

**AEDE 503**  
**Quiz 2**

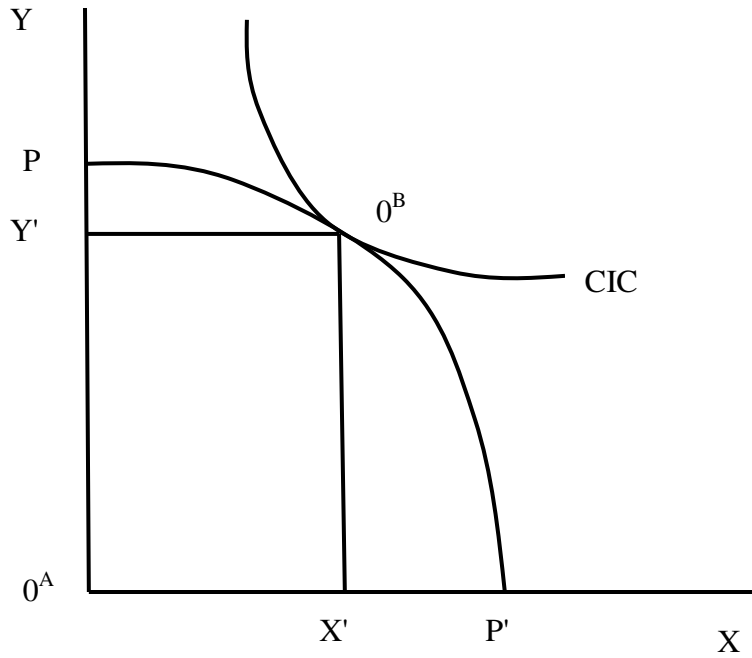
Name: \_\_\_\_\_

**Circle the correct answer:**

1. The first theorem of welfare economics states:
  - a. An equilibrium achieved by a competitive market will not be Pareto efficient
  - b. An equilibrium achieved by a competitive market will be a fair outcome
  - c. An equilibrium achieved by a competitive market will be Pareto efficient**
  - d. An equilibrium achieved by a competitive market will be an unfair outcome
  
2. The first theorem of welfare economics assumes:
  - a. There are many market imperfections
  - b. There are a few market imperfections
  - c. There are no market imperfections**
  - d. There is just one market imperfection
  
3. Competitive markets are never a benchmark to judge actual markets by:
  - a. True
  - b. False**
  
4. With convex indifference curves, the second welfare theorem implies that:
  - a. Every Pareto efficient outcome is associated with a set of competitive prices**
  - b. No Pareto efficient outcome is associated with a set of competitive prices
  - c. Some Pareto efficient outcomes are associated with a set of competitive prices
  - d. Some Pareto efficient outcomes are not associated with a set of competitive prices
  
5. The second welfare theorem suggests that:
  - a. The problems of efficiency and distribution cannot be separated
  - b. Only the problem of efficiency is relevant
  - c. The problems of efficiency and distribution can be separated**
  - d. Only the problem of distribution is relevant
  
6. By the second-welfare theorem, redistribution should occur via lump-sum transfers:
  - (a) True**
  - (b) False
  
7. If a market is already in competitive equilibrium, distorting relative prices will:
  - (a) Always result in a Pareto efficient outcome
  - (b) Sometimes result in a Pareto efficient outcome
  - (c) Never result in a Pareto efficient outcome**
  - (d) Result in a unique Pareto efficient outcome

8. In production economics, capital is defined as the financial resources of the firm:
- (a) True
  - (b) False**
9. Under constant returns to scale, if inputs are doubled:
- (a) Output of a good stays the same
  - (b) Output of a good more than doubles
  - (c) Output of a good doubles**
  - (d) Output of a good less than doubles
10. One assumption underlying a concave production possibilities frontier is:
- (a) Both goods are labor-intensive in production
  - (b) One good is labor intensive and one good is capital-intensive in production**
  - (c) Both goods are capital-intensive in production
  - (d) Neither good is produced with capital or labor
11. With two consumers, the slope of a community indifference curve is:
- (a) One consumer's marginal rate of substitution
  - (b) The other consumer's marginal rate of substitution
  - (c) The economy's marginal rate of substitution**
  - (d) The difference between two consumers' marginal rates of substitution
12. Efficiency in production *and* exchange is where:
- (a) Only equalized marginal rates of substitution are equal to relative prices
  - (b) Equalized marginal rates of substitution and the marginal rate of transformation are simultaneously equal to relative prices**
  - (c) The marginal rate of transformation is equal to relative prices
  - (d) Equalized marginal rates of substitution and the marginal rate of transformation are not simultaneously equal to relative prices

**For an extra 2 points:** With a concave production possibilities frontier, and convex community indifference curves, use a diagram to show how the Edgeworth Box of Exchange is derived when we allow for production.



Your diagram should look something like this, where the two goods are X and Y, there are two consumers A and B, the concave production possibility curve is PP', and the convex community indifference tangent to it is CIC. From this you can work out that the Edgeworth Box is  $0^A Y' 0^B X'$ .