derived from the consumption of diamonds tends to be:
- A) low and the marginal utility tends to be low.
 - B) high and the marginal utility tends to be high.
 - C) low but the marginal utility tends to be high.
 - D) high but the marginal utility tends to be low.

Ans: B Level: Easy Main Topic: 5.4 Applications and extensions Page: 120
Subtopic: The diamond – water paradox Type: Application

90. The diamond-water paradox arises because:
- A) essential goods may be cheap while nonessential goods may be expensive.
 - B) the marginal utility of certain products increases, rather than diminishes.
 - C) essential goods are always higher priced than nonessential goods.
 - D) we sometimes fail to use money as a standard of value.

Ans: A Level: Easy Main Topic: 5.4 Applications and extensions Page: 120
Subtopic: The diamond – water paradox Type: Definition

91. The diamond-water paradox occurs because:
- A) the price of a product is related to its total utility, not its marginal utility.
 - B) the relative price of a product is related to its marginal utility, not its total utility.
 - C) water is, in fact, very scarce in certain regions of the world.
 - D) diamonds are more useful than water.

Ans: B Level: Moderate Main Topic: 5.4 Applications and extensions
Page: 120 Subtopic: The diamond – water paradox Type: Application

Chapter 5 Consumer Choice and Utility Maximization

92. "Essential" water is cheaper than "nonessential" diamonds because:

- A) new industrial uses for diamonds have been discovered.
- B) the supply of water is great relative to demand and the supply of diamonds is small relative to demand.
- C) although the total utility of diamonds is greater, their marginal utility is small.
- D) the supply of diamonds is great relative to demand and the supply of water is small relative to demand.

Ans: B Level: Easy Main Topic: 5.4 Applications and extensions Page: 120
Subtopic: The diamond – water paradox Type: Application

93. Recent theories of consumer behaviour have:

- A) emphasized that consumption is basically an instantaneous act.
- B) contended that in the $MU_x/P_x = MU_y/P_y$ equation MU is understated for time-intensive goods.
- C) attempted to introduce the opportunity cost of time as a component of the price of a product.
- D) argued that inflationary expectations negate the theory of consumer behaviour.

Ans: C Level: Easy Main Topic: 5.4 Applications and extensions
Page: 120-121 Subtopic: The value of time Type: Application

94. In introducing the opportunity cost of time into the theory of consumer behaviour we find that, all else equal:

- A) one should consume less of time-intensive goods.
- B) one should consume more of time-intensive goods.
- C) the consumer's equilibrium position is not altered.
- D) the marginal utility derived from each product must be multiplied by consumption time in determining equilibrium.

Ans: A Level: Easy Main Topic: 5.4 Applications and extensions
Page: 120-121 Subtopic: The value of time Type: Application

Chapter 5 Consumer Choice and Utility Maximization

95. Assume you are spending your full budget and purchasing such amounts of X and Y that the marginal utility from the last units consumed is 40 and 20 utils respectively. Assume (a) the prices of X and Y are \$8 and \$4 respectively; (b) it takes 3 hours to consume a unit of X and 1 hour to consume a unit of Y; and (c) your time is worth \$2 per hour. You
- A) should substitute X for Y until the marginal utility per hour is the same for both products.
 - B) are consuming X and Y in the optimal amounts.
 - C) should consume less of Y and more of X.
 - D) should consume less of X and more of Y.

Ans: D Level: Moderate Main Topic: 5.4 Applications and extensions

Page: 120-121 Subtopic: The value of time Type: Calculation

96. Assume a round of golf requires four hours of leisure time, and attending a concert requires two hours. If the price of a round of golf is \$10 and the price of a concert is \$20, ceteris paribus, Joe will play:
- A) golf but not attend concerts, since golf is cheaper.
 - B) golf twice as often as he attends concerts.
 - C) less golf whenever he receives a large raise.
 - D) relatively less golf and attend relatively more concerts whenever his leisure time becomes more scarce.

Ans: D Level: Difficult Main Topic: 5.4 Applications and extensions

Page: 120-121 Subtopic: The value of time Type: Application

97. The marginal utility of leisure time appears to:
- A) be the same even for people with widely different incomes.
 - B) be exempt from the law of diminishing marginal utility.
 - C) increase as the quantity of available leisure time decreases.
 - D) equal zero for successful business executives.

Ans: C Level: Easy Main Topic: 5.4 Applications and extensions

Page: 120-121 Subtopic: The value of time Type: Application

98. The fact that some medical care purchases are financed through insurance:
- A) has no effect on health care consumption because aggregate costs are the same regardless of payment method.
 - B) reduces the amount of health care consumed.
 - C) has decreased health care costs and therefore reduced aggregate health care expenditures.
 - D) increases the amount of health care consumed.

Ans: D Level: Moderate Main Topic: 5.4 Applications and extensions

Page: 120-121 Subtopic: The value of time Type: Application

Chapter 5 Consumer Choice and Utility Maximization

99. In Canada, government-sponsored insurance pays the full amount of a Doctor's visit. This situation will encourage the rational consumer to:
- A) consume less health care because the cost is too expensive.
 - B) obtain health insurance that pays less than 80 percent of medical care costs.
 - C) use more medical services than they would if they had to pay the full price.
 - D) eliminate their health care coverage because it does not cover 100 percent of the cost.

Ans: C Level: Easy Main Topic: 5.4 Applications and extensions
Page: 120-121 Subtopic: The value of time Type: Application

100. Most economists contend that:
- A) noncash transfers are more efficient than cash transfers.
 - B) noncash transfers are less efficient than cash transfers.
 - C) noncash and cash transfers are equally efficient.
 - D) government can assess consumer preferences better than consumers themselves.

Ans: B Level: Easy Main Topic: 5.4 Applications and extensions Page: 121
Subtopic: Cash and noncash gifts Type: Application

101. Which of the following statements is correct?
- A) Both cash and noncash gift-giving cause an efficiency loss.
 - B) Neither cash nor noncash gift-giving cause an efficiency loss.
 - C) Noncash gift-giving entails an efficiency loss, but cash gifts do not.
 - D) Cash gifts entail an efficiency loss, but noncash gifts do not.

Ans: C Level: Moderate Main Topic: 5.4 Applications and extensions
Page: 121 Subtopic: Cash and noncash gifts Type: Application

102. According to a study by a Yale economist:
- A) there is a value loss in noncash gift-giving.
 - B) noncash gifts from more distant relatives entail larger value losses than do gifts from those "close" to the recipient.
 - C) more socially distant gift-givers are more likely to give gifts of cash.
 - D) all of the above are true.

Ans: D Level: Easy Main Topic: 5.4 Applications and extensions Page: 121
Subtopic: Cash and noncash gifts Type: Application

Chapter 5 Consumer Choice and Utility Maximization

103. Research on the economic effects of gift-giving concludes that:
- A) noncash gifts from more distant relatives entail greater value losses than do gifts from those "close" to the recipient.
 - B) noncash gifts entail greater efficiency losses than do cash gifts.
 - C) gifts from those more socially distant are more likely to be in the form of cash.
 - D) all of the above are true.

Ans: D Level: Moderate Main Topic: 5.4 Applications and extensions
Page: 121 Subtopic: Cash and noncash gifts Type: Application

104. Which of the following is likely to be the most economically efficient form of gift giving?
- A) noncash gifts from distant relatives to children
 - B) cash gifts from distant relatives to children
 - C) noncash gifts from distant relatives that require a cash return gift
 - D) cash gifts from distant relatives that require a noncash return gift

Ans: B Level: Moderate Main Topic: 5.4 Applications and extensions
Page: 121 Subtopic: Cash and noncash gifts Type: Application

105. If you receive a gift whose market price is \$20, but you consider it to be worth only \$10, then:
- A) there is a \$10 or 50 percent efficiency gain.
 - B) there may or may not be an efficiency loss.
 - C) there is a \$10 or 50 percent efficiency loss.
 - D) you can be relatively certain the giver was a sibling or other close relative.

