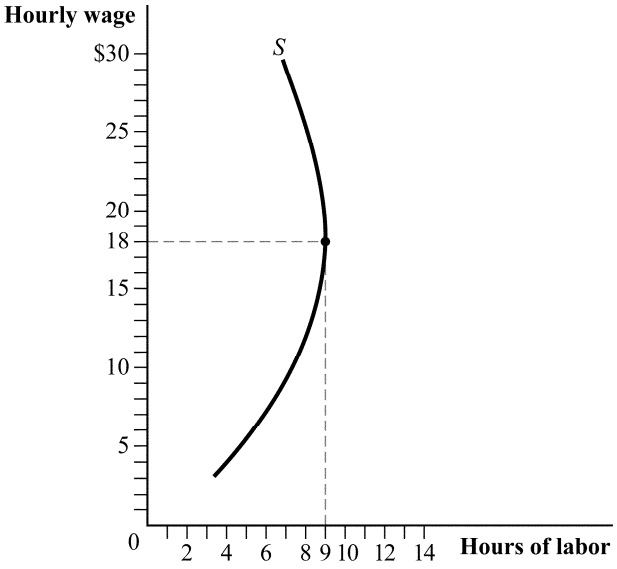
Quiz #3 -- October 6, 2022

You have until the end of class to complete the quiz. Answer the questions on the answer sheet. Pick the alternative that best completes the statement or answers the question. Be sure to write and bubble in your name and PantherID on the answer sheet. You may keep the test booklet.

Use the following to answer question 1.

Figure 5.13



1. (Figure 5.13) Which of the following statements is (are) TRUE?
   I. At a wage above $18, the income effect dominates the substitution effect.
   II. At a wage below $18, the substitution effect dominates the income effect.
   III. At a wage above $18, the substitution effect dominates the income effect.
   IV. At a wage below $18, the income effect dominates the substitution effect.

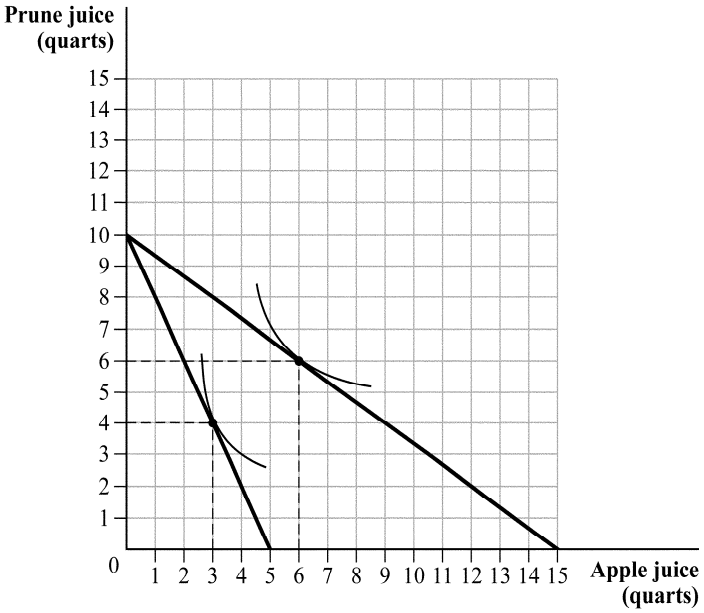
   A) I and II B) III and IV C) I D) II and III

2. 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; increases
   D) decreases; decreases

3. Suppose that $MU_X = Y$ and $MU_Y = X$. The prices of good X and good Y are \$5 and \$4, respectively. How many units of good X does the consumer buy if she has \$410 of income?
   A) 25 B) 33 C) 41 D) 15

Use the following to answer question 4.

Figure 5.8



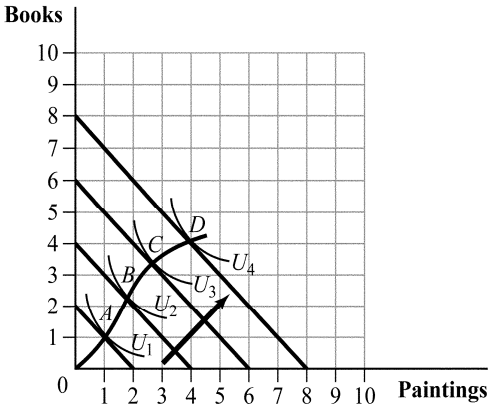
4. (Figure 5.8) Refer to Figure 5.8, depicting the consumer's indifference curves and budget constraints. Suppose the consumer has \$20 of income to spend on apple and prune juice. Which of the following statement(s) is (are) TRUE?
   I. At \$2 per quart, the consumer buys 3 quarts of apple juice.
 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

5. Frank's utility function is $U = 10X + 6Y$. Frank has a budget of \$60 to spend on goods X and Y. The price of good X is \$3 and the price of good Y is \$2. How many units of good X and good Y does Frank purchase?
   A) $X = 15$ and $Y = 5$
   B) $X = 10$ and $Y = 20$
   C) $X = 0$ and $Y = 10$
   D) $X = 20$ and $Y = 0$

Use the following to answer question 6.

