Chapter 3—Interdependence and the Gains from Trade

MULTIPLE CHOICE

1. What is the best reason for people to provide you with goods and services?
   a. They are acting out of generosity.
   b. They are acting because they like you.
   c. They do so because they get something in return.
   d. They are required to do so by the government.

   ANS: C PTS: 1 DIF: Easy REF: 49
   BLM: Remember NOT: Micro TB_3-1

2. A rancher can produce only hamburgers, while a farmer can produce only French fries. If the rancher and the farmer like both foods, which of the following is most likely?
   a. They cannot gain from trade.
   b. They could gain from trade under certain circumstances, but not always.
   c. They could gain from trade because each would enjoy a greater variety of food.
   d. They could gain from trade only if each were indifferent between hamburgers and French fries.

   ANS: C PTS: 1 DIF: Average REF: 51-52
   BLM: Higher Order NOT: Micro TB_3-2

3. Regan grows flowers and makes vases. Jayson also grows flowers and makes vases, but Regan is better at producing both. Who has an absolute or comparative advantage in what activity?
   a. Regan has an absolute advantage in both activities.
   b. Jayson has an absolute advantage in both activities.
   c. Regan has a comparative advantage in growing flowers.
   d. Jayson has a comparative advantage in growing flowers.

   ANS: A PTS: 1 DIF: Average REF: 50-53
   BLM: Higher Order NOT: Micro TB_3-3

4. If there is no trade, which of the following is most likely?
   a. A country is better off because it will become self-sufficient.
   b. A country's production possibilities frontier is also its consumption possibilities frontier.
   c. A country can still benefit from international specialization.
   d. A country has more product variety available.

   ANS: B PTS: 1 DIF: Average REF: 50-53
   BLM: Remember NOT: Micro TB_3-4

5. If there is trade, which of the following is most likely?
   a. A country is worse off because it becomes dependent on other countries.
   b. A country will produce a greater variety of goods and services to trade.
   c. A country's consumption possibilities frontier can be outside its production possibilities frontier.
   d. A country will experience a lower unemployment rate.

   ANS: C PTS: 1 DIF: Average REF: 50-53
   BLM: Remember NOT: Micro TB_3-5

6. When can a country's consumption possibilities frontier be outside its production possibilities frontier?
   a. if additional resources become available
   b. if there is an increase in the level of technology
   c. if the country engages in trade
   d. if resources are shiftable

   ANS: C PTS: 1 DIF: Challenging REF: 53-54
   BLM: Remember NOT: Micro TB_3-6

7. When will a production possibilities frontier be linear and not bowed out?
   a. if no tradeoffs exist
   b. if the tradeoff between the two goods is always at a constant rate
   c. if unemployment is zero
   d. if resources are allocated efficiently

   ANS: B PTS: 1 DIF: Average REF: 51-52
   BLM: Remember NOT: Micro TB_3-7

8. What is the difference between production possibilities frontiers that are bowed out and those that are linear?
   a. Bowed out production possibilities frontiers illustrate tradeoffs, whereas linear production possibilities frontiers do not.
   b. Bowed out production possibilities frontiers show increasing opportunity cost, whereas linear ones show constant opportunity cost.
   c. Bowed out production possibilities frontiers are the result of perfectly shiftable resources whereas linear production possibilities frontiers are not.
   d. Bowed out production possibilities frontiers illustrate real world conditions less than linear production possibilities frontiers.

   ANS: B PTS: 1 DIF: Challenging REF: 51-52
   BLM: Remember NOT: Micro TB_3-8

9. Which of the following is NOT an implication of our model of trade?
   a. Trade allows for specialization.
   b. Trade is good for nations.
   c. Trade is based on absolute advantage.
   d. Trade allows individuals to consume more than otherwise.

   ANS: C PTS: 1 DIF: Average REF: 52-53
   BLM: Higher Order NOT: Micro TB_3-9

10. Suppose labour in Mexico is less productive than labour in Canada. What can we conclude from this information?
    a. that neither nation can benefit from trade
    b. that Mexico can benefit from trade, but Canada cannot
    c. that Mexico will not have a comparative advantage in any good
    d. that both nations can benefit from trade

    ANS: D PTS: 1 DIF: Average REF: 54-56
    BLM: Remember NOT: Micro TB_3-10

Table 3-1

	Labour hours needed to make 1 kilogram:		Kilograms produced in 40 hours:	
	Meat	Potatoes	Meat	Potatoes
Farmer	8	2	5	20
Rancher	4	5	10	8

11. Refer to Table 3-1. What is the opportunity cost of 1 kg of meat for the farmer?
    a. 1/4 hour of labour
    b. 4 hours of labour
    c. 4 kg of potatoes
    d. 1/4 kg of potatoes

    ANS: C PTS: 1 DIF: Challenging REF: 51-52
    BLM: Higher Order NOT: Micro TB_3-11

12. Refer to Table 3-1. What is the opportunity cost of 1 kg of meat for the rancher?
    a. 4 hours of labour
    b. 5 hours of labour
    c. 5/4 kg of potatoes
    d. 4/5 kg of potatoes

    ANS: D PTS: 1 DIF: Challenging REF: 51-52
    BLM: Higher Order NOT: Micro TB_3-12

13. Refer to Table 3-1. What is the opportunity cost of 1 kg of potatoes for the farmer?
    a. 8 hours of labour
    b. 2 hours of labour
    c. 4 kg of meat
    d. 1/4 kg of meat

    ANS: D PTS: 1 DIF: Challenging REF: 55-56
    BLM: Higher Order NOT: Micro TB_3-13

14. Refer to Table 3-1. What is the opportunity cost of 1 kg of potatoes for the rancher?
    a. 4 hours of labour
    b. 5 hours of labour
    c. 5/4 kg of meat
    d. 4/5 kg of meat

    ANS: C PTS: 1 DIF: Challenging REF: 55-56
    BLM: Higher Order NOT: Micro TB_3-14

15. Refer to Table 3-1. What does each producer have an absolute advantage in?
    a. The farmer has an absolute advantage in meat, and the rancher has an absolute advantage in potatoes.
    b. The farmer has an absolute advantage in potatoes, and the rancher has an absolute advantage in meat.
    c. The rancher has an absolute advantage in neither good, and the farmer has an absolute advantage in both goods.
    d. The farmer has an absolute advantage in neither good, and the rancher has an absolute advantage in both goods.

    ANS: B PTS: 1 DIF: Average REF: 55-56
    BLM: Higher Order NOT: Micro TB_3-15

16. Refer to Table 3-1. What does each producer have an absolute or comparative advantage in?
    a. The rancher has an absolute advantage in both goods, and the farmer has a comparative advantage in meat.
    b. The rancher has an absolute advantage in meat, and the farmer has a comparative advantage in potatoes.
    c. The rancher has an absolute advantage in meat, and the farmer has a comparative advantage in neither good.
    d. The rancher has an absolute advantage in both goods, and the farmer has a comparative advantage in potatoes.

    ANS: B PTS: 1 DIF: Challenging REF: 55-56
    BLM: Higher Order NOT: Micro TB_3-16

17. Refer to Table 3-1. What does each producer have an absolute or comparative advantage in?
    a. The farmer has an absolute advantage in potatoes, and the rancher has a comparative advantage in meat.
    b. The farmer has an absolute advantage in meat, and the rancher has a comparative advantage in potatoes.
    c. The farmer has an absolute advantage in neither good, and the rancher has a comparative advantage in potatoes.
    d. The farmer has an absolute advantage in neither good, and the rancher has a comparative advantage in meat.

    ANS: A PTS: 1 DIF: Challenging REF: 55-56
    BLM: Higher Order NOT: Micro TB_3-17

18. Refer to Table 3-1. What does each producer have a comparative advantage in?
    a. The rancher has a comparative advantage in neither good, and the farmer has a comparative advantage in both goods.
    b. The rancher has a comparative advantage in both goods, and the farmer has a comparative advantage in neither good.
    c. The rancher has a comparative advantage in meat, and the farmer has a comparative advantage in potatoes.
    d. The rancher has a comparative advantage in potatoes, and the farmer has a comparative advantage in meat.

    ANS: C PTS: 1 DIF: Challenging REF: 55-56
    BLM: Higher Order NOT: Micro TB_3-18

19. Refer to Table 3-1. How could the farmer and rancher both benefit?
    a. by the farmer specializing in meat and the rancher specializing in potatoes
    b. by the farmer specializing in potatoes and the rancher specializing in meat
    c. by the farmer specializing in neither good and the rancher specializing in both goods
    d. by the farmer specializing in both goods and the rancher specializing in neither good

    ANS: B PTS: 1 DIF: Average REF: 55-56
    BLM: Higher Order NOT: Micro TB_3-19

Table 3-2

	Labour hours needed to make 1 kilogram:		Kilograms produced in 40 hours:	
	Meat	Potatoes	Meat	Potatoes
Farmer	4	1	10	40
Rancher	4	5	10	8

20. Refer to Table 3-2. What is the opportunity cost of 1 kilogram of meat for the farmer?
    a. 1/4 hour of labour
    b. 4 hours of labour
    c. 4 kilograms of potatoes
    d. 1/4 kilogram of potatoes

    ANS: C PTS: 1 DIF: Challenging REF: 55-56
    BLM: Higher Order NOT: Micro TB_3-20

21. Refer to Table 3-2. What is the opportunity cost of 1 kilogram of meat for the rancher?
    a. 4 hours of labour
    b. 5 hours of labour
    c. 5/4 kilograms of potatoes
    d. 4/5 kilogram of potatoes

    ANS: D PTS: 1 DIF: Challenging REF: 55-56
    BLM: Higher Order NOT: Micro TB_3-21

22. Refer to Table 3-2. What is the opportunity cost of 1 kilogram of potatoes for the farmer?
    a. 8 hours of labour
    b. 2 hours of labour
    c. 4 kilograms of meat
    d. 1/4 kilogram of meat

    ANS: D PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-22

23. Refer to Table 3-2. What is the opportunity cost of 1 kilogram of potatoes for the rancher?
    a. 4 hours of labour
    b. 5 hours of labour
    c. 5/4 pounds of meat
    d. 4/5 pound of meat

    ANS: C PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-23

24. Refer to Table 3-2. What does each producer have an absolute advantage in?
    a. The farmer has an absolute advantage in meat, and the rancher has an absolute advantage in potatoes.
    b. The farmer has an absolute advantage in potatoes, and the rancher has an absolute advantage in meat.
    c. The farmer has an absolute advantage in neither good, and the rancher has an absolute advantage in both goods.
    d. The farmer has an absolute advantage in potatoes, and the rancher has an absolute advantage in neither good.

    ANS: D PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-24

25. Refer to Table 3-2. What does each producer have an absolute or comparative advantage in?
    a. The rancher has an absolute advantage in both goods, and the farmer has a comparative advantage in meat.
    b. The rancher has an absolute advantage in meat, and the farmer has a comparative advantage in potatoes.
    c. The rancher has an absolute advantage in meat, and the farmer has a comparative advantage in neither good.
    d. The rancher has an absolute advantage in neither good, and the farmer has a comparative advantage in potatoes.

    ANS: D PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-25

26. Refer to Table 3-2. What does each producer have an absolute or comparative advantage in?
    a. The farmer has an absolute advantage in neither good, and the rancher has a comparative advantage in meat.
    b. The farmer has an absolute advantage in meat, and the rancher has a comparative advantage in potatoes.
    c. The farmer has an absolute advantage in potatoes, and the rancher has a comparative advantage in meat.
    d. The farmer has an absolute advantage in neither good, and the rancher has a comparative advantage in potatoes.

    ANS: C PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-26

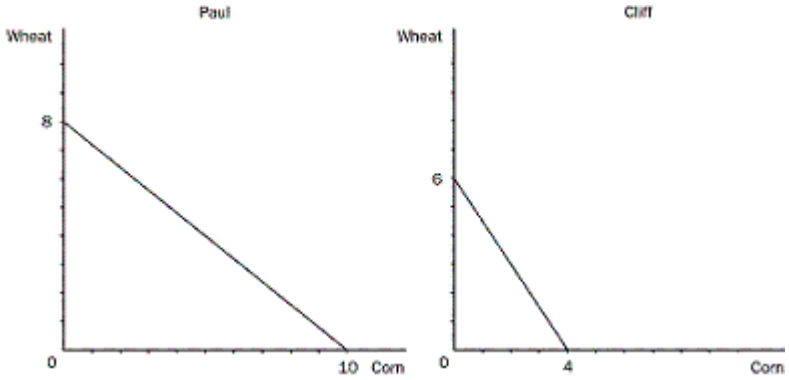
27. Refer to Table 3-2. What does each producer have a comparative advantage in?
    a. The rancher has a comparative advantage in neither good, and the farmer has a comparative advantage in both goods.
    b. The rancher has a comparative advantage in both goods, and the farmer has a comparative advantage in neither good.
    c. The rancher has a comparative advantage in meat, and the farmer has a comparative advantage in potatoes.
    d. The rancher has a comparative advantage in potatoes, and the farmer has a comparative advantage in meat.