Ans: C Level: Easy Main Topic: 5.4 Applications and extensions Page: 121
Subtopic: Cash and noncash gifts Type: Application

106. When people are offered a variety of products:
- A) marginal cost of extra products exceeds the marginal benefit.
 - B) diminishing marginal utility sets in more slowly.
 - C) people will be acting the same way as if they are offered one or two.
 - D) diminishing marginal utility sets in more quickly.

Ans: B Level: Easy Main Topic: Last Word Page: 122 Type: Application

Chapter 5 Consumer Choice and Utility Maximization

107. The pressing needs of the present rather than the elusive possibilities of the future:
- A) produces a more clear vision regarding the decision making about the future.
 - B) produces the human brain to have trouble making decision regarding the future.
 - C) will make the human being placing a higher value to the future as compared to today.
 - D) will make the human being to place the same value to the future as compared to the present.

Ans: B Level: Easy Main Topic: Last Word Page: 122 Type: Application

108. Time inconsistency refers to the situation where:
- A) the consumer behaves in a way that present is more important than the future.
 - B) the consumer behaves in a way that future is more important than the present.
 - C) the consumer behaves in a way that future and present are equally important.
 - D) the consumer only considers the future and not the present consumption,

Ans: A Level: Moderate Main Topic: Last Word Page: 122
Type: Application

109. An example of the federal government public policy aimed at solving the problem of time inconsistency of individuals is:
- A) corporate tax system.
 - B) private pension contribution.
 - C) mandatory old age pension contribution.
 - D) progressive tax system.

Ans: C Level: Moderate Main Topic: Last Word Page: 122
Type: Application

110. The law of diminishing marginal utility states that the total utility a consumer derives from a product will sometimes decrease as consumption of the product increases.

Ans: False Level: Moderate Main Topic: 5.1 The law of diminishing marginal utility Page: 112 Type: Definition

111. The law of diminishing marginal utility states that marginal utility will always decrease when a consumer uses more units of a good or service.

Ans: False Level: Moderate Main Topic: 5.1 The law of diminishing marginal utility Page: 112 Type: Definition

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112. If marginal utility is diminishing, total utility must also be declining.

Ans: False Level: Moderate Main Topic: 5.1 The law of diminishing marginal utility Page: 112 Type: Application

113. If total utility is increasing, marginal utility must be positive but decreasing.

Ans: False Level: Moderate Main Topic: 5.1 The law of diminishing marginal utility Page: 112 Type: Application

114. Downward-sloping product demand curves can be explained by diminishing marginal utility.

Ans: True Level: Easy Main Topic: 5.1 The law of diminishing marginal utility Page: 112 Type: Application

115. A rational consumer will cease purchasing a product at that amount where marginal utility begins to diminish.

Ans: False Level: Easy Main Topic: 5.2 The theory of consumer choice Page: 112 Type: Application

116. The theory of consumer behaviour assumes that there is a budget constraint.

Ans: True Level: Easy Main Topic: 5.2 The theory of consumer choice Page: 114 Type: Definition

117. As marginal utility declines, a lower price will be needed to induce the consumer to buy more of a product.

Ans: True Level: Easy Main Topic: 5.2 The theory of consumer choice Page: 116 Type: Application

118. If $P_A = 5$ and $MU_A = 10$, while $P_B = 1$ and $MU_B = 3$, the consumer should buy more of good B and less of good A.

Ans: True Level: Difficult Main Topic: 5.2 The theory of consumer choice Page: 117 Type: Application

119. The income effect leads to an increase in the consumption of normal goods when their price increases.

Ans: False Level: Easy Main Topic: 5.3 Utility maximizing and the demand curve Page: 118 Type: Application

Chapter 5 Consumer Choice and Utility Maximization

120. An increase in the real income of a consumer will result from a decrease in the price of a product the consumer is buying.

Ans: True Level: Moderate Main Topic: 5.3 Utility maximizing and the demand curve Page: 118 Type: Application

121. The income and substitution effects will induce the consumer to buy more of a normal good when its price decreases.

Ans: True Level: Moderate Main Topic: 5.3 Utility maximizing and the demand curve Page: 118 Type: Application

122. The "income effect" explains an exception to the law of demand.

Ans: False Level: Easy Main Topic: 5.3 Utility maximizing and the demand curve Page: 118 Type: Definition

123. The "substitution effect" suggests that, when consumers judge product quality by price, they will substitute high-priced products for low-priced products.

Ans: False Level: Easy Main Topic: 5.3 Utility maximizing and the demand curve Page: 118 Type: Application

124. When the price of a product falls, the "income effect" induces the consumer to purchase more of it while the "substitution effect" prompts her to buy less.

Ans: False Level: Easy Main Topic: 5.3 Utility maximizing and the demand curve Page: 118 Type: Application

125. When the economic value of time is taken into account, paying \$800 to fly from one city to another may be cheaper than paying \$100 for a bus trip between the two cities.

Ans: True Level: Moderate Main Topic: 5.4 Applications and extensions Page: 120 Type: Application

126. One reason for the increased medical care services is that consumers pay the full price of the services.

Ans: False Level: Moderate Main Topic: 5.4 Applications and extensions Page: 120 Type: Application

Chapter 5 Consumer Choice and Utility Maximization

127. Incorporating the value of time required for the consumption of a product along with the market price of the product reflects the "full price" in the consumption of the product.

Ans: True Level: Moderate Main Topic: 5.4 Applications and extensions
Page: 120-121 Type: Application

128. Cash gifts add more to total utility than noncash gifts.

Ans: True Level: Moderate Main Topic: 5.4 Applications and extensions
Page: 121 Type: Application

Appendix to Chapter 5:

129. The budget line shows:

- A) the amount of product A which a consumer is willing to give up to obtain one more unit of product B.
- B) all possible combinations of two goods which can be purchased, given money income and the prices of the goods.
- C) all equilibrium points on an indifference map.
- D) all possible combinations of two goods which yield the same level of utility to the consumer.

Ans: B Level: Easy Main Topic: A5.1 Indifference curve analysis Page: 126
Subtopic: The budget line: What is attainable Type: Definition

130. The price ratio of the two products is the:

- A) marginal rate of substitution.
- B) slope of the budget line.
- C) point of tangency for equilibrium.
- D) elasticity of demand for the two products.

Ans: B Level: Easy Main Topic: A5.1 Indifference curve analysis Page: 126
Subtopic: The budget line: What is attainable Type: Definition

131. Decreases in the price of a product causes the consumer's:

- A) indifference curves to shift outward from the origin.
- B) indifference curves to shift inward to the origin.
- C) budget line to shift outward from the origin.
- D) budget line to shift inward to the origin.

Ans: C Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Subtopic: The budget line: What is attainable Type: Application

Chapter 5 Consumer Choice and Utility Maximization

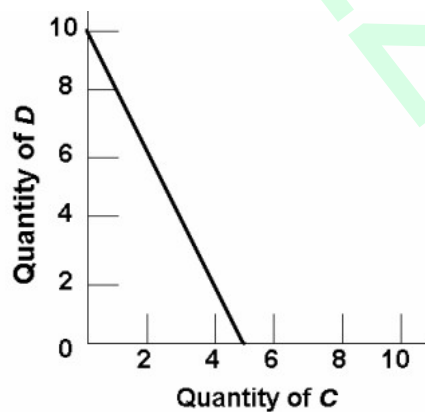
132. A leftward shift of a consumer's budget line to a position parallel with the original one could indicate that the:
- A) price of one product has decreased in relation to the other.
 - B) prices of both products have decreased in the same proportion.
 - C) marginal utilities derived from both products have decreased.
 - D) consumer's money income has increased but the prices of both products have increased proportionately more.

