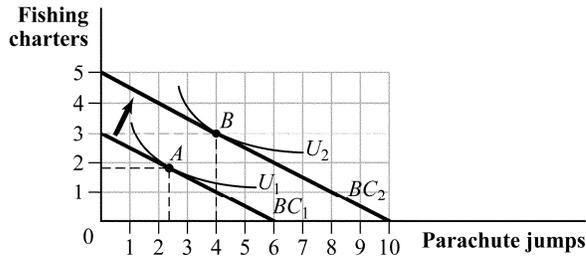


Quiz #3, February 23, 2017

Use the following to answer question 1.

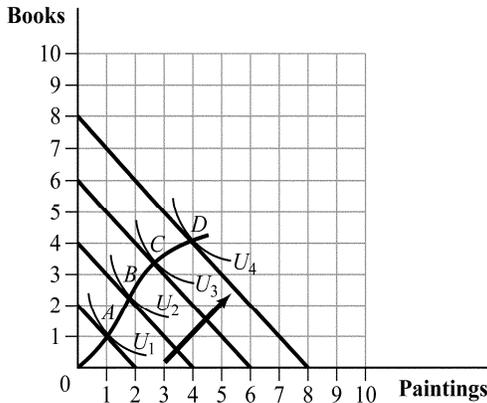
Figure 5.1



1. (Figure 5.1) Francis spends his income on fishing charters and jumping out of airplanes. Which of the following statements is TRUE?
 - A) Fishing charters are an inferior good.
 - B) An increase in income will cause the optimal consumption bundle to move from point A to point B .
 - C) Parachute jumps are an inferior good.
 - D) An increase in the price of parachute jumps could cause the optimal consumption bundle to move from point A to point B .
2. A basic assumption of the long run is that a firm:
 - A) cannot change the amount of labor or capital that it employs.
 - B) can change the amount of labor and capital that it employs.
 - C) can change the amount of capital that it employs but not the amount of labor.
 - D) cannot change the amount of capital that it employs but can change the amount of labor.

Use the following to answer question 3.

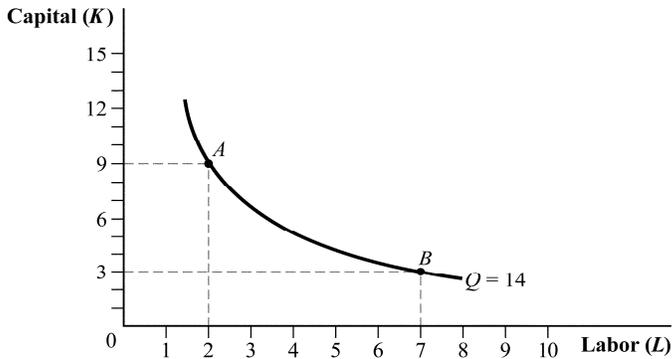
Figure 5.3



3. (Figure 5.3) Which of the following statements is TRUE?
- A) Books are an inferior good at income levels greater than those associated with bundle *B*.
 - B) Books are an inferior good at income levels greater than those associated with bundle *C*.
 - C) Both books and paintings are normal goods up to the income level corresponding to bundle *D*.
 - D) Paintings are an inferior good at income levels higher than those associated with these bundles.
4. Suppose that good *X* and good *Y* are substitutes and good *X* and good *Z* are complements. When the price of a good *Y* _____ or the price of good *Z* _____, the demand for good *X* shifts outward.
- A) increases; decreases
 - B) increases; increases
 - C) decreases; decreases
 - D) decreases; increases
5. Suppose the slope of a short-run production function is given by $2/L^{0.5}$. Which of the following statements is (are) TRUE?
- I. The marginal product of the fifth worker is 0.20.
 - II. The production function exhibits increasing marginal returns.
 - III. The marginal product of the sixteenth worker is 0.50.
 - IV. The production function's slope eventually changes from positive to negative as the firm produces more and more.
- A) II and III
 - B) I and IV
 - C) III
 - D) I, II, and IV

Use the following to answer question 6.

Figure 6.3



6. (Figure 6.3) Which of the following statements is (are) TRUE?

- I. More output is produced at point A than at point B .
- II. The ratio of the marginal product of labor to the marginal product of capital is higher at point A than at point B .
- III. The $MRTS_{LK}$ is equal at points A and B .