    ANS: C PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-27

28. Refer to Table 3-2. How could the farmer and rancher both benefit?
    a. by the farmer specializing in meat and the rancher specializing in potatoes
    b. by the farmer specializing in potatoes and the rancher specializing in meat
    c. by the farmer specializing in neither good and the rancher specializing in both goods
    d. by the farmer specializing in both goods and the rancher specializing in neither good

    ANS: B PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-28

Figure 3-1



29. Refer to Figure 3-1. If Paul divides his time equally between corn and wheat, what will he be able to produce?
    a. 2 bushels of wheat and 2 bushels of corn
    b. 3 bushels of wheat and 3 bushels of corn
    c. 4 bushels of wheat and 5 bushels of corn
    d. 4 bushels of wheat and 6 bushels of corn

    ANS: C PTS: 1 DIF: Average REF: 55
    BLM: Higher Order NOT: Micro TB_3-9

30. Refer to Figure 3-1. What is the opportunity cost of 1 bushel of wheat for Cliff?
    a. 1/3 bushel of corn
    b. 2/3 bushel of corn
    c. 1 bushel of corn
    d. 3/2 bushels of corn

    ANS: B PTS: 1 DIF: Average REF: 55
    BLM: Higher Order NOT: Micro TB_3-30

31. Refer to Figure 3-1. Assume that both Paul and Cliff divide their time equally between the production of corn and wheat, and they do not trade. If they were the only producers of corn and wheat, what would the total production of wheat and corn be?
    a. 8 bushels of wheat and 7 bushels of corn
    b. 7 bushels of wheat and 6 bushels of corn
    c. 6 bushels of wheat and 8 bushels of corn
    d. 7 bushels of wheat and 7 bushels of corn

    ANS: D PTS: 1 DIF: Challenging REF: 55
    BLM: Higher Order NOT: Micro TB_3-31

32. Refer to Figure 3-1. Assume that Cliff and Paul were both producing wheat and corn, and each was dividing their time equally between the two. Then they decide to specialize in the product they have a comparative advantage in. What would happen to the total production of corn?
    a. It would increase by 1 bushel.
    b. It would increase by 3 bushels.
    c. It would increase by 5 bushels.
    d. It would increase by 7 bushels.

    ANS: B PTS: 1 DIF: Challenging REF: 55
    BLM: Higher Order NOT: Micro TB_3-32

33. Refer to Figure 3-1. Assume that Cliff and Paul were both producing wheat and corn, and each was dividing their time equally between the two. Then they decide to specialize in the product they have a comparative advantage in and trade 3 bushels of wheat for 3 bushels of corn. What would Cliff now be able to consume?
    a. 4 bushels of wheat and 3 bushels of corn
    b. 3 bushels of wheat and 4 bushels of corn
    c. 3 bushels of wheat and 3 bushels of corn
    d. 2 bushels of wheat and 3 bushels of corn

    ANS: C PTS: 1 DIF: Challenging REF: 55
    BLM: Higher Order NOT: Micro TB_3-33

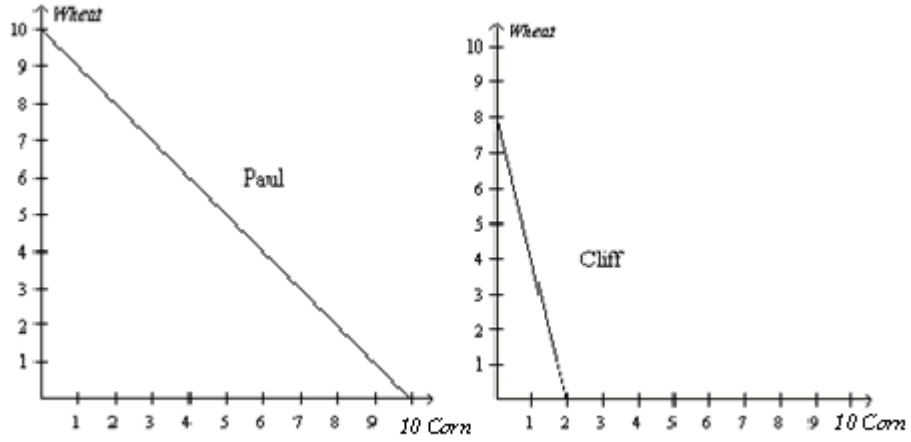
34. Refer to Figure 3-1. What do the two producers have an absolute advantage in?
    a. Paul has an absolute advantage in both wheat and corn.
    b. Paul has an absolute advantage in wheat, and Cliff has an absolute advantage in corn.
    c. Cliff has an absolute advantage in wheat, and Paul has an absolute advantage in corn.
    d. Cliff has an absolute advantage in both wheat and corn.

    ANS: A PTS: 1 DIF: Average REF: 55
    BLM: Higher Order NOT: Micro TB_3-34

35. Refer to Figure 3-1. What do the two producers have a comparative advantage in?
    a. Paul has a comparative advantage in both wheat and corn.
    b. Paul has a comparative advantage in wheat, and Cliff has a comparative advantage in corn.
    c. Cliff has a comparative advantage in wheat, and Paul has a comparative advantage in corn.
    d. Cliff has a comparative advantage in both wheat and corn.

    ANS: C PTS: 1 DIF: Challenging REF: 55
    BLM: Higher Order NOT: Micro TB_3-35

Figure 3-2



36. Refer to Figure 3-2. If Paul divides his time equally between corn and wheat, what will he be able to produce?
    a. 4 bushels of wheat and 1 bushel of corn
    b. 4 bushels of wheat and 5 bushels of corn
    c. 5 bushels of wheat and 4 bushels of corn
    d. 5 bushels of wheat and 5 bushels of corn

    ANS: D PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-36

37. Refer to Figure 3-2. What is the opportunity cost of 1 bushel of wheat for Cliff?
    a. 1/4 bushel of corn
    b. 1/2 bushel of corn
    c. 1 bushel of corn
    d. 4 bushels of corn

    ANS: A PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-37

38. Refer to Figure 3-2. Assume that both Paul and Cliff divide their time equally between the production of corn and wheat, and they do not trade. If they were the only producers of corn and wheat, what would the total production of wheat and corn be?
    a. 7 bushels of wheat and 8 bushels of corn
    b. 8 bushels of wheat and 7 bushels of corn
    c. 9 bushels of wheat and 6 bushels of corn
    d. 18 bushels of wheat and 12 bushels of corn

    ANS: C PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-38

39. Refer to Figure 3-2. Assume that Cliff and Paul were both producing wheat and corn, and both were dividing their time equally between the two. Then they decide to specialize in the product for which they have a comparative advantage. What would happen to the production of corn?
    a. It would increase by 1 bushel.
    b. It would increase by 2 bushels.
    c. It would increase by 3 bushels.
    d. It would increase by 4 bushels.

    ANS: D PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-39

40. Refer to Figure 3-2. Assume that Cliff and Paul were both producing wheat and corn, and both were dividing their time equally between the two. Then they decide to specialize in the product for which they have a comparative advantage and trade 3 bushels of wheat for 3 bushels of corn. What would Cliff now be able to consume?
    a. 5 bushels of wheat and 3 bushels of corn
    b. 4 bushels of wheat and 3 bushels of corn
    c. 3 bushels of wheat and 5 bushels of corn
    d. 3 bushels of wheat and 3 bushels of corn

    ANS: A PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-40

41. Refer to Figure 3-2. What do the two producers have an absolute advantage in?
    a. Paul has an absolute advantage in both wheat and corn.
    b. Paul has an absolute advantage in wheat, and Cliff has an absolute advantage in corn.
    c. Cliff has an absolute advantage in wheat, and Paul has an absolute advantage in corn.
    d. Cliff has an absolute advantage in both wheat and corn.

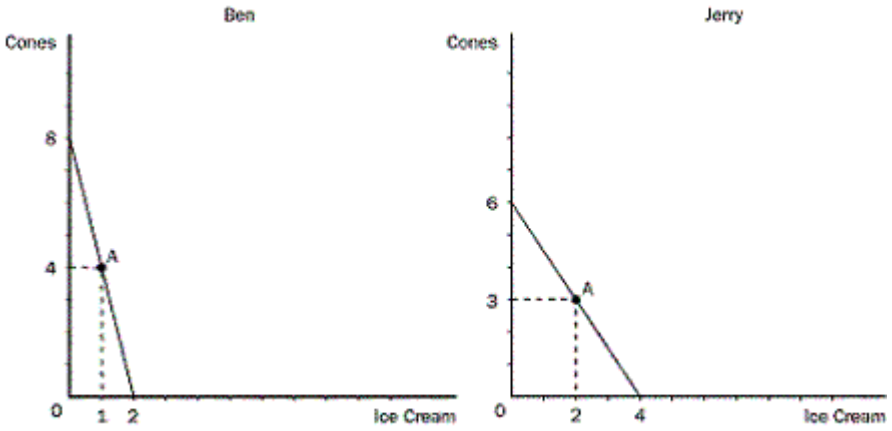
    ANS: A PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-41

42. Refer to Figure 3-2. What do the two producers have an absolute or comparative advantage in?
    a. Paul has a comparative advantage in both wheat and corn.
    b. Paul has an absolute advantage in wheat, and Cliff has a comparative advantage in corn.
    c. Cliff has a comparative advantage in wheat, and Paul has a comparative advantage in corn.
    d. Cliff has a comparative advantage in both wheat and corn.

    ANS: C PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-42

Figure 3-3

Ice cream and cones are measured in kilograms.



43. Refer to Figure 3-3. For Ben, what is the opportunity cost of 1 kg of ice cream?
    a. 1/4 kg of cones
    b. 1/2 kg of cones
    c. 2 kg of cones
    d. 4 kg of cones

    ANS: D PTS: 1 DIF: Challenging REF: 55
    BLM: Higher Order NOT: Micro TB_3-43

44. Refer to Figure 3-3. For Jerry, what is the opportunity cost of 1 kg of ice cream?
    a. 1/3 kg of cones
    b. 1 kg of cones
    c. 3/2 kg of cones
    d. 2 kg of cones

    ANS: C PTS: 1 DIF: Challenging REF: 55
    BLM: Higher Order NOT: Micro TB_3-44

45. Refer to Figure 3-3. For Ben, what is the opportunity cost of 1 kg of cones?
    a. 1/4 kg of ice cream
    b. 1/2 kg of ice cream
    c. 2 kg of ice cream
    d. 4 kg of ice cream

    ANS: A PTS: 1 DIF: Challenging REF: 55
    BLM: Higher Order NOT: Micro TB_3-45

46. Refer to Figure 3-3. For Jerry, what is the opportunity cost of 1 kg of cones?
    a. 2/3 kg of ice cream
    b. 1 kg of ice cream
    c. 2 kg of ice cream
    d. 3 kg of ice cream

    ANS: A PTS: 1 DIF: Challenging REF: 55
    BLM: Higher Order NOT: Micro TB_3-46

47. Refer to Figure 3-3. What does each of the two producers have a comparative advantage in?
    a. Ben has a comparative advantage in cones, and Jerry has a comparative advantage in ice cream.
    b. Ben has a comparative advantage in ice cream, and Jerry has a comparative advantage in cones.
    c. Ben has a comparative advantage in neither good, and Jerry has a comparative advantage in both goods.
    d. Ben has a comparative advantage in both goods, and Jerry has a comparative advantage in neither good.

    ANS: A PTS: 1 DIF: Challenging REF: 55
    BLM: Higher Order NOT: Micro TB_3-47

48. Refer to Figure 3-3. What does each of the two producers have an absolute advantage in?
    a. Ben has an absolute advantage in ice cream, and Jerry has an absolute advantage in cones.
    b. Ben has an absolute advantage in cones, and Jerry has an absolute advantage in ice cream.
    c. Ben has an absolute advantage in neither good, and Jerry has an absolute advantage in both goods.
    d. Ben has an absolute advantage in both goods, and Jerry has an absolute advantage in neither good.

    ANS: B PTS: 1 DIF: Average REF: 55
    BLM: Higher Order NOT: Micro TB_3-48

49. Refer to Figure 3-3. What does each of the two producers have a comparative or absolute advantage in?
    a. Ben has a comparative advantage in ice cream, and Jerry has an absolute advantage in both goods.
    b. Ben has a comparative advantage in cones, and Jerry has an absolute advantage in ice cream.
    c. Ben has a comparative advantage in ice cream, and Jerry has an absolute advantage in neither good.
    d. Ben has a comparative advantage in ice cream, and Jerry has an absolute advantage in cones.