Ans: D Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Subtopic: The budget line: What is attainable Type: Application

133. Which of the following statements is not correct?
- A) A reduction in money income will shift the budget line to the right.
 - B) A reduction in money income accompanied by an increase in product prices will necessarily shift the budget line to the left.
 - C) An increase in product prices will shift the budget line to the left.
 - D) An increase in money income will shift the budget line to the right.

Ans: A Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Subtopic: The budget line: What is attainable Type: Definition

Use the following to answer questions 134-136:



134. Refer to the budget line shown in the diagram above. If the consumer's money income is \$20, the:
- A) prices of C and D cannot be determined.
 - B) price of C is \$2 and the price of D is \$4.
 - C) consumer can obtain a combination of 5 units of both C and D.
 - D) price of C is \$4 and the price of D is \$2.

Ans: D Level: Difficult Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Subtopic: The budget line: What is attainable Type: Graphic

Chapter 5 Consumer Choice and Utility Maximization

135. Refer to the budget line shown in the diagram above. Given the same money income, reductions in the prices of both products C and D will:
- A) shift the budget line outward on the horizontal axis, but leave it anchored at "10" on the vertical axis.
 - B) shift the budget line to the left.
 - C) shift the budget line to the right.
 - D) have no effect on the budget line.

Ans: C Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Subtopic: The budget line: What is attainable Type: Graphic

136. Refer to the budget line shown in the diagram above. The absolute value of the slope of the budget line is:
- A) MU_C/MU_D .
 - B) one-half.
 - C) P_D/P_C .
 - D) P_C/P_D .

Ans: D Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Subtopic: The budget line: What is attainable Type: Graphic

137. In moving along a given budget line:
- A) the prices of both products and money income are assumed to be constant.
 - B) each point on the line will be equally satisfactory to consumers.
 - C) money income varies, but the prices of the two goods are constant.
 - D) the prices of both products are assumed to vary, but money income is constant.

Ans: A Level: Easy Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Subtopic: The budget line: What is attainable Type: Application

138. Increases in product prices shift the consumer's:
- A) budget line to the right.
 - B) budget line to the left.
 - C) indifference curves to the left.
 - D) indifference curves to the right.

Ans: B Level: Easy Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Subtopic: The budget line: What is attainable Type: Application

Chapter 5 Consumer Choice and Utility Maximization

139. An increase in money income shifts the consumer's:

- A) budget line to the right
- B) budget line to the left.
- C) indifference curves to the left.
- D) indifference curves to the right.

Ans: A Level: Easy Main Topic: A5.1 Indifference curve analysis

Page: 126-127 Subtopic: The budget line: What is attainable Type: Application

140. A change in the slope of a budget line is solely the result of a change in:

- A) consumer preferences.
- B) the price of one or both goods.
- C) money income.
- D) the marginal rate of substitution.

Ans: B Level: Easy Main Topic: A5.1 Indifference curve analysis

Page: 126-127 Subtopic: The budget line: What is attainable Type: Application

141. In drawing a budget line it is assumed that:

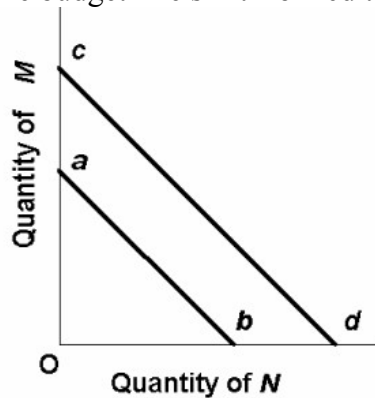
- A) consumer preferences are fixed.
- B) the prices of the two products are variable.
- C) money income is fixed.
- D) consumer willingness to substitute between the two products is fixed.

Ans: C Level: Easy Main Topic: A5.1 Indifference curve analysis

Page: 126-127 Subtopic: The budget line: What is attainable Type: Application

Chapter 5 Consumer Choice and Utility Maximization

142. The budget line shift from cd to ab in the figure below is consistent with:

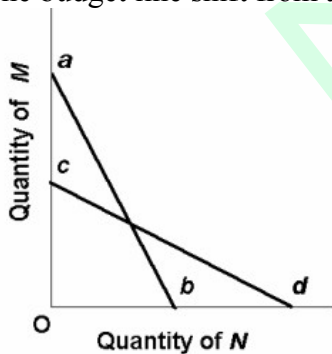


- A) decreases in the prices of both M and N.
- B) an increase in the price of M and a decrease in the price of N.
- C) a decrease in money income.
- D) an increase in money income.

Ans: C Level: Easy Main Topic: A5.1 Indifference curve analysis

Page: 126-127 Subtopic: The budget line: What is attainable Type: Graphic

143. The budget line shift from ab to cd in the figure below is consistent with:



- A) decreases in the prices of both M and N.
- B) an increase in the price of M and a decrease in the price of N.
- C) a decrease in money income.
- D) an increase in money income.

Ans: B Level: Moderate Main Topic: A5.1 Indifference curve analysis

Page: 126-127 Subtopic: The budget line: What is attainable Type: Graphic

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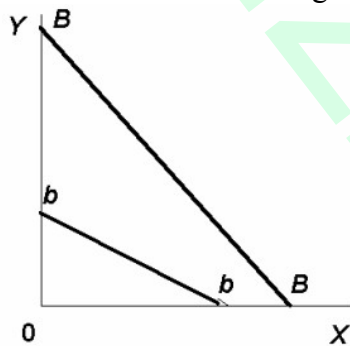
144. Any combination of goods lying outside of the budget line:
- A) implies that the consumer is not spending all of his income.
 - B) yields less utility than any point on the budget line.
 - C) yields less utility than any point inside the budget line.
 - D) is unobtainable, given the consumer's income.

Ans: D Level: Easy Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Subtopic: The budget line: What is attainable Type: Application

145. If money income increases and the prices of products A and B both increase, then the budget line:
- A) must shift to the right.
 - B) must shift to the left.
 - C) may shift either to the right or the left.
 - D) will no longer be tangent to an indifference curve.

Ans: C Level: Difficult Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Subtopic: The budget line: What is attainable Type: Application

146. The movement of the budget line from BB to bb in the figure suggests that income has:

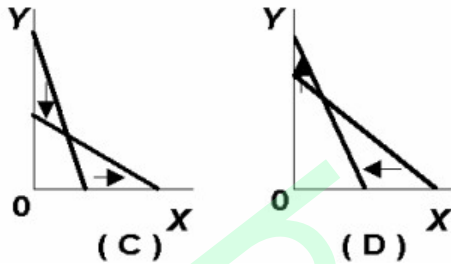
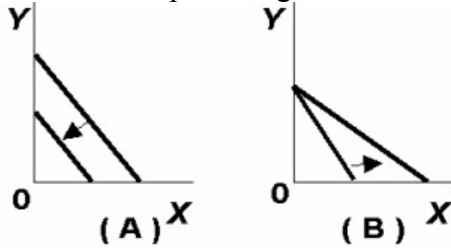


- A) increased and the price of X has decreased.
- B) fallen and the price of Y has increased.
- C) fallen and the price of X has decreased.
- D) decreased but there have been no price changes.