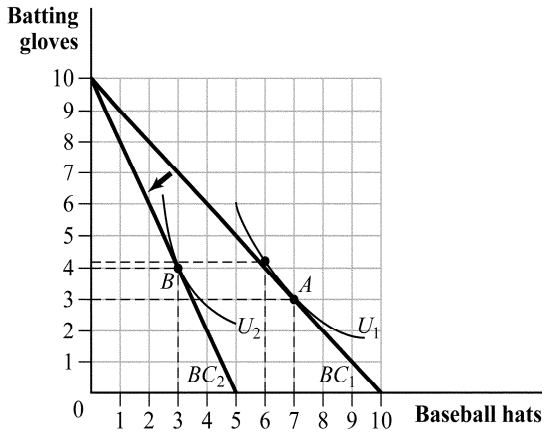
Figure 5.3



6. (Figure 5.3) The curve that goes through the points *A, B, C,* and *D* is called the:
   A) optimal consumption path.
   B) Engel curve.
   C) income elasticity curve.
   D) income expansion path.

Use the following to answer question 7.

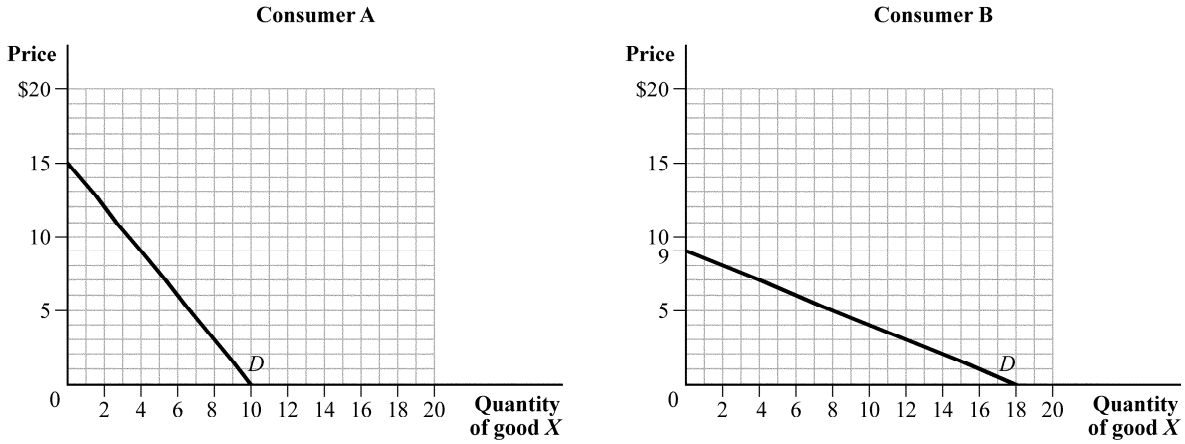
Figure 5.16



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

Use the following to answer question 8.

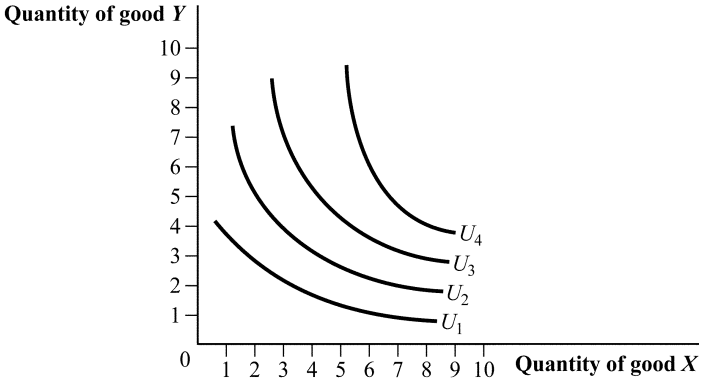
Figure 5.22



8. (Figure 5.22) Suppose there are only two consumers in the market for good *X*. The total quantity demanded in the market at a price of $3 is _____, and the total quantity demanded in the market at a price of $12 is _____.
   A) 18; 0 B) 20; 2 C) 20; 5 D) 6; 3

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_3. B) U_1. C) U_4. D) U_2.

10. Ryan's Engel curve for potato chips is $I = 300C$, where I is weekly income and C measures the number of bags of potato chips. Ryan considers potato chips a(n):
    A) inferior good at income levels above $30,000.
    B) inferior good.
    C) normal good.
    D) inferior good at income levels above $60,000.

Answer Key - F22-3

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