    ANS: B PTS: 1 DIF: Average REF: 55
    BLM: Higher Order NOT: Micro TB_3-49

50. Refer to Figure 3-3. What does each of the two producers have a comparative or absolute advantage in?
    a. Ben has an absolute advantage in cones, and Jerry has a comparative advantage in ice cream.
    b. Ben has an absolute advantage in both goods, and Jerry has a comparative advantage in cones.
    c. Ben has an absolute advantage in ice cream, and Jerry has a comparative advantage in cones.
    d. Ben has an absolute advantage in neither good, and Jerry has a comparative advantage in ice cream.

    ANS: A PTS: 1 DIF: Average REF: 55
    BLM: Higher Order NOT: Micro TB_3-50

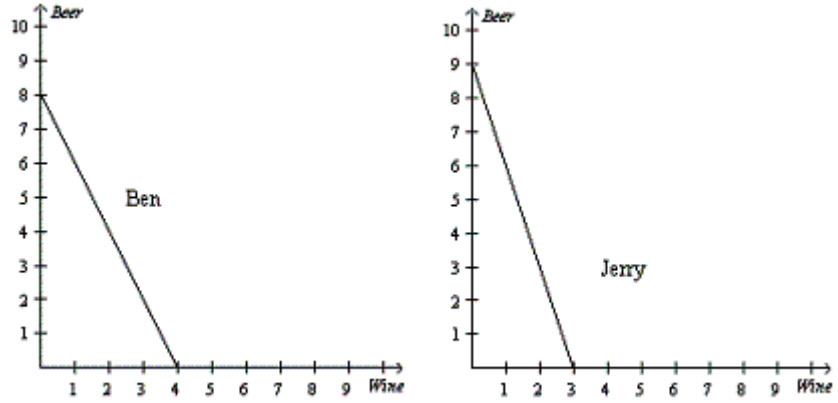
51. Refer to Figure 3-3. Suppose that Ben and Jerry have both decided to produce at point A on their production possibilities frontiers. What can we infer from this information?
    a. that this is not an efficient combination for neither Ben nor Jerry
    b. that Ben and Jerry are both allocating 1/2 their time to the production of each good
    c. that no other production point is as efficient for both Ben and Jerry to produce as point A
    d. that the two must be trading with each other

    ANS: B PTS: 1 DIF: Challenging REF: 55
    BLM: Higher Order NOT: Micro TB_3-51

52. Refer to Figure 3-3. Suppose Ben and Jerry were both producing at point A on their production possibilities frontier and then Ben decided he would be willing to trade 4 kg of cones to get 2 kg of ice cream from Jerry. If both decided to specialize in what they had a comparative advantage in and trade, what would be the gains from trade?
    a. 1 kg of cones for Ben and 1 kg of ice cream for Jerry
    b. 1 kg of ice cream for Ben and 1 kg of cones for Jerry
    c. 2 kg of ice cream for Ben and 2 kg of cones for Jerry
    d. 2 kg of ice cream for Ben and 1 kg of cones for Jerry

    ANS: B PTS: 1 DIF: Challenging REF: 55
    BLM: Higher Order NOT: Micro TB_3-52

Figure 3-4



53. Refer to Figure 3-4. For Ben, what is the opportunity cost of one bottle of wine?
    a. 1/4 bottle of beer
    b. 1/2 bottle of beer
    c. 2 bottles of beer
    d. 4 bottles of beer

    ANS: C PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-53

54. Refer to Figure 3-4. For Ben, what is the opportunity cost of one bottle of beer?
    a. 1/2 bottle of wine
    b. 1/4 bottle of wine
    c. 2 bottles of wine
    d. 4 bottles of wine

    ANS: A PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-54

55. Refer to Figure 3-4. For Jerry, what is the opportunity cost of one bottle of wine?
    a. 1/3 bottle of beer
    b. 1/2 bottle of beer
    c. 1 bottle of beer
    d. 3 bottles of beer

    ANS: D PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-55

56. Refer to Figure 3-4. For Jerry, what is the opportunity cost of one bottle of beer?
    a. 1/3 bottle of wine
    b. 1/2 bottle of wine
    c. 1 bottle of wine
    d. 3 bottles of wine

    ANS: A PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-56

57. Refer to Figure 3-4. What does each of the two producers have a comparative advantage in?
    a. Ben has a comparative advantage in beer, and Jerry has a comparative advantage in wine.
    b. Ben has a comparative advantage in wine, and Jerry has a comparative advantage in beer.
    c. Ben has a comparative advantage in neither good, and Jerry has a comparative advantage in wine.
    d. Ben has a comparative advantage in both goods, and Jerry has a comparative advantage in neither.

    ANS: B PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-57

58. Refer to Figure 3-4. What does each of the two producers have an absolute advantage in?
    a. Ben has an absolute advantage in wine, and Jerry has an absolute advantage in neither good.
    b. Ben has an absolute advantage in beer, and Jerry has an absolute advantage in wine.
    c. Ben has an absolute advantage in wine, and Jerry has an absolute advantage in beer.
    d. Ben has an absolute advantage in neither good, and Jerry has an absolute advantage in both goods.

    ANS: C PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-58

59. Refer to Figure 3-4. What does each of the two producers have a comparative or absolute advantage in?
    a. Ben has a comparative advantage in wine, and Jerry has an absolute advantage in both goods.
    b. Ben has a comparative advantage in beer, and Jerry has an absolute advantage in both goods.
    c. Ben has a comparative advantage in beer, and Jerry has an absolute advantage in wine.
    d. Ben has a comparative advantage in wine, and Jerry has an absolute advantage in beer.

    ANS: D PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-59

60. Refer to Figure 3-4. What does each of the two producers have a comparative or absolute advantage in?
    a. Ben has an absolute advantage in wine, and Jerry has a comparative advantage in neither good.
    b. Ben has an absolute advantage in both goods, and Jerry has a comparative advantage in beer.
    c. Ben has an absolute advantage in wine, and Jerry has a comparative advantage in beer.
    d. Ben has an absolute advantage in beer, and Jerry has a comparative advantage in wine.

    ANS: C PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-60

61. Refer to Figure 3-4. Suppose Ben and Jerry both spend half their time producing beer and half their time producing wine. How much wine and beer does each produce?
    a. Ben will produce 4 bottles of beer and 4 bottles of wine.
    b. Ben will produce 4 bottles of beer and 2 bottles of wine.
    c. Jerry will produce 1.5 bottles of beer and 4.5 bottles of wine.
    d. Jerry will produce 8 bottles of beer and 4 bottles of wine.

    ANS: B PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-61

Table 3-3

Labour hours needed to make one unit:			Amount produced in 160 hours:	
	Quilts	Dresses	Quilts	Dresses
Helen	40	10	4	16
Carolyn	80	16	2	10

62. Refer to Table 3-3. What is the opportunity cost of one quilt for Helen?
    a. 2 dresses
    b. 3 dresses
    c. 4 dresses
    d. 5 dresses

    ANS: C PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-62

63. Refer to Table 3-3. What is the opportunity cost of one quilt for Carolyn?
    a. 2 dresses
    b. 3 dresses
    c. 4 dresses
    d. 5 dresses

    ANS: D PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-63

64. Refer to Table 3-3. What is the opportunity cost of one dress for Helen?
    a. 1/4 quilt
    b. 1/2 quilt
    c. 1 quilt
    d. 4 quilts

    ANS: A PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-64

65. Refer to Table 3-3. What is the opportunity cost of one dress for Carolyn?
    a. 1/5 quilt
    b. 1 quilt
    c. 4 quilts
    d. 5 quilts

    ANS: A PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-65

66. Refer to Table 3-3. What does each of the two producers have a comparative or absolute advantage in?
    a. Helen has a comparative advantage in quilts, and Carolyn has an absolute advantage in neither good.
    b. Helen has a comparative advantage in dresses, and Carolyn has an absolute advantage in quilts.
    c. Helen has a comparative advantage in quilts, and Carolyn has an absolute advantage in dresses.
    d. Helen has a comparative advantage in dresses, and Carolyn has an absolute advantage in both goods.

    ANS: A PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-66

67. Refer to Table 3-3. What does each of the two producers have a comparative or absolute advantage in?
    a. Helen has an absolute advantage in dresses, and Carolyn has a comparative advantage in quilts.
    b. Helen has an absolute advantage in both goods, and Carolyn has a comparative advantage in dresses.
    c. Helen has an absolute advantage in quilts, and Carolyn has a comparative advantage in quilts.
    d. Helen has an absolute advantage in both goods, and Carolyn has a comparative advantage in quilts.

    ANS: B PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-67

68. Refer to Table 3-3. What does each of the two producers have an absolute advantage in?
    a. Helen has an absolute advantage in dresses, and Carolyn has an absolute advantage in quilts.
    b. Helen has an absolute advantage in quilts, and Carolyn has an absolute advantage in dresses.
    c. Helen has an absolute advantage in neither good, and Carolyn has an absolute advantage in both goods.
    d. Helen has an absolute advantage in both goods, and Carolyn has an absolute advantage in neither good.

    ANS: D PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-68

69. Refer to Table 3-3. How could Helen and Carolyn both benefit?
    a. by Helen specializing in dresses and Carolyn specializing in quilts
    b. by Helen specializing in neither good and Carolyn specializing in both goods
    c. by Helen specializing in quilts and Carolyn specializing in dresses
    d. by Helen specializing in both goods and Carolyn specializing in neither good

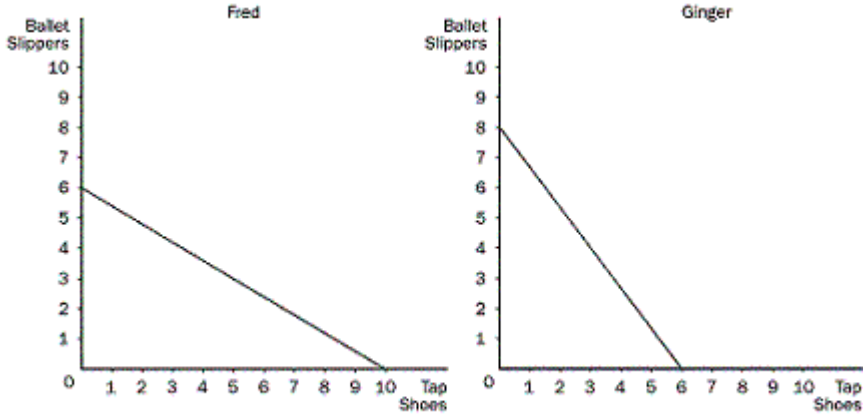
    ANS: C PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-69

70. Refer to Table 3-3. What does each of the two producers have a comparative advantage in?
    a. Helen has a comparative advantage in dresses, and Carolyn has a comparative advantage in quilts.
    b. Helen has a comparative advantage in quilts, and Carolyn has a comparative advantage in dresses.
    c. Helen has a comparative advantage in neither good, and Carolyn has a comparative advantage in both goods.
    d. Helen has a comparative advantage in both goods, and Carolyn has a comparative advantage in neither good.

    ANS: B PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-70

Figure 3-5

These graphs illustrate the production possibilities available for dancing shoes to Fred and Ginger with 40 hours of labour.



71. Refer to Figure 3-5. What is the opportunity cost of one pair of tap shoes for Fred?
    a. 1/5 pair of ballet slippers
    b. 1/3 pair of ballet slippers
    c. 3/5 pair of ballet slippers
    d. 5/3 pairs of ballet slippers

    ANS: C PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-71

72. Refer to Figure 3-5. What is the opportunity cost of one pair of tap shoes for Ginger?
    a. 1/4 pair of ballet slippers
    b. 1/3 pair of ballet slippers
    c. 3/4 pair of ballet slippers
    d. 4/3 pairs of ballet slippers

    ANS: D PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-72

73. Refer to Figure 3-5. What is the opportunity cost of one pair of ballet slippers for Ginger?
    a. 1/4 pair of tap shoes
    b. 1/3 pair of tap shoes
    c. 3/4 pair of tap shoes
    d. 4/3 pairs of tap shoes

    ANS: C PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-73

74. Refer to Figure 3-5. What is the opportunity cost of one pair of ballet slippers for Fred?
    a. 1/5 pair of tap shoes
    b. 1/3 pair of tap shoes
    c. 3/5 pair of tap shoes
    d. 5/3 pairs of tap shoes

    ANS: D PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-74

75. Refer to Figure 3-5. What does each of the two producers have an absolute advantage in?
    a. Ginger has an absolute advantage in ballet slippers, and Fred has an absolute advantage in tap shoes.
    b. Ginger has an absolute advantage in tap shoes, and Fred has an absolute advantage in ballet slippers.
    c. Ginger has an absolute advantage in neither good, and Fred has an absolute advantage in both goods.
    d. Ginger has an absolute advantage in both goods, and Fred has an absolute advantage in neither good.