Ans: B Level: Difficult Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Subtopic: The budget line: What is attainable Type: Graphic

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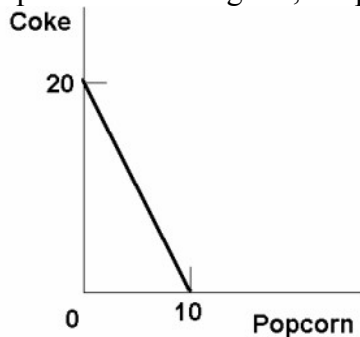
147. Which of the budget constraint lines illustrates a decrease in the price of good X and an increase in the price of good Y?



- A) graph A
- B) graph B
- C) graph C
- D) graph D

Ans: C Level: Difficult Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Subtopic: The budget line: What is attainable Type: Graphic

148. Suppose you have a money income of \$10 all of which you spend on Coke and boxes of popcorn. In the diagram, the prices of Coke and popcorn respectively are:

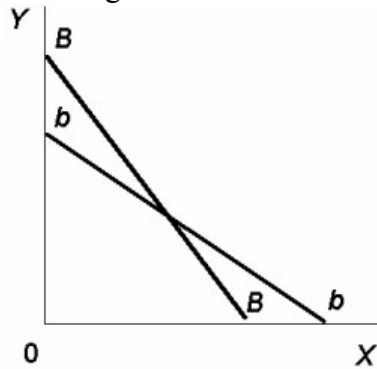


- A) \$.50 and \$1.00.
- B) \$1.00 and \$.50.
- C) \$1.00 and \$2.00.
- D) \$.40 and \$.50.

Ans: A Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Subtopic: The budget line: What is attainable Type: Graphic

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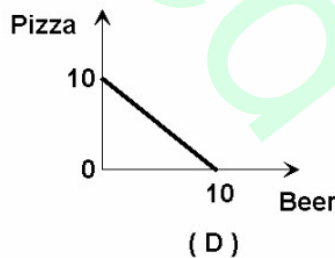
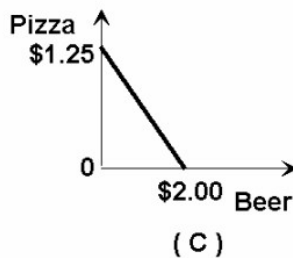
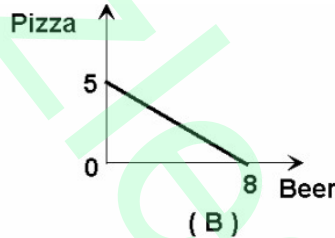
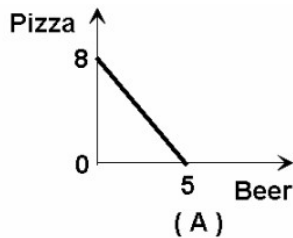
149. If the budget line shifts from BB to bb in the diagram we can infer that the:



- A) price of Y has increased and the price of X has decreased.
- B) price of Y has decreased and the price of X has increased.
- C) prices of both X and Y have increased.
- D) prices of both X and Y have decreased.

Ans: A Level: Difficult Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Subtopic: The budget line: What is attainable Type: Graphic

150. Refer to the graphs below. Pizza and beer are the only two goods Jon consumes. The price of beer is \$2.00 per pitcher and pizza is \$1.25 per slice. If Jon has only \$10 to spend for the evening, which graph represents the set of possible combinations of beer and pizza he can consume?



- A) graph A
- B) graph B
- C) graph C
- D) graph D

Ans: A Level: Difficult Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Subtopic: The budget line: What is attainable Type: Graphic

Chapter 5 Consumer Choice and Utility Maximization

151. A budget line shows the:

- A) alternative combinations of two goods which a consumer can purchase with a given money income.
- B) alternative combinations of two goods which will yield the same level of total utility to a consumer.
- C) quantities of a particular good which a consumer will buy at various prices.
- D) ratio of money income to product price.

Ans: A Level: Easy Main Topic: A5.1 Indifference curve analysis

Page: 126-127 Subtopic: The budget line: What is attainable Type: Definition

152. Other things equal, an increase in a consumer's money income:

- A) shifts her indifference curves rightward because she can now satisfy more of her wants.
- B) shifts her budget line rightward because she can now purchase more of both products.
- C) will be subject to the substitution effect, but not the income effect.
- D) will not alter the location of consumer equilibrium.

Ans: B Level: Easy Main Topic: A5.1 Indifference curve analysis

Page: 126-127 Subtopic: The budget line: What is attainable Type: Application

153. The slope of a budget line reflects the:

- A) elasticity of demand for the two products.
- B) price ratio of the two products.
- C) amount of the consumer's income.
- D) utility ratio of the two products.

Ans: B Level: Easy Main Topic: A5.1 Indifference curve analysis

Page: 126-127 Subtopic: The budget line: What is attainable Type: Application

154. If the price of A is \$12 and the price of B is \$3, the budget line tells us that a consumer in effect can trade:

- A) 12 units of A for 3 of B.
- B) 1 unit of A for 4 of B.
- C) 1 unit of A for 3 of B.
- D) 1 unit of B for 4 of A.

Ans: B Level: Moderate Main Topic: A5.1 Indifference curve analysis

Page: 126-127 Subtopic: The budget line: What is attainable Type: Calculation

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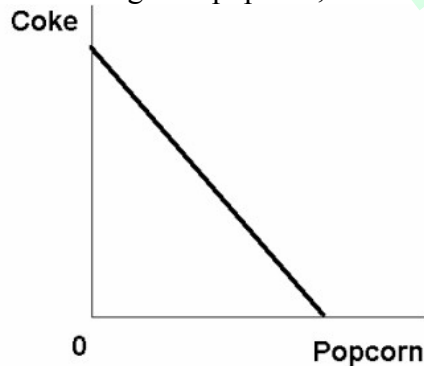
155. Assume the price of product Y (the quantity of which is plotted on the vertical axis) is initially \$15 and the price of X (the quantity of which is plotted on the horizontal axis) is initially \$3. Assume money income is initially \$60. If the prices of Y and X now increase to \$30 and \$6 respectively and money income increases to \$120, then the budget line will:
- A) shift rightward and become steeper.
 - B) shift rightward and become flatter.
 - C) shift rightward, but its slope will not change.
 - D) be unchanged.

Ans: D Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Subtopic: The budget line: What is attainable Type: Application

156. Assume initially that the price of X (measured on the horizontal axis) is \$9 and the price of Y (measured on the vertical axis) is \$4. If the price of X now declines to \$6, the budget line will:
- A) be unaffected.
 - B) shift outward on the vertical axis.
 - C) shift inward on the horizontal axis.
 - D) shift outward on the horizontal axis.

Ans: D Level: Difficult Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Subtopic: The budget line: What is attainable Type: Application

157. Suppose Elroy's budget line is as shown on the diagram. If his tastes change in favour of Coke and against popcorn, the budget line will:



- A) become steeper.
- B) become flatter.
- C) shift rightward.
- D) be unaffected.

Ans: D Level: Difficult Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Subtopic: The budget line: What is attainable Type: Graphic

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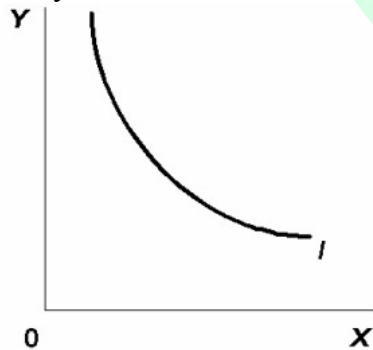
158. Edith is buying products X and Y with her money income. Suppose her budget line shifts rightward (outward). This might be the result of:
- A) the prices of X and Y increasing while her money income remains constant.
 - B) her money income decreasing while the prices of X and Y remain constant.
 - C) her money income increasing more than proportionately to increases in the prices of X and Y.
 - D) none of the above.