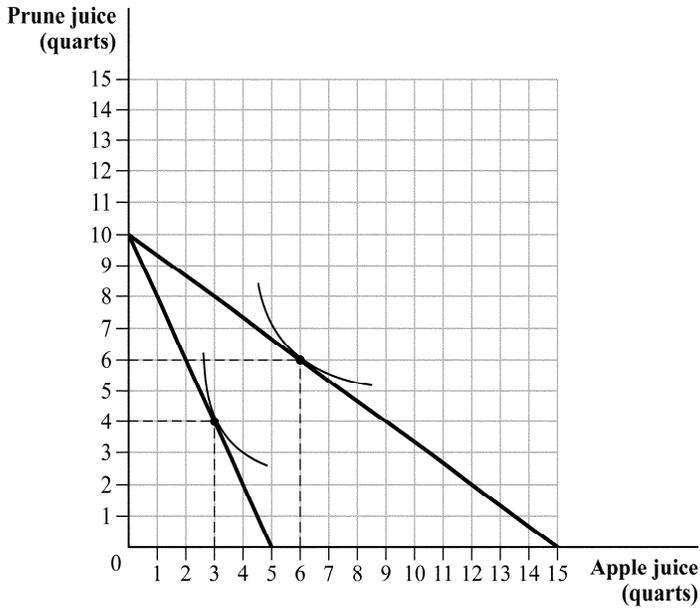
- A) I, II, and III B) II C) III D) II and III

7. Suppose a firm is producing 2,475 units of output by hiring 50 workers ($W = \$20$ per hour) and 25 units of capital ($R = \$10$ per hour). The marginal product of labor and marginal product of capital are 40 and 25, respectively. Is the firm minimizing the cost of producing 2,475 units of output?

- A) Yes, the ratio of the number of workers to the wage equals the ratio of the number of units of capital to the rental rate.
- B) No, the firm should use more labor and less capital.
- C) No, the firm should use more capital and less labor.
- D) No, the firm should use more of both labor and capital.

Use the following to answer question 8.

Figure 5.8

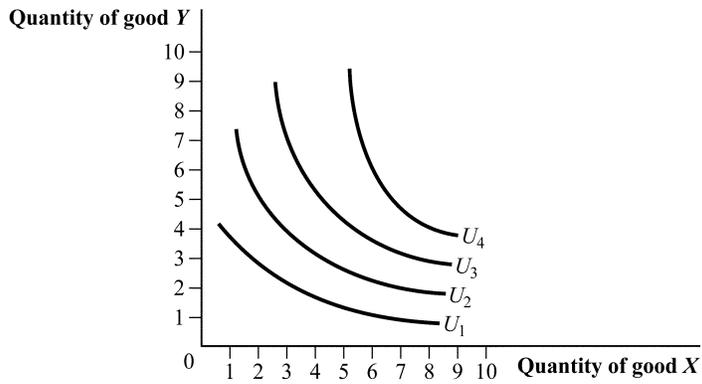


8. (Figure 5.8) Refer to Figure 5.8, depicting the consumer's indifference curves and budget constraints. Suppose the consumer has \$20 of income to spend on apple and prune juice. Which of the following statement(s) is (are) TRUE?
- I. At \$2 per quart, the consumer buys 3 quarts of apple juice.
 - II. At \$4 per quart, the consumer buys 3 quarts of apple juice.
 - III. At \$1.33 per quart, the consumer buys 6 quarts of apple juice.
 - IV. At \$0.75 per quart, the consumer buys 6 quarts of apple juice.

- A) I and II B) II and III C) II and IV D) I

Use the following to answer question 9.

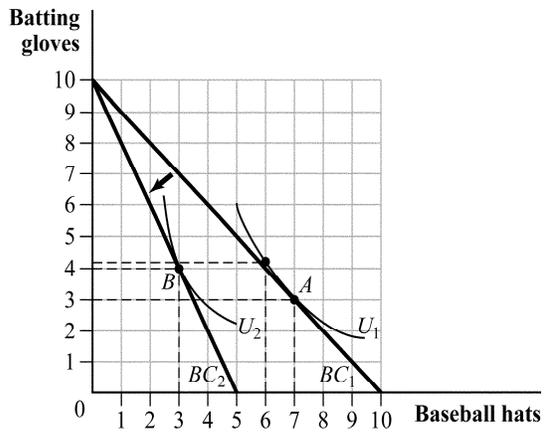
Figure 5.12



9. (Figure 5.12) The substitution effect will be largest for indifference curve:
A) U_1 . B) U_2 . C) U_3 . D) U_4 .

Use the following to answer question 10.

Figure 5.16



10. (Figure 5.16) The income effect of the price increase causes consumption of baseball hats to:
- A) decrease by 1. B) decrease by 3. C) decrease by 4. D) increase by 1.

Answer Key - S17-3

1. B
2. B
3. C
4. A
5. C
6. B
7. C
8. B
9. A
10. B