    ANS: A PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-75

76. Refer to Figure 3-5. Who has a comparative advantage in each good?
    a. Ginger has a comparative advantage in tap shoes, and Fred has a comparative advantage in ballet slippers.
    b. Ginger has a comparative advantage in both goods, and Fred has a comparative advantage in neither good.
    c. Ginger has a comparative advantage in ballet slippers, and Fred has a comparative advantage in tap shoes.
    d. Ginger has a comparative advantage in neither good, and Fred has a comparative advantage in both goods.

    ANS: C PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-76

77. Refer to Figure 3-5. What should Fred and Ginger produce?
    a. Fred should produce tap shoes, and Ginger should produce ballet slippers.
    b. Fred should produce tap shoes and ballet slippers, and Ginger should produce ballet slippers.
    c. Fred should produce tap shoes, and Ginger should produce ballet slippers and tap shoes.
    d. Fred should produce ballet slippers, and Ginger should produce tap shoes.

    ANS: A PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-77

78. Refer to Figure 3-5. Who has a comparative or absolute advantage in what product? ?
    a. Ginger has an absolute advantage in tap shoes, and Fred has a comparative advantage in ballet slippers.
    b. Ginger has an absolute advantage in both goods, and Fred has a comparative advantage in neither good.
    c. Ginger has an absolute advantage in ballet slippers, and Fred has a comparative advantage in tap shoes.
    d. Ginger has an absolute advantage in neither good, and Fred has a comparative advantage in both goods.

    ANS: C PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-78

79. Refer to Figure 3-5. What should Ginger and Fred specialize in?
    a. Ginger should specialize in tap shoes, and Fred should specialize in ballet slippers.
    b. Ginger should specialize in both goods, and Fred should specialize in neither good.
    c. Ginger should specialize in ballet slippers, and Fred should specialize in tap shoes.
    d. Ginger should specialize in neither good, and Fred should specialize in both goods.

    ANS: C PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-79

80. Refer to Figure 3-5. If Fred and Ginger devote half of their time (20 hours) to the production of each good, what would the total production be?
    a. 7 ballet slippers and 8 tap shoes
    b. 8 ballet slippers and 8 tap shoes
    c. 9 ballet slippers and 6 tap shoes
    d. 10 ballet slippers and 8 tap shoes

    ANS: A PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-80

81. Refer to Figure 3-5. If Fred and Ginger both specialize in the good in which they have a comparative advantage, what would the total production be?
    a. 6 ballet slippers and 6 tap shoes
    b. 8 ballet slippers and 6 tap shoes
    c. 8 ballet slippers and 8 tap shoes
    d. 8 ballet slippers and 10 tap shoes

    ANS: D PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-81

82. Refer to Figure 3-5. If Fred and Ginger both specialize in the good in which they have a comparative advantage, what would the total consumption be?
    a. 4 ballet slippers and 6 tap shoes
    b. 6 ballet slippers and 6 tap shoes
    c. 8 ballet slippers and 8 tap shoes
    d. 8 ballet slippers and 10 tap shoes

    ANS: D PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-82

83. Suppose a gardener produces both green beans and corn in her garden. If she must give up 13 bushels of corn to get 5 bushels of green beans, what is the opportunity cost of 1 bushel of green beans?
    a. 0.38 bushel of corn
    b. 2.6 bushels of corn
    c. 8 bushels of corn
    d. 18 bushels of corn

    ANS: B PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-83

84. Suppose a gardener produces both green beans and corn in her garden. If the opportunity cost of one bushel of corn is 3/5 bushel of green beans, what is the opportunity cost of 1 bushel of green beans?
    a. 2/5 bushel of corn
    b. 8/5 bushels of corn
    c. 5/2 bushels of corn
    d. 5/3 bushels of corn

    ANS: D PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-84

85. Using all available resources, if a farmer can produce either 85 cantaloupes or 70 watermelons, what is the opportunity cost of 1 cantaloupe to the farmer?
    a. 0.82 watermelons
    b. 1.21 watermelons
    c. 1.50 watermelons
    d. 2.00 watermelons

    ANS: A PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-85

86. Currently, a farmer can either grow 40 bushels of wheat or 120 bushels of corn per acre. If he were able to trade 80 bushels of corn for 30 bushels of wheat, would he be better off or worse off?
    a. worse off, because his opportunity cost of wheat would increase from 2.7 bushels of corn to 3 bushels of corn
    b. better off, because his opportunity cost of wheat would fall from 80 bushels to 50 bushels
    c. better off, because his opportunity cost of wheat would fall from 3 bushels of corn to 2.7 bushels
    d. worse off, because his opportunity cost of wheat would increase from 50 bushels of corn to 80 bushels of corn

    ANS: C PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-86

87. Shawn can produce donuts at a lower opportunity cost than Sue. Who has an absolute or a comparative advantage in the production of donuts?
    a. Shawn has a comparative advantage.
    b. Sue has a comparative advantage.
    c. Shawn has an absolute advantage.
    d. Sue has an absolute advantage.

    ANS: A PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-87

Table 3-4

	Labour hours needed to make one unit:		Amount produced in 24 hours:	
	Baskets	Birdhouses	Baskets	Birdhouses
Alberta	6	2	4	12
Manitoba	3	4	8	6

88. Refer to the table. What is the opportunity cost of one basket for Alberta?
    a. 1/3 birdhouse
    b. 1 birdhouse
    c. 3 birdhouses
    d. 4 birdhouses

    ANS: C PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-88

89. Refer to the table. What is the opportunity cost of one basket for Manitoba?
    a. 1/4 birdhouse
    b. 3/4 birdhouse
    c. 1 birdhouse
    d. 4/3 birdhouses

    ANS: B PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-89

90. Refer to the table. What is the opportunity cost of one birdhouse for Alberta?
    a. 1/3 basket
    b. 1 basket
    c. 4/3 baskets
    d. 3 baskets

    ANS: A PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-90

91. Refer to the table. What is the opportunity cost of one birdhouse for Manitoba?
    a. 3/4 basket
    b. 1 basket
    c. 4/3 baskets
    d. 3 baskets

    ANS: C PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-91

92. Refer to the table. Who has an absolute advantage in the production of each good?
    a. Alberta has an absolute advantage in birdhouses, and Manitoba has an absolute advantage in baskets.
    b. Alberta has an absolute advantage in baskets, and Manitoba has an absolute advantage in birdhouses.
    c. Alberta has an absolute advantage in neither good, and Manitoba has an absolute advantage in both goods.
    d. Alberta has an absolute advantage in both goods, and Manitoba has an absolute advantage in neither good.

    ANS: A PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-92

93. Refer to the table. Who has a comparative advantage in the production of each good?
    a. Alberta has a comparative advantage in baskets, and Manitoba has a comparative advantage in birdhouses.
    b. Alberta has a comparative advantage in birdhouses, and Manitoba has a comparative advantage in baskets.
    c. Alberta has a comparative advantage in neither good, and Manitoba has a comparative advantage in both goods.
    d. Alberta has a comparative advantage in both goods, and Manitoba has a comparative advantage in neither good.

    ANS: B PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-93

94. Refer to the table. If Alberta and Manitoba trade based on the principle of comparative advantage, what will be exported?
    a. Alberta will export baskets, and Manitoba will export birdhouses.
    b. Alberta will export birdhouses, and Manitoba will export baskets.
    c. Alberta will export neither good, and Manitoba will export both goods.
    d. Alberta will export both goods, and Manitoba will export neither good.

    ANS: B PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-94

95. Refer to the table. If Alberta and Manitoba trade based on the principle of comparative advantage, what will happen?
    a. All individuals in both provinces will gain.
    b. No one in either province will gain.
    c. Some individuals within both provinces will be made worse off.
    d. One province will be better off, and the other province will be worse off.

    ANS: C PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-95

96. What is comparative advantage based on?
    a. capital costs
    b. labour costs
    c. dollar price
    d. opportunity costs

    ANS: D PTS: 1 DIF: Easy REF: 55-57
    BLM: Remember NOT: Micro TB_3-96

97. What is trade based on?
    a. absolute advantage
    b. comparative advantage
    c. production costs
    d. relative dollar prices

    ANS: B PTS: 1 DIF: Easy REF: 55-57
    BLM: Remember NOT: Micro TB_3-97

98. What economic concept is the most relevant when defining comparative advantage?
    a. opportunity cost
    b. sunk cost
    c. scarcity
    d. efficiency

    ANS: A PTS: 1 DIF: Average REF: 55-57
    BLM: Remember NOT: Micro TB_3-98

99. For two people who are planning to trade two different goods, when will there NOT be a comparative advantage for either?
    a. if they have exactly the same opportunity cost
    b. if they have agreed in advance on who will produce what and how much each will produce
    c. if the terms of trade are such that neither can gain from trade
    d. if one person has an absolute advantage in both products

    ANS: A PTS: 1 DIF: Average REF: 55-57
    BLM: Remember NOT: Micro TB_3-99

100. South Korea can produce shoes, clothes, TV sets, and computers cheaper than any other country. What would one expect South Korea to export?
    a. all of these goods
    b. none of these goods
    c. some of these and other goods
    d. some of these but no other goods

    ANS: C PTS: 1 DIF: Average REF: 55-57
    BLM: Remember NOT: Micro TB_3-100

101. What does comparative advantage reflect?
    a. productivity
    b. relative opportunity cost
    c. efficiency
    d. terms of trade advantage

    ANS: B PTS: 1 DIF: Average REF: 55-57
    BLM: Remember NOT: Micro TB_3-101

102. Both Canada and the U.S. can produce equally tasty strawberries. What determines which country will export strawberries?
    a. how the opportunity cost in Canada compares to the opportunity cost in the U.S.
    b. how the costs of production in Canada compare to the costs of production in the U.S.
    c. how the costs of labour in Canada compare to the costs of labour in the U.S.
    d. how the costs of strawberries in Canada compares to the cost of strawberries in the U.S.

    ANS: A PTS: 1 DIF: Average REF: 55-57
    BLM: Remember NOT: Micro TB_3-102

103. Assume that Greece has a comparative advantage in fish and Germany has a comparative advantage in cars. What will happen if these two countries specialize and trade according to their comparative advantage?
    a. All individuals in both countries will benefit.
    b. Greece will specialize in and export cars.
    c. Germany will produce more cars than in the absence of trade.
    d. Germany will produce more fish than in the absence of trade.

    ANS: C PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-103

104. Greece and Germany can both produce fish and cars. Greece has a comparative advantage in cars, but Germany has an absolute advantage in cars. What would Germany import from Greece?
   a. Nothing, because Germany has a comparative advantage in fish and an absolute advantage in cars.
   b. Cars, because it is relatively cheaper for Greece to produce them.
   c. Fish, because Germany can produce cars cheaper than Greece.
   d. Both fish and cars, because Germany's absolute advantage in cars creates more income.

   ANS: B PTS: 1 DIF: Average REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-104

105. Belarus has a comparative advantage in the production of linen and an absolute advantage in the production of beer, compared to Russia. If these two countries decide to trade, what would the pattern of trade be?
   a. Belarus would export linen to Russia.
   b. Russia would export linen to Belarus.
   c. Belarus would export both beer and linen to Russia.
   d. Russia would export both beer and linen to Belarus.

   ANS: A PTS: 1 DIF: Average REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-105

106. What should a country do if it has a comparative advantage in a product?
   a. It should import that product.
   b. It should export that product.
   c. It should keep the product for domestic use since it is relatively inexpensive to produce.
   d. It should lower the costs of production until realizing an absolute advantage.

   ANS: B PTS: 1 DIF: Easy REF: 55-57
   BLM: Remember NOT: Micro TB_3-106

107. Suppose a producer requires a smaller quantity of inputs to produce carrots than to produce onions. Is this information sufficient to determine in which good the producer has a comparative advantage?
   a. Yes, the producer has a comparative advantage in carrots.
   b. Yes, the producer has a comparative advantage in onions.
   c. No, because information about the costs of inputs is missing.
   d. No, because information about other producers is missing.