Ans: C Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Subtopic: The budget line: What is attainable Type: Application

159. Assume the price of product Y (the quantity of which is on the vertical axis) is \$15 and the price of product X (the quantity of which is on the horizontal axis) is \$3. Also assume that money income is \$60. The absolute value of the slope of the resulting budget line:
- A) is 5.
 - B) is $1/5$.
 - C) is 4.
 - D) is 20.

Ans: B Level: Easy Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Subtopic: The budget line: What is attainable Type: Calculation

160. The indifference curve in the diagram below yields Juan 100 units of utility. If Juan's money income were to increase by 20 percent, the indifference curve would:



- A) shift leftward.
- B) shift rightward.
- C) become steeper.
- D) not be affected.

Ans: D Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 127 Subtopic: Indifferences curves: What is preferred Type: Application

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161. At each point on an indifference curve:

- A) money income is the same.
- B) the prices of the two products are the same.
- C) total utility is the same.
- D) all of the above are true.

Ans: C Level: Easy Main Topic: A5.1 Indifference curve analysis

Page: 127 Subtopic: Indifferences curves: What is preferred Type: Definition

162. An indifference curve shows all:

- A) possible equilibrium positions on an indifference map.
- B) equilibrium combinations of two products which are obtainable with a given money income.
- C) combinations of two products yielding the same total utility to a consumer.
- D) possible combinations of two products which a consumer can purchase, given her income and the prices of the products.

Ans: C Level: Easy Main Topic: A5.1 Indifference curve analysis

Page: 127 Subtopic: Indifferences curves: What is preferred Type: Definition

163. All the combinations of two products which will yield the same total utility to a consumer are reflected in:

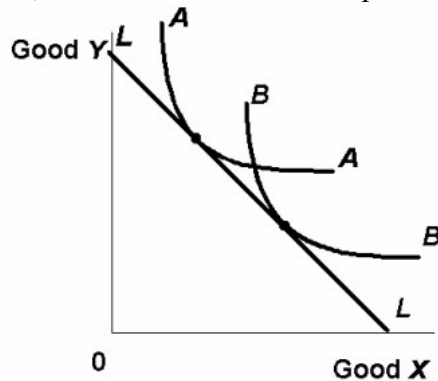
- A) the budget line.
- B) an indifference curve.
- C) the marginal rate of substitution.
- D) the position of consumer equilibrium.

Ans: B Level: Easy Main Topic: A5.1 Indifference curve analysis

Page: 127 Subtopic: Indifferences curves: What is preferred Type: Definition

Chapter 5 Consumer Choice and Utility Maximization

164. If AA is Al's indifference curve and BB is Betty's. Al and Betty have the same budget line, LL. This information implies that:



- A) Al's demand for X is stronger than Betty's.
- B) Al's demand for Y is stronger than Betty's.
- C) Al and Betty have the same demand for both products.
- D) Al will buy some of X, but Betty will not.

Ans: B Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 127 Subtopic: Indifferences curves: What is preferred Type: Graphic

165. Indifference curve analysis:

- A) presumes, as does utility analysis, that satisfaction is numerically measurable.
- B) presumes, unlike utility analysis, that satisfaction is numerically measurable.
- C) presumes only that the consumer can say one combination of two goods yields more or less utility than some other combination.
- D) is in conflict with the notion of a downward sloping demand curve.

Ans: C Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 127 Subtopic: Indifferences curves: What is preferred Type: Application

166. Which of the following is correct?

- A) Budget lines are linear and upward sloping; indifference curves are downward sloping and concave to the origin.
- B) Budget lines are linear and downward sloping; indifference curves are downward sloping and concave to the origin.
- C) Budget lines are linear and downward sloping; indifference curves are downward sloping and convex to the origin.
- D) Budget lines are downward sloping and convex to the origin; indifference curves are linear and downward sloping.

Ans: C Level: Easy Main Topic: A5.1 Indifference curve analysis
Page: 127-128 Subtopic: Indifferences curves: What is preferred
Type: Application

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167. The marginal rate of substitution of beef for chicken is the:

- A) number of units of chicken the consumer is prepared to give up to obtain one more unit of beef.
- B) number of units of beef the consumer is prepared to give up as income falls.
- C) number of units of beef the consumer must sacrifice to obtain one more unit of chicken.
- D) rate at which units of beef may be exchanged for units of chicken.

Ans: A Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 128 Subtopic: Indifferences curves: What is preferred Type: Definition

168. An indifference curve:

- A) may be either upward sloping or downward sloping, depending on whether the two products are complements or substitutes.
- B) is downward sloping and convex to the origin.
- C) is upward sloping and has a constant slope.
- D) is downward sloping and concave to the origin.

Ans: B Level: Easy Main Topic: A5.1 Indifference curve analysis Page: 128
Subtopic: Indifferences curves: What is preferred Type: Definition

169. The marginal rate of substitution measures the:

- A) magnitude of the substitution effect.
- B) total utility received by a consumer when equilibrium is achieved.
- C) extra utility which a consumer derives from successive units of a product.
- D) consumer's willingness to substitute one product for another so that total utility will remain constant.

Ans: D Level: Easy Main Topic: A5.1 Indifference curve analysis Page: 128
Subtopic: Indifferences curves: What is preferred Type: Definition

170. The marginal rate of substitution of good A for good B defines:

- A) how many more units of good A a consumer buys when the price of good B declines by one dollar.
- B) the rate at which the consumer's marginal utility increases when he increases consumption of goods A and B by 1 unit.
- C) how many more units of good B a consumer buys when his income increases and his consumption of good A is kept constant.
- D) how many units of good B a consumer is willing to give up when he receives one extra unit of good A, holding his total utility constant.

Ans: D Level: Easy Main Topic: A5.1 Indifference curve analysis Page: 128
Subtopic: Indifferences curves: What is preferred Type: Definition

Chapter 5 Consumer Choice and Utility Maximization

171. The marginal rate of substitution:

- A) may increase or decrease on a given indifference curve, depending on whether the substitution or the income effect is dominant.
- B) increases as one moves southeast along an indifference curve.
- C) is constant at all points on the budget line.
- D) declines as one moves southeast along an indifference curve.

Ans: D Level: Easy Main Topic: A5.1 Indifference curve analysis Page: 128
Subtopic: Indifferences curves: What is preferred Type: Definition

172. Which of the following is not characteristic of indifference curves?

- A) They are downward sloping.
- B) They are convex to the origin.
- C) Their slope diminishes as we move from northwest to southeast on a given curve.
- D) Curves closer to the origin reflect higher levels of total utility.

Ans: D Level: Easy Main Topic: A5.1 Indifference curve analysis Page: 128
Subtopic: Indifference map Type: Application

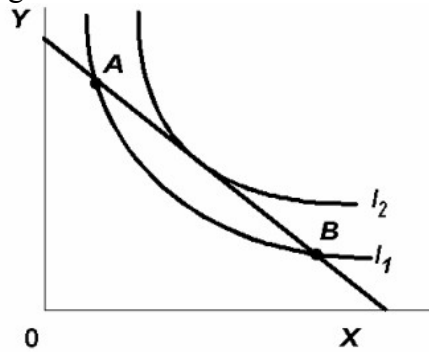
173. An indifference map implies that:

- A) money income is constant, but the prices of the two products vary directly with the quantities purchased.
- B) the two products under consideration are perfectly substitutable for one another.
- C) a consumer is better off to be at some point "high" on a given curve as opposed to a point "low" on the same curve.
- D) curves further from the origin yield higher levels of total utility.