   ANS: D PTS: 1 DIF: Average REF: 55-57
   BLM: Remember NOT: Micro TB_3-107

108. Suppose a producer can produce shoes with lower opportunity cost than boots. What else do we need to know if we want to determine this producer's comparative advantage?
   a. how this producer's opportunity cost compares with other producer's opportunity cost
   b. nothing, the producer has a comparative advantage in boots.
   c. how many hours of work each product requires
   d. nothing, the producer has a comparative advantage in shoes

   ANS: A PTS: 1 DIF: Average REF: 55-57
   BLM: Remember NOT: Micro TB_3-108

109. What is the opportunity cost of an item?
   a. the number of hours needed to earn money to buy it
   b. what you give up to get that item
   c. always less than the dollar value of the item
   d. always equal to the dollar value of the item

   ANS: B PTS: 1 DIF: Easy REF: 55-57
   BLM: Remember NOT: Micro TB_3-109

110. What is the term that means whatever must be given up to obtain an item?
   a. efficiency
   b. externality
   c. opportunity cost
   d. market failure

   ANS: C PTS: 1 DIF: Easy REF: 55-57
   BLM: Remember NOT: Micro TB_3-110

111. How is absolute advantage found?
   a. by comparing opportunity costs
   b. by calculating the dollar cost of production
   c. by comparing the productivity of one nation to that of another
   d. by first determining which country has a comparative advantage

   ANS: C PTS: 1 DIF: Average REF: 55-57
   BLM: Remember NOT: Micro TB_3-111

112. How does trade benefit the two parties involved?
   a. Trade benefits both parties, but not always equally.
   b. Trade benefits the seller more than the buyer.
   c. Trade benefits the buyer more than the seller.
   d. Trade benefits both parties equally.

   ANS: A PTS: 1 DIF: Easy REF: 55-57
   BLM: Remember NOT: Micro TB_3-112

113. Which of the following does trade NOT allow for?
   a. a more efficient use of resources
   b. goods to be obtained at a lower opportunity cost
   c. people to specialize in activities in which they have a comparative advantage
   d. some countries to gain political control over trading partners

   ANS: D PTS: 1 DIF: Average REF: 55-57
   BLM: Remember NOT: Micro TB_3-113

114. What happens when countries specialize according to their comparative advantage?
   a. It is possible to increase world output of all goods.
   b. It is possible to increase world output of some goods only by reducing the output of others.
   c. One country is likely to gain from trade while others lose.
   d. All countries will lose from trade.

   ANS: A PTS: 1 DIF: Average REF: 55-57
   BLM: Remember NOT: Micro TB_3-114

115. Which of the following would NOT occur if each person specializes in the good for which they have a comparative advantage?
   a. Each person's production possibilities frontier will shift outward.
   b. Total production in the economy will increase.
   c. Everyone can be better off with specialization and trade.
   d. The size of the economic pie will increase.

   ANS: A PTS: 1 DIF: Average REF: 55-57
   BLM: Remember NOT: Micro TB_3-115

116. Why does total output in an economy increase when each person specializes?
   a. because there is much less competition for the same resources
   b. because each person spends more time producing that product for which they have a comparative advantage
   c. because a wider variety of products can be produced with specialization
   d. because more people will be producing products than before

   ANS: B PTS: 1 DIF: Average REF: 55-57
   BLM: Remember NOT: Micro TB_3-116

117. Mike and Sandy are two woodworkers who both make tables and chairs. In one month, Mike can make 4 tables or 20 chairs, where Sandy can make 6 tables or 18 chairs. Who has an absolute advantage in which product?
   a. Mike in chairs, Sandy in tables
   b. both Mike and Sandy in tables
   c. both Mike and Sandy in chairs
   d. Mike in tables, Sandy in chairs

   ANS: A PTS: 1 DIF: Challenging REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-117

118. Mike and Sandy are two woodworkers who both make tables and chairs. In one month, Mike can make 4 tables or 20 chairs, where Sandy can make 6 tables or 18 chairs. Who has a comparative advantage in which product?
   a. Mike in chairs, Sandy in tables
   b. both Mike and Sandy in tables
   c. both Mike and Sandy in chairs
   d. Mike in tables, Sandy in chairs

   ANS: A PTS: 1 DIF: Challenging REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-118

119. Mike and Sandy are two woodworkers who both make tables and chairs. In one month, Mike can make 4 tables or 20 chairs, where Sandy can make 6 tables or 18 chairs. What is the opportunity cost of 1 chair?
   a. 1/5 table for Mike and 1/3 table for Sandy
   b. 5 tables for Mike and 3 tables for Sandy
   c. 1/3 table for Mike and 1/5 table for Sandy
   d. 3 tables for Mike and 5 tables for Sandy

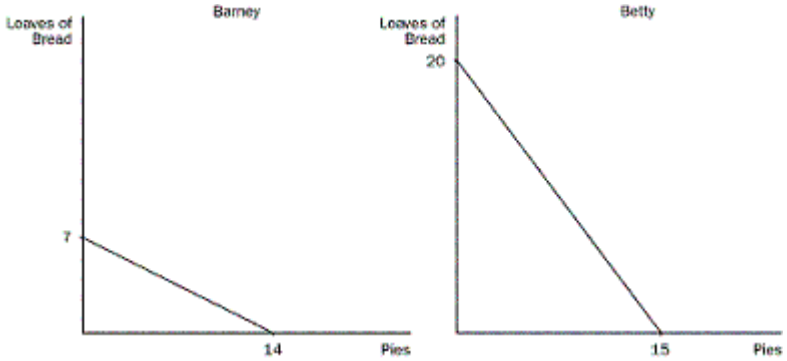
   ANS: A PTS: 1 DIF: Challenging REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-119

120. Mike and Sandy are two woodworkers who both make tables and chairs. In one month, Mike can make 4 tables or 20 chairs, where Sandy can make 6 tables or 18 chairs. What is the opportunity cost of 1 table?
   a. 1/5 chair for Mike and 1/3 chair for Sandy
   b. 5 chairs for Mike and 3 chairs for Sandy
   c. 1/3 chair for Mike and 1/5 chair for Sandy
   d. 3 chairs for Mike and 5 chairs for Sandy

   ANS: B PTS: 1 DIF: Challenging REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-120

Figure 3-6

These figures illustrate the production possibilities available to Barney and Betty with eight hours of labour in their bakery.



121. Refer to Figure 3-6. What is the opportunity cost of one loaf of bread for Barney?
   a. 1/4 pie
   b. 1/2 pie
   c. 1 pie
   d. 2 pies

   ANS: D PTS: 1 DIF: Challenging REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-121

122. Refer to Figure 3-6. What is the opportunity cost of one pie for Betty?
   a. 1/4 loaf of bread
   b. 3/4 loaf of bread
   c. 1 loaf of bread
   d. 4/3 loaves of bread

   ANS: D PTS: 1 DIF: Average REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-122

123. Refer to Figure 3-6. Who has an absolute advantage in each product?
   a. Barney has an absolute advantage in both goods, and Betty has an absolute advantage in neither good.
   b. Barney has an absolute advantage in loaves of bread, and Betty has an absolute advantage in pies.
   c. Barney has an absolute advantage in neither good, and Betty has an absolute advantage in both goods.
   d. Barney has an absolute advantage in pies, and Betty has an absolute advantage in loaves of bread.

   ANS: C PTS: 1 DIF: Challenging REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-123

124. Refer to Figure 3-6. Who has a comparative advantage in each product?
   a. Barney has a comparative advantage in both goods, and Betty has a comparative advantage in neither good.
   b. Barney has a comparative advantage in loaves of bread, and Betty has a comparative advantage in pies.
   c. Barney has a comparative advantage in neither good, and Betty has a comparative advantage in both goods.
   d. Barney has a comparative advantage in pies, and Betty has a comparative advantage in loaves of bread.

   ANS: D PTS: 1 DIF: Challenging REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-124

125. Refer to Figure 3-6. If Barney and Betty both specialize in the good in which they have a comparative advantage, what would the total production be?
   a. 7 loaves of bread and 15 pies
   b. 20 loaves of bread and 14 pies
   c. 27 loaves of bread and 29 pies
   d. 34 loaves of bread and 22 pies

   ANS: B PTS: 1 DIF: Challenging REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-125

Table 3-5

	Hours needed to make one unit:		Amount produced in 2400 hours:	
	Cars	Airplanes	Cars	Airplanes
Canada	40	160	60	15
Japan	50	150	48	16

126. Refer to Table 3-5. What is the opportunity cost of one car for Japan?
   a. 4 airplanes
   b. 3 airplanes
   c. 1/3 airplane
   d. 1/4 airplane

   ANS: C PTS: 1 DIF: Average REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-126

127. Refer to Table 3-5. What is the opportunity cost of one airplane for Japan?
a. 4 cars
b. 3 cars
c. 1/3 car
d. 1/4 car

ANS: B PTS: 1 DIF: Average REF: 55-57
BLM: Higher Order NOT: Micro TB_3-127

128. Refer to Table 3-5. What is the opportunity cost of one car for Canada?
a. 4 airplanes
b. 3 airplanes
c. 1/3 airplane
d. 1/4 airplane

ANS: D PTS: 1 DIF: Average REF: 55-57
BLM: Higher Order NOT: Micro TB_3-128

129. Refer to Table 3-5. What is the opportunity cost of one airplane for Canada?
a. 4 cars
b. 3 cars
c. 1/3 car
d. 1/4 car

ANS: A PTS: 1 DIF: Average REF: 55-57
BLM: Higher Order NOT: Micro TB_3-129

130. Refer to Table 3-5. Which country has an absolute or comparative advantage in each product?
a. Japan has a comparative advantage in airplanes, and Canada has an absolute advantage in cars.
b. Japan has a comparative advantage in cars, and Canada has an absolute advantage in airplanes.
c. Japan has a comparative advantage in cars, and Canada has an absolute advantage in neither good.
d. Japan has a comparative advantage in airplanes, and Canada has an absolute advantage in both goods.

ANS: A PTS: 1 DIF: Average REF: 55-57
BLM: Higher Order NOT: Micro TB_3-130

131. Refer to Table 3-5. Which country has an absolute or comparative advantage in each product?
a. Japan has an absolute advantage in both goods, and Canada has a comparative advantage in cars.
b. Japan has an absolute advantage in both goods, and Canada has a comparative advantage in neither good.
c. Japan has an absolute advantage in cars, and Canada has a comparative advantage in airplanes.
d. Japan has an absolute advantage in airplanes, and Canada has a comparative advantage in cars.

ANS: D PTS: 1 DIF: Average REF: 55-57
BLM: Higher Order NOT: Micro TB_3-131

132. Refer to Table 3-5. Which country has an absolute advantage in each product?
   a. Canada has an absolute advantage in airplanes, and Japan has an absolute advantage in cars.
   b. Canada has an absolute advantage in neither good, and Japan has an absolute advantage in both goods.
   c. Canada has an absolute advantage in cars, and Japan has an absolute advantage in airplanes.
   d. Canada has an absolute advantage in neither good, and Japan has an absolute advantage in cars.

   ANS: C PTS: 1 DIF: Average REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-132

133. Refer to Table 3-5. Which country has a comparative advantage in each product?
   a. Canada has a comparative advantage in airplanes, and Japan has a comparative advantage in neither good.
   b. Canada has a comparative advantage in cars, and Japan has a comparative advantage in airplanes.
   c. Canada has a comparative advantage in airplanes, and Japan has a comparative advantage in cars.
   d. Canada has a comparative advantage in neither good, and Japan has a comparative advantage in cars.