Ans: D Level: Easy Main Topic: A5.1 Indifference curve analysis Page: 128
Subtopic: Indifference map Type: Definition

Chapter 5 Consumer Choice and Utility Maximization

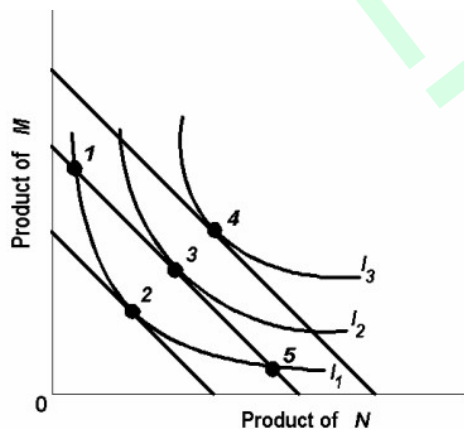
174. In the diagram:



- A) the consumer is indifferent between points A and B, but neither point maximizes his utility.
- B) the consumer is indifferent between points A and B and either point will maximize his utility.
- C) any combination of X and Y entailing more of Y and less of X than shown at B would be preferred.
- D) any combination of X and Y entailing more of X and less of Y than shown at A would be preferred.

Ans: A Level: Easy Main Topic: A5.1 Indifference curve analysis Page: 128
Subtopic: Indifference map Type: Graphic

Use the following to answer questions 175-177:



Chapter 5 Consumer Choice and Utility Maximization

175. Refer to the diagram above where the downward sloping linear lines are budget lines and I_1 , I_2 , and I_3 comprise an indifference map. The combinations of products M and N indicated by points 1, 2, and 5 are such that:
- A) point 2 yields more utility than either 1 or 5.
 - B) points 1 and 5 yield more utility than point 2.
 - C) points 1, 2, and 5 yield equal amounts of utility.
 - D) the levels of utility associated with these three points cannot be compared.

Ans: C Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 128 Subtopic: Indifference map Type: Graphic

176. Refer to the diagram above where the downward sloping linear lines are budget lines and I_1 , I_2 , and I_3 comprise an indifference map. The combinations of products M and N indicated by points 1, 3, and 5 are such that:
- A) all three imply the same level of utility.
 - B) 1 and 5 imply a higher level of utility than does 3.
 - C) 3 implies a higher level of utility than does 1 or 5.
 - D) none of the above statements are correct.

Ans: C Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 128 Subtopic: Indifference map Type: Graphic

177. Refer to the diagram above wherein the downward sloping linear lines are budget lines and I_1 , I_2 , and I_3 comprise an indifference map. With respect to points 2, 3, and 4, it can be said that:
- A) point 4 entails more utility than 3, but less than 2.
 - B) point 4 entails more utility than 2, but less than 3.
 - C) point 4 yields more utility than either 2 or 3.
 - D) the levels of utility associated with these three points cannot be compared.

Ans: C Level: Easy Main Topic: A5.1 Indifference curve analysis Page: 128
Subtopic: Indifference map Type: Graphic

178. Assume a diagram in which a budget line is imposed on an indifference map. A consumer will maximize her utility:
- A) at any point where the budget line and an indifference curve intersect.
 - B) at either point where the budget line intersects the horizontal and vertical axes.
 - C) where the budget line is tangent to an indifference curve.
 - D) where the ratio of the two product prices equals the reciprocal of the consumer's income.

Ans: C Level: Easy Main Topic: A5.1 Indifference curve analysis
Page: 128-129 Subtopic: Equilibrium at tangency Type: Application

Chapter 5 Consumer Choice and Utility Maximization

179. Indifference curve analysis indicates that consumer equilibrium exists:

- A) where an indifference curve has a slope of 1.
- B) where any two indifference curves intersect.
- C) at any point where the budget line intersects an indifference curve.
- D) where the budget line touches the highest possible indifference curve.

Ans: D Level: Easy Main Topic: A5.1 Indifference curve analysis
Page: 128-129 Subtopic: Equilibrium at tangency Type: Application

180. If a consumer is initially in equilibrium, an increase in money income will:

- A) move him to a new equilibrium on a lower indifference curve.
- B) make his indifference curves steeper, but will not alter the equilibrium position.
- C) have no effect on the equilibrium position because product prices have not changed.
- D) move him to a new equilibrium on a higher indifference curve.

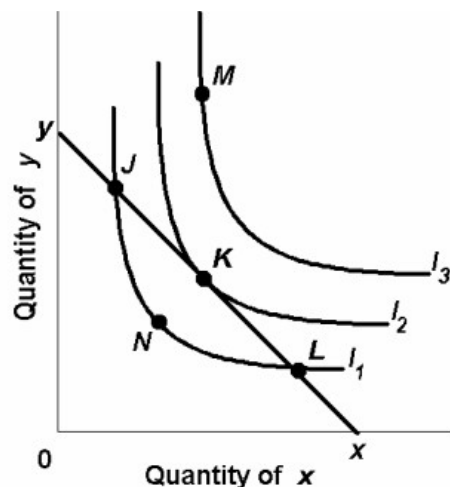
Ans: D Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 128-129 Subtopic: Equilibrium at tangency Type: Application

181. If a consumer chooses a combination of goods which lies inside of her budget line, the consumer:

- A) is maximizing utility.
- B) is spending in excess of her current income.
- C) could obtain more goods with her money income.
- D) has upward sloping indifference curves.

Ans: C Level: Easy Main Topic: A5.1 Indifference curve analysis
Page: 128-129 Subtopic: Equilibrium at tangency Type: Application

Use the following to answer questions 182-185:



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182. Refer to the diagram above where xy is the relevant budget line and I_1 , I_2 , and I_3 are indifference curves. The equilibrium position for the consumer is at:

- A) any point on xy .
- B) point M.
- C) point K.
- D) point J.

Ans: C Level: Easy Main Topic: A5.1 Indifference curve analysis
Page: 128-129 Subtopic: Equilibrium at tangency Type: Graphic

183. Refer to the diagram above where xy is the relevant budget line and I_1 , I_2 , and I_3 are indifference curves. If the consumer is initially at point L, he or she should:

- A) strive for point N by obtaining a larger money income.
- B) purchase more of X and less of Y.
- C) remain at that point to maximize utility.
- D) purchase more of Y and less of X.

Ans: D Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 128-129 Subtopic: Equilibrium at tangency Type: Graphic

184. Refer to the diagram above where xy is the relevant budget line and I_1 , I_2 , and I_3 are indifference curves. Point M:

- A) is the consumer's equilibrium position.
- B) is unobtainable.
- C) is inferior to point N.
- D) entails the highest attainable level of total utility.

Ans: B Level: Easy Main Topic: A5.1 Indifference curve analysis
Page: 128-129 Subtopic: Equilibrium at tangency Type: Graphic

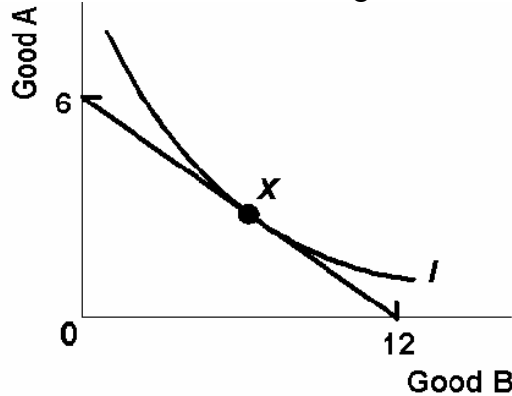
185. Refer to the diagram above where xy is the relevant budget line and I_1 , I_2 , and I_3 are indifference curves. At point K:

- A) $MU_x = MU_y$.
- B) $MRS = P_x/P_y$.
- C) $MRS = P_y/P_x$.
- D) P_x exceeds P_y .