   ANS: B PTS: 1 DIF: Average REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-133

134. Refer to Table 3-5. How could Canada and Japan both benefit?
   a. by Canada specializing in airplanes and Japan specializing in airplanes
   b. by Canada specializing in cars and Japan specializing in airplanes
   c. by Canada specializing in airplanes and Japan specializing in cars
   d. by Canada specializing in neither good and Japan specializing in both goods

   ANS: B PTS: 1 DIF: Average REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-134

135. Refer to Table 3-5. If Canada and Japan trade based on the principle of comparative advantage, what could Canada gain from exporting a car?
   a. a maximum of 1/12 airplane
   b. a maximum of 1/4 airplane
   c. a maximum of 1/3 airplane
   d. a maximum of 1 airplane

   ANS: A PTS: 1 DIF: Average REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-135

136. Refer to Table 3-5. If Canada and Japan trade based on the principle of comparative advantage, what could Canada gain from importing an airplane?
a. a maximum of 1 car
b. a maximum of 3 cars
c. a maximum of 4 cars
d. a maximum of 12 cars

ANS: A PTS: 1 DIF: Average REF: 55-57
BLM: Higher Order NOT: Micro TB_3-136

137. Refer to Table 3-5. If Canada and Japan trade based on the principle of comparative advantage, what could Japan gain from importing a car?
a. a maximum of 1/12 airplane
b. a maximum of 1/4 airplane
c. a maximum of 1/3 airplane
d. a maximum 1 airplane

ANS: A PTS: 1 DIF: Average REF: 55-57
BLM: Higher Order NOT: Micro TB_3-137

138. Refer to Table 3-5. If Japan and Canada open up trade based on the principle of comparative advantage, who loses in the short term in Canada?
a. consumers
b. workers in car-producing companies
c. owners of airplane-producing companies
d. owners of car-producing companies

ANS: C PTS: 1 DIF: Average REF: 55-57
BLM: Higher Order NOT: Micro TB_3-138

139. Refer to Table 3-5. If Japan and Canada open up trade based on the principle of comparative advantage, who loses in the short term in Japan?
a. consumers
b. workers in airplane-producing companies
c. workers in car-producing companies
d. owners of airplane-producing companies

ANS: C PTS: 1 DIF: Average REF: 55-57
BLM: Higher Order NOT: Micro TB_3-139

Table 3-6

	Labour hours needed to make one unit:		Amount produced in 40 hours:	
	Cheese	Bread	Cheese	Bread
England	1	2	40	20
Spain	2	8	20	5

140. Refer to Table 3-6. What is the opportunity cost of one unit of cheese in England?
a. 4 breads
b. 2 breads
c. 1/2 bread
d. 1/4 bread

ANS: C PTS: 1 DIF: Challenging REF: 55-57
BLM: Higher Order NOT: Micro TB_3-140

141. Refer to Table 3-5. What is the opportunity cost of one unit of bread in England?
a. 4 cheeses
b. 2 cheeses
c. 1 cheese
d. 1/2 cheese

ANS: B PTS: 1 DIF: Challenging REF: 55-57
BLM: Higher Order NOT: Micro TB_3-141

142. Refer to Table 3-5. What is the opportunity cost of one unit of cheese in Spain?
a. 2 breads
b. 1 bread
c. 1/2 bread
d. 1/4 bread

ANS: D PTS: 1 DIF: Challenging REF: 55-57
BLM: Higher Order NOT: Micro TB_3-142

143. Refer to Table 3-5. What is the opportunity cost of one unit of bread in Spain?
a. 4 cheeses
b. 2 cheeses
c. 1 cheese
d. 1/4 cheese

ANS: A PTS: 1 DIF: Challenging REF: 55-57
BLM: Higher Order NOT: Micro TB_3-143

144. Refer to Table 3-5. Which country has a comparative advantage in each product?
   a. England has a comparative advantage in bread, and Spain has a comparative advantage in cheese.
   b. England has a comparative advantage in cheese, and Spain has a comparative advantage in bread.
   c. England has a comparative advantage in both goods, and Spain has a comparative advantage in neither good.
   d. England has a comparative advantage in neither good, and Spain has a comparative advantage in both goods.

   ANS: A PTS: 1 DIF: Average REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-144

145. Refer to Table 3-5. Which country has an absolute advantage in each product?
   a. England has an absolute advantage in bread, and Spain has an absolute advantage in cheese.
   b. England has an absolute advantage in cheese, and Spain has an absolute advantage in bread.
   c. England has an absolute advantage in neither good, and Spain has an absolute advantage in both goods.
   d. England has an absolute advantage in both goods, and Spain has an absolute advantage in neither good.

   ANS: D PTS: 1 DIF: Challenging REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-145

146. Refer to Table 3-5. Which country has a comparative or absolute advantage in each product?
   a. England has a comparative advantage in bread, and Spain has an absolute advantage in cheese.
   b. England has a comparative advantage in bread, and Spain has an absolute advantage in neither good.
   c. England has a comparative advantage in cheese, and Spain has an absolute advantage in both goods.
   d. England has a comparative advantage in both goods, and Spain has an absolute advantage in cheese.

   ANS: B PTS: 1 DIF: Challenging REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-146

147. Refer to Table 3-5. Which country has an absolute or comparative advantage in each product?
   a. England has an absolute advantage in bread, and Spain has a comparative advantage in bread.
   b. England has an absolute advantage in bread, and Spain has a comparative advantage in neither good.
   c. England has an absolute advantage in cheese, and Spain has a comparative advantage in both goods.
   d. England has an absolute advantage in both goods, and Spain has a comparative advantage in cheese.

   ANS: D PTS: 1 DIF: Challenging REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-147

148. Refer to Table 3-5. How could England and Spain benefit?
   a. by England specializing in bread and Spain specializing in cheese
   b. by England specializing in cheese and Spain specializing in bread
   c. by England specializing in both goods and Spain specializing in neither good
   d. by England specializing in neither good and Spain specializing in both goods

   ANS: A PTS: 1 DIF: Challenging REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-148

149. Refer to Table 3-5. England and Spain trade according to the principle of comparative advantage. If the international price of bread is 2.5 units of cheese for 1 unit of bread, what is the gain from trade to England per unit of bread traded?
   a. 0.5 units of cheese
   b. 1.5 unit of cheese
   c. 2.0 units of cheese
   d. 2.5 units of cheese

   ANS: A PTS: 1 DIF: Average REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-149

150. Refer to Table 3-5. England and Spain trade according to the principle of comparative advantage. If the international price of bread is 2.5 units of cheese for 1 unit of bread, what is the gain from trade to Spain per unit of bread traded?
   a. 0.5 units of cheese
   b. 1.5 units of cheese
   c. 2.0 units of cheese
   d. 2.5 units of cheese

   ANS: B PTS: 1 DIF: Average REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-150

151. Refer to Table 3-5. If England and Spain trade based on the principle of comparative advantage, which country will export or import each product?
   a. England will export bread, and Spain will export cheese.
   b. England will export bread, and Spain will export bread.
   c. England will export cheese, and Spain will export cheese.
   d. England will export cheese, and Spain will export bread.

   ANS: A PTS: 1 DIF: Challenging REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-151

152. Refer to Table 3-5. If England and Spain trade based on the principle of comparative advantage, which country will export or import each product?
   a. England will import bread, and Spain will import cheese.
   b. England will import bread, and Spain will import bread.
   c. England will import cheese, and Spain will import bread.
   d. England will import cheese, and Spain will import cheese.

   ANS: C PTS: 1 DIF: Challenging REF: 55-57
   BLM: Higher Order NOT: Micro TB_3-152

153. Refer to Table 3-5. If England and Spain specialize and trade according to their respective comparative advantage, who gains in the short run in England?
a. owners of cheese-producing companies
b. owners of milk-producing companies
c. consumers who like cheese
d. consumers who like bread

ANS: C PTS: 1 DIF: Challenging REF: 55-57
BLM: Higher Order NOT: Micro TB_3-153

154. What is the term for a good that is produced abroad and sold domestically?
a. a quota
b. a tariff
c. an import
d. an export

ANS: C PTS: 1 DIF: Easy REF: 62
BLM: Remember NOT: Micro TB_3-154

155. Suppose that a worker in Freedonia can produce either 6 units of corn or 2 units of wheat per year, and a worker in Sylvania can produce either 2 units of corn or 6 units of wheat per year. Each nation has 10 workers. Without trade, Freedonia produces and consumes 30 units of corn and 10 units of wheat per year. Sylvania produces and consumes 10 units of corn and 30 units of wheat. Then suppose that trade is initiated between the two countries, and Freedonia sends 30 units of corn to Sylvania in exchange for 30 units of wheat. What maximum amounts will Freedonia now be able to consume?
a. 30 units of corn and 30 units of wheat
b. 0 units of corn and 30 units of wheat
c. 60 units of corn and 30 units of wheat
d. 0 units of corn and 60 units of wheat

ANS: A PTS: 1 DIF: Challenging REF: 55
BLM: Higher Order NOT: Micro TB_3-155

156. Suppose that a worker in Freedonia can produce either 6 units of corn or 2 units of wheat per year, and a worker in Sylvania can produce either 2 units of corn or 6 units of wheat per year. Each nation has 10 workers. For many years the two countries traded, each completely specializing in producing the grain for which it has a comparative advantage. Now, however, war has broken out between them and all trade has stopped. Without trade, Freedonia produces and consumes 30 units of corn and 10 units of wheat per year. Sylvania produces and consumes 10 units of corn and 30 units of wheat. By how much has the combined yearly output of the two countries declined?
a. 10 units of corn and 10 units of wheat
b. 20 units of corn and 20 units of wheat
c. 30 units of corn and 30 units of wheat
d. 40 units of corn and 40 units of wheat

ANS: B PTS: 1 DIF: Challenging REF: 55-57
BLM: Higher Order NOT: Micro TB_3-156

157. Suppose that a worker in Radioland can produce either 4 radios or 1 television per year, and a worker in Teeveeland can produce either 2 radios or 4 televisions per year. Each nation has 100 workers. Also suppose that each country completely specializes in producing the good for which it has a comparative advantage. If Radioland trades 100 radios to Teeveeland in exchange for 100 televisions each year, what is each country's maximum consumption of new radios and televisions per year?
    a. 300 televisions and 100 radios in Radioland, and 300 radios and 100 televisions in Teeveeland
    b. 300 televisions and 100 radios in Teeveeland, and 300 radios and 100 televisions in Radioland
    c. 100 televisions and 200 radios in Radioland, and 100 radios and 200 televisions in Teeveeland
    d. 400 televisions and 100 radios in Teeveeland, and 400 radios and 100 televisions in Radioland

    ANS: B PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-157

158. Suppose that a worker in Radioland can produce either 4 radios or 1 television per year, and a worker in Teeveeland can produce either 2 radios or 5 televisions per year. Each nation has 100 workers. If Radioland trades 100 televisions to Teeveeland in exchange for 100 radios each year, what is the impact on each country's maximum consumption of new radios and televisions per year?
    a. higher than it would be in the absence of trade because of the gains from trade
    b. the same as it would be in the absence of trade
    c. less than it would be in the absence of trade because neither country is specializing in the product for which it has a comparative advantage
    d. less than it would be in the absence of trade because Teeveeland has an absolute advantage in both goods and so would lose if it trades with Radioland

    ANS: C PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-158

159. Suppose that a worker in Agland can produce either 10 units of organic grain or 2 units of incense per year, and a worker in Zenland can produce either 5 units of organic grain or 15 units of incense per year. There are 20 workers in Agland and 10 workers in Zenland. Currently the two countries do not trade. Agland produces and consumes 100 units of grain and 20 units of incense per year. Zenland produces and consumes 50 units of grain and no incense per year. The combined output of the two countries is therefore 150 units of grain and 20 units of incense per year. If the two countries decided to trade and completely specialize in producing the good for which each has a comparative advantage, what would the combined yearly output of the two countries be?
    a. 50 units of grain and 40 units of incense
    b. 200 units of grain and 150 units of incense
    c. 150 units of grain and 20 units of incense
    d. 200 units of grain and 300 units of incense

    ANS: B PTS: 1 DIF: Challenging REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-159

160. Suppose that a worker in Cornland can grow either 40 bushels of corn or 10 bushels of oats per year, and a worker in Oatland can grow either 5 bushels of corn or 50 bushels of oats per year. There are 20 workers in Cornland and 20 workers in Oatland. If the two countries do not trade, Cornland will produce and consume 400 bushels of corn and 100 bushels of oats, while Oatland will produce and consume 50 bushels of corn and 500 bushels of oats. Combined output for the two countries would therefore be 450 bushels of corn and 600 bushels of oats. If the two countries do trade, each will completely specialize in producing the crop for which it has a comparative advantage. If trade occurs, by what amount will the combined output for the two countries increase?
a. 800 bushels of corn and 1000 bushels of oats
b. 400 bushels of corn and 500 bushels of oats
c. 350 bushels of corn and 400 bushels of oats
d. 200 bushels of corn and 200 bushels of oats

ANS: C PTS: 1 DIF: Challenging REF: 55-57
BLM: Higher Order NOT: Micro TB_3-160

161. Suppose that a worker in Cornland can grow either 40 bushels of corn or 10 bushels of oats per year, and a worker in Oatland can grow either 20 bushels of corn or 5 bushels of oats per year. There are 20 workers in Cornland and 20 workers in Oatland. What is the opportunity cost of 1 bushel of oats in Cornland?
a. 1/10 bushels of corn
b. 1/4 bushels of corn
c. 4 bushels of corn
d. 10 bushels of corn

ANS: C PTS: 1 DIF: Challenging REF: 55-57
BLM: Higher Order NOT: Micro TB_3-161

162. Suppose that a worker in Boatland can produce either 5 units of wheat or 25 units of fish per year, and a worker in Farmland can produce either 25 units of wheat or 5 units of fish per year. There are 10 workers in each country. Political pressure from the fish lobby in Farmland and the wheat lobby in Boatland has prevented trade between the two countries on the grounds that cheap imports would kill the fish industry in Farmland and the wheat industry in Boatland. As a result, Boatland produces and consumes 25 units of wheat and 125 units of fish per year while Farmland produces and consumes 125 units of wheat and 25 units of fish per year. If the political pressure was overcome and trade was to occur, each country would completely specialize in the product for which it has a comparative advantage. If trade were to occur, by how much would the combined output of the two countries increase?
a. 25 wheat and 25 fish
b. 50 wheat and 50 fish
c. 75 wheat and 75 fish
d. 100 wheat and 100 fish

ANS: D PTS: 1 DIF: Challenging REF: 55-57
BLM: Higher Order NOT: Micro TB_3-162

163. Suppose that a worker in Boatland can produce either 5 units of wheat or 25 units of fish per year, and a worker in Farmland can produce either 25 units of wheat or 5 units of fish per year. There are 10 workers in each country. No trade occurs between the two countries. Boatland produces and consumes 25 units of wheat and 125 units of fish per year, while Farmland produces and consumes 125 units of wheat and 25 units of fish per year. If trade were to occur, Boatland would trade 100 units of fish to Farmland in exchange for 100 units of wheat. If Boatland no longer grew any of its own wheat, how many units of fish could it now consume along with the 100 units of imported wheat?
a. 25 units
b. 75 units
c. 150 units
d. 250 units

ANS: C PTS: 1 DIF: Challenging REF: 55-57
BLM: Higher Order NOT: Micro TB_3-163

164. Suppose that the country of Xenophobia chose to isolate itself from the rest of the world. Its ruler proclaimed that Xenophobia should become self-sufficient and so would not engage in foreign trade. From an economic perspective, when would this idea make sense?
a. if Xenophobia had an absolute advantage in all goods
b. if Xenophobia had no absolute advantages in any good.
c. never, as long as Xenophobia had a comparative advantage in any good
d. never, as long as Xenophobia had an absolute advantage in at least half the goods traded

ANS: C PTS: 1 DIF: Average REF: 55-57
BLM: Higher Order NOT: Micro TB_3-164

165. What are imports?
a. people who work in foreign countries
b. economic models
c. whatever is given up to obtain some item
d. goods produced abroad and sold domestically

ANS: D PTS: 1 DIF: Easy REF: 62
BLM: Remember NOT: Micro TB_3-165

166. What are exports?
a. limits placed on the quantity of goods brought into a country
b. goods produced abroad and sold domestically
c. a country's ability to produce a good
d. goods produced domestically and sold abroad

ANS: D PTS: 1 DIF: Easy REF: 62
BLM: Remember NOT: Micro TB_3-166

167. What did Adam Smith believe about trade?
a. that trade would hurt the British people
b. that trade with other countries was not necessary
c. that trade should be based on comparative advantage
d. that people are better off if they specialize in what they can do best

ANS: D PTS: 1 DIF: Easy REF: 59
BLM: Remember NOT: Micro TB_3-167

168. According to Adam Smith, what should a person never attempt to make at home?
    a. whatever will cost one more to make than to buy
    b. everything one person needs to live
    c. what one doesn't know how to make
    d. any necessity of life

    ANS: A PTS: 1 DIF: Average REF: 59
    BLM: Remember NOT: Micro TB_3-168

169. Who developed the principle of comparative advantage?
    a. Paul Samuelson
    b. David Ricardo
    c. John Maynard Keynes
    d. Adam Smith

    ANS: B PTS: 1 DIF: Easy REF: 59
    BLM: Remember NOT: Micro TB_3-169

170. What is David Ricardo's contribution?
    a. He wrote books opposing the ideas of Adam Smith.
    b. He was the founder of modern economics.
    c. He argued in favour of Britain following a free-trade policy.
    d. He wrote An Inquiry into the Nature and Causes of the Wealth of Nations.

    ANS: C PTS: 1 DIF: Easy REF: 59
    BLM: Remember NOT: Micro TB_3-170

171. What is David Ricardo known for?
    a. He opposed the Corn Laws as a member of the British Parliament.
    b. He disputed Adam Smith's theory of specialization and trade in the early 1800s.
    c. He advocated trade based on absolute advantage.
    d. He was an early supporter of trade restrictions.

    ANS: A PTS: 1 DIF: Easy REF: 59
    BLM: Remember NOT: Micro TB_3-171

172. Which book did David Ricardo write?
    a. Inquiry into the Nature and Causes of the Wealth of Nations
    b. Principles of Political Economy and Taxation
    c. The General Theory of Prices and Employment
    d. Why Nations Trade

    ANS: B PTS: 1 DIF: Easy REF: 59
    BLM: Remember NOT: Micro TB_3-172

173. Which of the following do economists generally support?
    a. trade restrictions
    b. government management of trade
    c. export subsidies
    d. free international trade

    ANS: D PTS: 1 DIF: Easy REF: 62
    BLM: Remember NOT: Micro TB_3-173

174. Which of the following could benefit Canada?
   a. restricting imports and promoting exports
   b. promoting imports and restricting exports
   c. restricting both imports and exports
   d. not restricting trade

   ANS: D PTS: 1 DIF: Average REF: 60-61
   BLM: Remember NOT: Micro TB_3-174

TRUE/FALSE

1. Trade allows a country to consume outside its production possibilities frontier.

   ANS: T PTS: 1 DIF: Average REF: 55
   BLM: Remember NOT: Micro TB_3-175

2. It takes Barbara 3 hours to make a pie and 4 hours to make a shirt. It takes Gary 2 hours to make a pie and 5 hours to make a shirt. Barbara should specialize in making shirts and Gary should specialize in making pies, then they should trade.

   ANS: T PTS: 1 DIF: Average REF: 55-57
   BLM: Remember NOT: Micro TB_3-176

3. It takes Russell 6 hours to produce a bushel of corn and 2 hours to wash and polish a car. It takes Wilma 6 hours to produce a bushel of corn and 1 hour to wash and polish a car. Wilma and Russell cannot gain from specialization and trade, since it takes each of them 6 hours to produce 1 bushel of corn.

   ANS: F PTS: 1 DIF: Average REF: 55-57
   BLM: Remember NOT: Micro TB_3-177

4. For a country producing two goods, the opportunity cost of one good will be the inverse of the opportunity cost of the other good.

   ANS: T PTS: 1 DIF: Average REF: 55-57
   BLM: Remember NOT: Micro TB_3-178

5. The producer who has the smaller opportunity cost of producing a good is said to have an absolute advantage in producing that good.

   ANS: F PTS: 1 DIF: Average REF: 55-57
   BLM: Remember NOT: Micro TB_3-179

6. Trade is based on absolute advantage.

   ANS: F PTS: 1 DIF: Easy REF: 55-57
   BLM: Remember NOT: Micro TB_3-180

7. Rusty can edit two pages in one minute, and can type 80 words in one minute. Emily can edit one page in one minute, and can type 100 words in one minute. Rusty has an absolute and comparative advantage in editing, and Emily has an absolute and comparative advantage in typing.

   ANS: T PTS: 1 DIF: Average REF: 55-57
   BLM: Remember NOT: Micro TB_3-181

8. Two countries can achieve gains from trade even if one country has an absolute advantage in the production of both goods.

   ANS: T PTS: 1 DIF: Average REF: 55-57
   BLM: Remember NOT: Micro TB_3-182

9. Differences in opportunity cost allow for gains from trade.

   ANS: T PTS: 1 DIF: Easy REF: 55-57
   BLM: Remember NOT: Micro TB_3-183

10. When each person specializes in producing the good for which he or she has a comparative advantage, each person can gain from trade but total production in the economy is unchanged.

    ANS: F PTS: 1 DIF: Average REF: 55-57
    BLM: Remember NOT: Micro TB_3-184

11. Unless two people who are producing two goods have exactly the same opportunity costs, each will have a comparative advantage in a different good.

    ANS: T PTS: 1 DIF: Easy REF: 55-57
    BLM: Remember NOT: Micro TB_3-185

12. As long as two people have different opportunity costs, each can gain from trade by being able to obtain a good at a price lower than his or her opportunity cost.

    ANS: T PTS: 1 DIF: Average REF: 55-57
    BLM: Remember NOT: Micro TB_3-186

13. Trade allows a person to obtain goods at prices that are less than that person's opportunity cost because each person concentrates on the activity for which he or she has the lower opportunity cost.

    ANS: T PTS: 1 DIF: Average REF: 55-57
    BLM: Remember NOT: Micro TB_3-187

14. Jonathan can make a birdhouse in three hours. He can make a bird feeder in three hour. The opportunity cost to Jonathan of making a birdhouse is 1/3 bird feeder.

    ANS: F PTS: 1 DIF: Average REF: 55-57
    BLM: Higher Order NOT: Micro TB_3-188

15. Mark is a computer company executive and earns $200 per hour managing the company and promoting its products. His daughter Regan is a high school student and earns $6 per hour helping her grandmother on the farm. Mark's computer is broken. He can repair it himself in one hour. Regan can repair it in 10 hours. Mark has a comparative advantage repairing the computer.

ANS: F PTS: 1 DIF: Average REF: 55-57
BLM: Higher Order NOT: Micro TB_3-189

16. Suppose it takes a Chinese worker 2 hours to produce a ceramic pot, and 20 hours to produce a tablecloth. Suppose that it takes a Canadian worker 2 hours to produce a ceramic pot and 10 hours to produce a tablecloth. It will benefit China to produce extra pots and export them to Canada in return for imported Canadian tablecloths.

ANS: T PTS: 1 DIF: Average REF: 55-57
BLM: Higher Order NOT: Micro TB_3-190

17. If it takes Canadian workers fewer hours to produce every good than it takes German workers, Canada cannot gain from trade with Germany.

ANS: F PTS: 1 DIF: Average REF: 55-57
BLM: Higher Order NOT: Micro TB_3-191

18. Adam Smith developed the theory of comparative advantage as we know it today.

ANS: F PTS: 1 DIF: Average REF: 59
BLM: Remember NOT: Micro TB_3-192

19. Goods produced abroad and sold domestically are called exports and goods produced domestically and sold abroad are called imports.

ANS: F PTS: 1 DIF: Easy REF: 62
BLM: Remember NOT: Micro TB_3-193

20. International trade may make some individuals in a nation better off, while other individuals are made worse off.

ANS: T PTS: 1 DIF: Average REF: 60
BLM: Remember NOT: Micro TB_3-194

21. Some countries win in international trade, while other countries lose.

ANS: F PTS: 1 DIF: Average REF: 60
BLM: Remember NOT: Micro TB_3-195

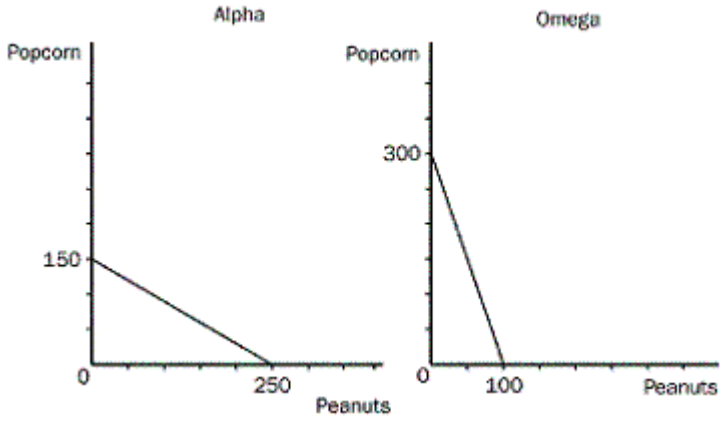
SHORT ANSWER

1. Explain the difference between absolute advantage and comparative advantage. Which is more important in determining trade patterns and why?

   ANS:
   Absolute advantage refers to productivity, as in the producer who can produce a product at a lower cost in terms of the resources used in production. Comparative advantage refers to the producer who can produce a product at a lower opportunity cost. Comparative advantage is the principle upon which trade patterns are based. Comparative advantage is based on opportunity cost, and opportunity cost measures the real cost to an individual or country of producing a particular product. Opportunity cost is therefore the information necessary for an individual or nation to determine whether to produce a good or buy it from someone else.

   PTS: 1 DIF: Challenging REF: 55-57 BLM: Higher Order
   NOT: Micro TB_3-196

2. The only two countries in the world, Alpha and Omega, face the following production possibilities frontiers.



   a. Assume that each country decides to use half of its resources in the production of each good. Show these points on the graphs for each country as point A.
   b. If these countries choose not to trade, what would be the total world production of popcorn and peanuts?
   c. Now suppose that each country decides to specialize in the good in which each has a comparative advantage. By specializing, what is the total world production of each product now?
   d. If each country decides to trade 100 units of popcorn for 100 units of peanuts, show on the graphs the gain each country would receive from trade. Label these points B.

   ANS:
   a. Alpha would be producing 125 units of peanuts and 75 units of popcorn (point A on its PPF), and Omega would be producing 50 units of peanuts and 150 units of popcorn (point A on its PPF).
   b. The total world production of peanuts would be 175 units, and the total world production of popcorn would be 225 units.
   c. The total world production of peanuts would now be 250 units, and the total world production of popcorn would now be 300 units.

d. Alpha would be producing 250 units of peanuts and would trade 100 of them to Omega, leaving Alpha with 150 units of peanuts. Alpha would then receive 100 units of popcorn from Omega. Omega would be producing 300 units of popcorn and would trade 100 of them to Alpha, leaving Omega with 200 units of popcorn. Omega would then receive 100 units of peanuts from Alpha.