Ans: B Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 129 Subtopic: Equivalency at equilibrium Type: Graphic

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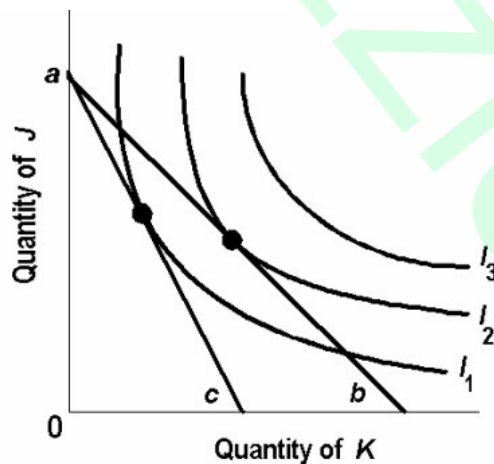
186. At point X on the graph below, which depicts a consumer's indifference curve for goods A and B and the relevant budget constraint line, we know that:



- A) $MU_A/P_A = MU_B/P_B$.
- B) $P_A = P_B$.
- C) $MU_A = MU_B$.
- D) $MU_A/P_A > MU_B/P_B$.

Ans: A Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 129 Subtopic: Equivalency at equilibrium Type: Graphic

Use the following to answer questions 187-189:



187. Refer to the diagram above. If the budget line shifts from ab to ac the:
- A) price of K has increased.
 - B) consumer's money income has fallen.
 - C) price of K has decreased.
 - D) price of J has increased.

Ans: A Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 130 Subtopic: The derivation of the demand curve Type: Graphic

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188. Refer to the diagram above. If the budget line shifts from ab to ac the:

- A) consumer's level of total utility will increase.
- B) consumer will purchase more of both J and K.
- C) consumer will purchase less of both J and K.
- D) consumer will purchase more of J and less of K.

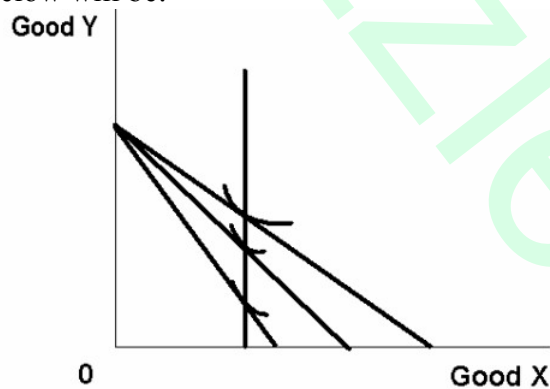
Ans: D Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 130 Subtopic: The derivation of the demand curve Type: Graphic

189. Refer to the diagram above. The equilibrium points shown in the diagram along with the price change implied by the shift of the budget line from ab to ac:

- A) are consistent with a downward sloping demand curve for product K.
- B) imply that the consumer's money income has declined, but his or her real income has increased.
- C) imply consumer irrationality since the dearer product is being substituted for the cheaper product.
- D) suggest that K is an inferior good.

Ans: A Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 130 Subtopic: The derivation of the demand curve Type: Graphic

190. The demand curve that is implied by the budget constraints and indifference curves below will be:

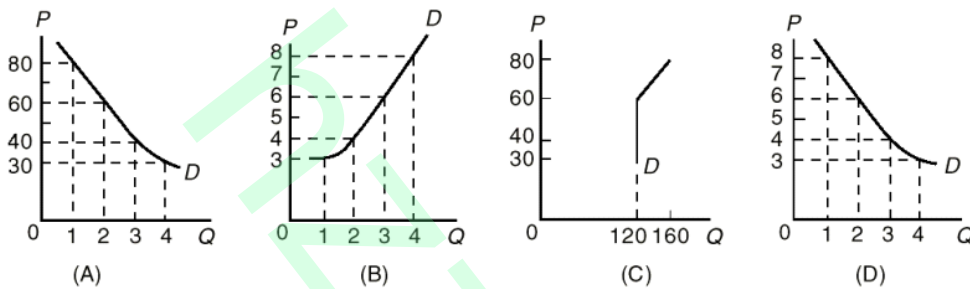
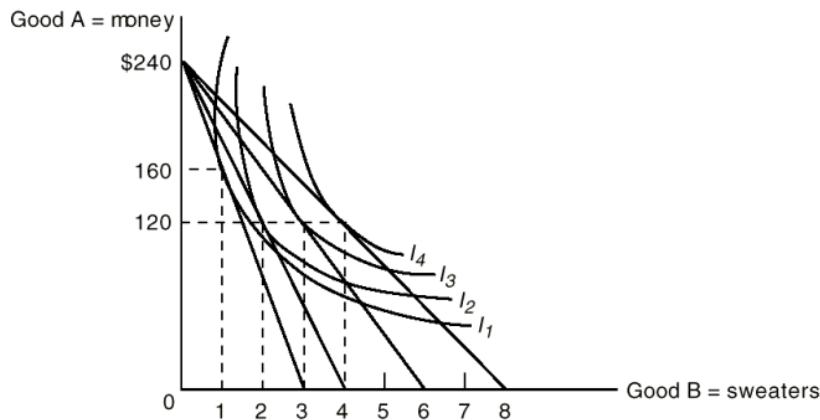


- A) perfectly elastic.
- B) relatively elastic..
- C) perfectly inelastic.
- D) relatively inelastic

Ans: C Level: Difficult Main Topic: A5.1 Indifference curve analysis
Page: 130 Subtopic: The derivation of the demand curve Type: Graphic

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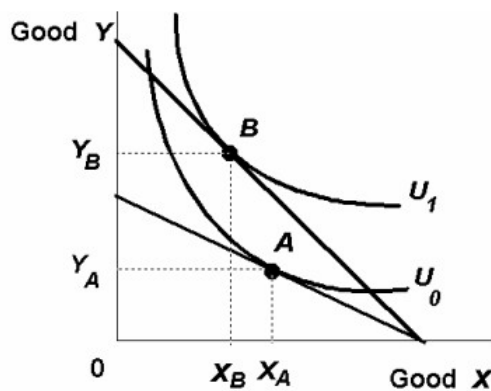
191. Given the indifference map and budget constraint lines, what is the demand curve for sweaters?



- A) graph A
- B) graph B
- C) graph C
- D) graph D

Ans: A Level: Difficult Main Topic: A5.1 Indifference curve analysis
Page: 130 Subtopic: The derivation of the demand curve Type: Graphic

Use the following to answer questions 192-194:



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192. Refer to the diagram above. Suppose the budget line shifts so that the consumer's equilibrium position changes from point A to point B. This means that the:
- A) price of Y has increased.
 - B) price of Y has decreased.
 - C) price of X has increased.
 - D) consumer's money income has increased.

Ans: B Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 130 Subtopic: The derivation of the demand curve Type: Graphic

193. Refer to the diagram above. The budget line shift which moves the consumer's equilibrium position from point A to point B suggests:
- A) an increase in the demand for product X.
 - B) a decrease in the demand for product X.
 - C) no change in the demand for product X.
 - D) that X is an inferior good.

Ans: B Level: Difficult Main Topic: A5.1 Indifference curve analysis
Page: 130 Subtopic: The derivation of the demand curve Type: Graphic

194. Refer to the diagram above. The budget line shift which moves the consumer's equilibrium position from point A to point B suggests:
- A) an increase in the quantity of Y demanded.
 - B) a decrease in the quantity of Y demanded.
 - C) a leftward shift in the demand curve for Y.
 - D) a rightward shift in the demand curve for Y.

Ans: A Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 130 Subtopic: The derivation of the demand curve Type: Graphic

195. Which of the following statements is correct?
- A) The income effect indicates that an increase in real income is associated with an increase in the price of a good.
 - B) The income effect of a normal good will reinforce its substitution effect.
 - C) The income effect indicates that a decrease in real income is associated with a decrease in the price of a good.
 - D) The income and substitution effects for any normal good will offset each other.

Ans: B Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 130-131 Subtopic: Income and substitution effects Type: Application

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196. Suppose X is a normal good. If the price of X decreases:

- A) the income and substitution effects will both cause the consumer to buy less of X.
- B) the income and substitution effects will both induce the consumer to buy more of X.
- C) the income effect will cause the consumer to buy more of X and the substitution effect will cause the consumer to buy less.
- D) the income effect will cause the consumer to buy less of X and the substitution will cause him to buy more.

Ans: B Level: Easy Main Topic: A5.1 Indifference curve analysis Page: 130-131
Subtopic: Income and substitution effects Type: Application

197. A change in the slope of a budget line is solely the result of a change in:

- A) consumer preference.
- B) the price of one good relative to the other.
- C) money income.
- D) the slope of the indifference curve that is tangent to the budget line.

Ans: B Level: Easy Main Topic: A5.1 Indifference curve analysis Page: 130-131
Subtopic: Income and substitution effects Type: Application

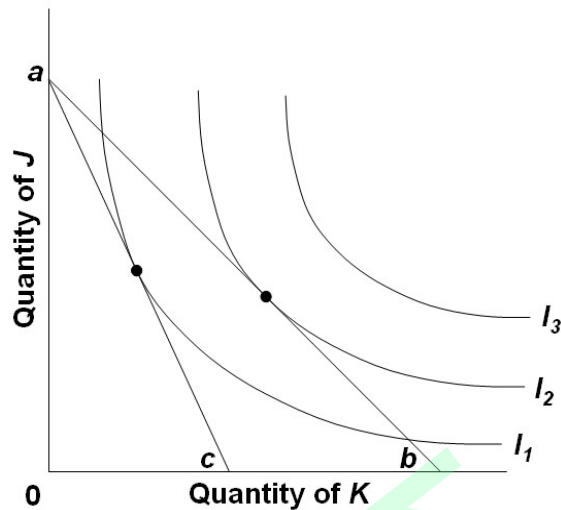
198. If a consumer is initially in equilibrium, an increase in money income will:

- A) move her to a new equilibrium on a lower indifference curve.
- B) make her indifference curves steeper, but will not alter the equilibrium position.
- C) have no effect on the equilibrium position because product price have not changed.
- D) move her to a new equilibrium on a higher indifference curve.

Ans: D Level: Easy Main Topic: A5.1 Indifference curve analysis Page: 130-131
Subtopic: Income and substitution effects Type: Application

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Use the following graph to answer questions 199-201:



199. Refer to the above diagram. If the budget line shifts from ab to ac the:
- A) price of K has increased.
 - B) consumer's money income has fallen.
 - C) price of K has decreased.
 - D) price of J has increased.

Ans: A Level: Easy Main Topic: A5.1 Indifference curve analysis Page: 130-131
Subtopic: Income and substitution effects Type: Application

200. Refer to the above diagram. If the budget line shifts from ab to ac the:
- A) consumer's level of total utility will increase.
 - B) consumer will purchase more of both J and K.
 - C) consumer will purchase less of both J and K.
 - D) consumer will purchase more of J and less of K.

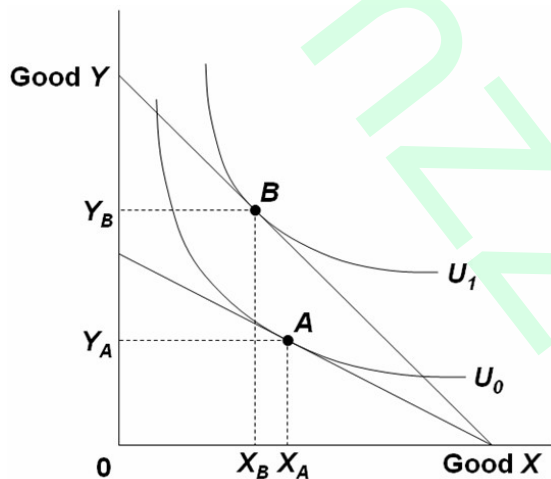
Ans: D Level: Easy Main Topic: A5.1 Indifference curve analysis Page: 130-131
Subtopic: Income and substitution effects Type: Application

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201. Refer to the above diagram. The equilibrium points shown in the diagram along with the Price change that produced the shift of the budget line from ab to ac :
- A) are consistent with a downward sloping demand curve for product K.
 - B) imply that the consumer's money income has declined, but his or her real income has increased..
 - C) imply consumer's irrationality since the dearer product is being substituted for the cheaper product.
 - D) suggest that K is an inferior good.

Ans: A Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 131-132 Subtopic: Income and substitution effects Type: Application

Use the following graph to answer questions 202-203:



202. Refer to the above diagram. Suppose the budget line shifts so that the consumer's equilibrium changes from point A to point B. This means that the:
- A) price of Y has increased.
 - B) price of Y has decreased.
 - C) price of X has increased.
 - D) consumer's money income has increased.

Ans: B Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 131-132 Subtopic: Income and substitution effects Type: Application

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203. Refer to the above diagram. The budget line shift which moves the consumer's equilibrium position from point A to point B suggests:

- A) an increase in the quantity of Y demanded.
- B) a decrease in the quantity of Y demanded.
- C) a leftward shift in the D curve for Y.
- D) a rightward shift in the D curve for Y.

Ans: A Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 131-132 Subtopic: Income and substitution effects Type: Application

204. Indifference curves are linear and budget lines are convex to the origin.

Ans: False Level: Easy Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Type: Definition

205. In drawing a particular budget line, money income and the prices of the two products are fixed.

Ans: True Level: Easy Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Type: Application

206. With fixed money income, an increase in the price of one good and a decrease in the price of the other will cause the new budget line to intersect the original budget line.

Ans: True Level: Difficult Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Type: Application

207. The lower the consumer's income, the higher her budget line.

Ans: False Level: Easy Main Topic: A5.1 Indifference curve analysis
Page: 126-127 Type: Application

208. Each point on a single indifference curve reflects the same level of total utility for a consumer.

Ans: True Level: Easy Main Topic: A5.1 Indifference curve analysis
Page: 127 Type: Application

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209. As a consumer moves down a given indifference curve, his or her total utility will diminish.

Ans: False Level: Easy Main Topic: A5.1 Indifference curve analysis
Page: 127 Type: Application

210. In moving toward northeast from the origin we encounter indifference curves which reflect higher and higher levels of total utility.

Ans: True Level: Easy Main Topic: A5.1 Indifference curve analysis Page: 127
Type: Application

211. It is possible for a consumer's indifference curves to intersect.

Ans: False Level: Easy Main Topic: A5.1 Indifference curve analysis
Page: 127-128 Type: Application

212. Consumer equilibrium occurs where the budget line is tangent to an indifference curve.

Ans: True Level: Easy Main Topic: A5.1 Indifference curve analysis
Page: 128-129 Type: Definition

213. A rational consumer will try to get on the highest indifference curve which his or her income will permit.

Ans: True Level: Easy Main Topic: A5.1 Indifference curve analysis Page: 129
Type: Application

214. Marginal utility theory and indifference curve analysis are both consistent with the law of demand.

Ans: True Level: Moderate Main Topic: A5.1 Indifference curve analysis
Page: 130 Type: Application

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