PTS: 1 DIF: Average REF: 55-57 BLM: Higher Order
NOT: Micro TB_3-197

3. Julia can fix a meal in one hour, and her opportunity cost of one hour is $50. Jacque can fix the same kind of meal in two hours, and his opportunity cost of one hour is $20. Will both Julia and Jacque be better off if she pays him $45 per meal to fix her meals? Explain.

ANS:
Since Julia's opportunity cost of preparing a meal is $50, and Jacque's opportunity cost of preparing a meal is $40, each of them will be better off by $5 per meal if this arrangement is made.

PTS: 1 DIF: Average REF: 55-57 BLM: Higher Order
NOT: Micro TB_3-198

4. Gary and Diane must prepare a presentation for their marketing class. As part of their presentation, they must do a series of calculations and prepare 50 PowerPoint slides. It would take Gary 10 hours to do the required calculations and 10 hours to prepare the slides. It would take Diane 12 hours to do the calculations and 20 hours to prepare the slides.
   a. How much time would it take the two to complete the project if they divide the calculations equally and the slides equally?
   b. How much time would it take the two to complete the project if they use comparative advantage and specialize in calculating or preparing slides?
   c. If Diane and Gary have the same opportunity cost of $5 per hour, is there a better solution than for each to specialize in calculating or preparing slides?

ANS:
a. If both tasks are divided equally, it will take 11 hours for the calculations and 15 hours for the slide preparation, for a total of 26 hours.
b. If Diane specializes in calculating and Gary specializes in preparing slides, it will take 22 hours to complete the project.
c. If Diane specializes in calculating, her opportunity cost will be $60; hence, Diane would be better off if she paid Gary any amount less than $60 to do the calculating. Since Gary's opportunity cost of doing the calculations is only $50, he would be better off if Diane paid him between $50 and $60 dollars to do the calculations. In this case, the total time spent on the project would be 20 hours.

PTS: 1 DIF: Average REF: 55-57 BLM: Higher Order
NOT: Micro TB_3-199

5. Suppose that a worker in Taiwan can make 2 TVs or 10 pairs of shoes per week, and a worker in Korea can make 3 TVs or 20 pairs of shoes per week.
   a. In what sense do TVs and shoes cost less in Korea than in Taiwan?
   b. In what sense do TVs cost less in Taiwan than in Korea?
   c. If Taiwan and Korea were to engage in trade, which country would export which good?
   d. How would the answer to the question in part c change if a worker in Korea could make 4 TVs per week?

   ANS:

   a. In terms of labour time spent making TVs and shoes, both goods cost less in Korea than in Taiwan, 0.33 weeks per TV and 0.05 weeks per pair of shoes in Korea, and 0.5 weeks per TV and 0.1 weeks per pair of shoes in Taiwan.
   b. In terms of opportunity cost, TVs cost less in Taiwan than in Korea: 5 pairs of shoes per TV in Taiwan and 6.67 pairs of shoes per TV in Korea.
   c. Since Taiwan has a comparative advantage in TVs, it will export TVs. Since Korea has a comparative advantage in making pairs of shoes, it will export shoes.
   d. No country would have a comparative advantage since opportunity costs will be the same for both countries; therefore, engaging in trade would benefit neither country.

   PTS: 1 DIF: Average REF: 55-57 BLM: Higher Order
   NOT: Micro TB_3-200

PROBLEM

1. The "two-country?two-good" model (sometimes called the 2×2 model) of comparative advantage that we have studied so far is simple, insightful, and compelling. However, its very simplicity turns out to be its weakness. In the real world, when many countries produce many goods, the simple 2×2 model is of limited use in predicting patterns of trade. To see how complex such a model can become, let us consider a 2×3 model (two countries, 1 and 2, and three goods, A, B, and C.) The following table gives the maximum amounts (units) of each good that each country can produce if all the country's resources were used in the production of the respective good. In other words, the table describes each country's production possibilities frontier.

	Good A (units)	Good B (units)	Good C (units)
Country 1	1	3	6
Country 2	2	4	4

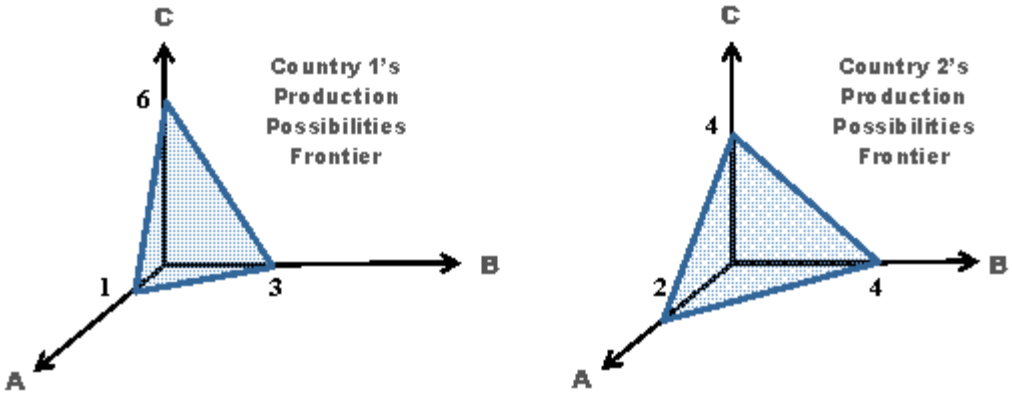
   a. How do the production possibilities frontiers for each of the two countries look in a three-dimensional coordinate system? (Draw three axes like a corner in your room, and label them after the three goods: A, B, and C. Then, place the number of units for each good for Country 1on its respective axis and connect the three intercepts by straight lines. Repeat for Country 2 on a separate graph.)
   b. Calculate the opportunity costs of good A in terms of B and C in each country and call these prices PA1 and PA2 respectively.
   c. Calculate the opportunity costs of good B in terms of A and C in each country and call these prices PB1 and PB2 respectively.
   d. Calculate the opportunity costs of good C in terms of A and B in each country and call these

prices PC1 and PC2 respectively.

e. Based on your calculations, can you tell which country should export or import each product based on comparative advantage?

ANS:

a.



b. PA1 = 3B = 6C (the price of good A in country 1, in terms of the goods B and C respectively)
PA2 = 2B = 2C (the price of good A in country 2, in terms of the goods B and C respectively)

c. PB1 = 1/3A = 2C (the price of good B in country 1, in terms of the goods A and C respectively)
PB2 = 1/2A = 1C (the price of good B in country 2, in terms of the goods A and C respectively)

d. PC1 = 1/6A = 1/2B (the price of good C in country 1, in terms of the goods A and B respectively)
PC2 = 1/2A = 1B (the price of good C in country 2, in terms of the goods A and B respectively)

e. Good A is more expensive in country 1 than in country 2 when its price is measured in terms of either B or C. Thus, by any measure, country 1 should not specialize in A.
Good B is cheaper in country 1 than in country 2 when measured in terms of A, but it is more expensive when measured in terms of C. Therefore, the model cannot tell which country has a comparative advantage in B.
Good C is cheaper in country 1 than in country 2 by both measures, so country A has a comparative advantage in C.
In conclusion, the model suggests that country 1 should produce C, country 2 should produce A, but it tells us little about which country should produce B.

PTS: 1 NOT: Micro TB_3-201

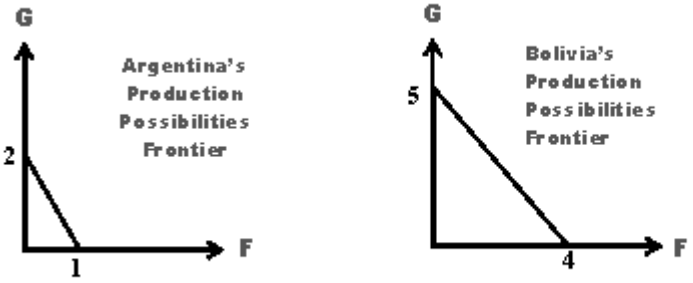
2. Suppose Argentina (A) and Bolivia (B) only trade with each other and they both produce the same two goods: grocery (G) and fish (F). Given its resources, Argentina can produce either 2 units of grocery per day or 1 unit of fish; Bolivia can produce either 5 units of grocery or 4 units of fish.
   a. Draw the production possibilities frontiers for each country on separate graphs.
   b. If there were no trade, what would be the local price of fish in each country, measured in units of grocery?
   c. If trade is allowed, which country will export fish and which country will export grocery (if any)?
   d. What are the gains from trading a unit of fish if the international price of fish is equal to the

average of the local prices in the two countries?

e. How are the gains from trade distributed? Comment on your result.

ANS:

a.



b. The price of fish in Argentina would be PAF = 2/1 = 2 G. In Bolivia, PBF = 5/4 = 1.25 G.

c. The opportunity cost of fish is lower in Bolivia, thus Bolivia will export fish and Argentina will export grocery.

d. The international price is (2 + 1.25)/2 = 1.625 G. For each unit of fish imported, Argentina gains 2 – 1.625 = 0.375 G. For each unit of fish exported, Bolivia gains 1.625 – 1.25 = 0.375 G.

e. The gains from trade are distributed equally. However, in general gains from trade are not equal. In this problem, equal gains from trade come from the assumption that the international price of fish is the average of the two internal costs of production.

PTS: 1 NOT: Micro TB_3-202

3. This exercise introduces the concept of "consumption possibilities frontier." Suppose Argentina (A) and Bolivia (B) only trade with each other and they both produce the same two goods: grocery (G) and fish (F). Given its resources, Argentina can produce either 2 units of grocery per day or 1 unit of fish; Bolivia can produce either 5 units of grocery or 4 units of fish. The international price of fish is equal to the average of the opportunity costs of production in the two countries.

a. Draw the production possibilities frontiers for each country on separate graphs.

b. If Argentina specializes in the production of groceries and sells them all to Bolivia, how much fish could it buy from Bolivia?

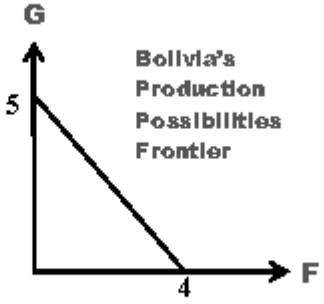
c. If Bolivia specializes in the production of fish and sells it all to Argentina, how much groceries could it buy?

d. Based on the results of parts b and c, using the production possibilities frontier you drew in part a, draw the consumption possibilities frontier for each country. (A consumption possibilities frontier is a straight line that connects the maximum amount of fish and groceries that a country can afford to consume from its own production or from importing.)

e. Think about your answer in part d. Is there anything that might not be correct? (Hint: Is Argentina capable of buying all of Bolivia's fish production? Is Argentina capable of exporting as much groceries as Bolivia could import?)

ANS:

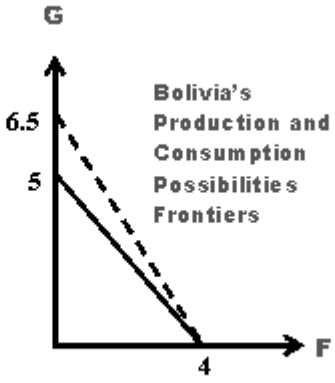
a.



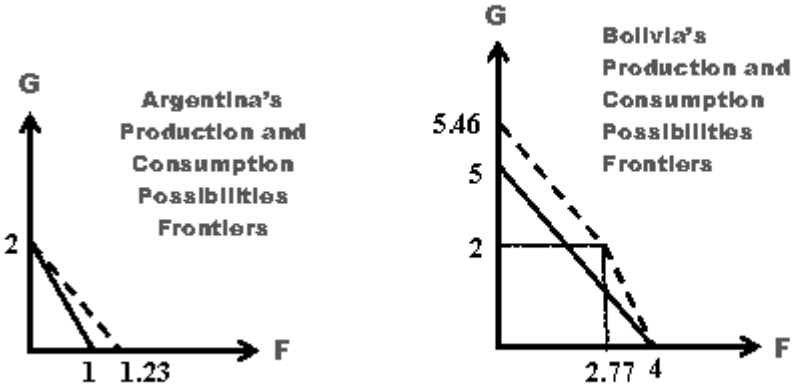
b. The price of fish in Argentina is 2 G (i.e., 2 units of groceries), and in Bolivia is 5/4 = 1.25 G. The international price is their average, which is equal to 1.625 G. Alternatively, the international price of groceries is 1/1.625 = 0.615 F (units of fish per unit of groceries).
If Argentina produced only groceries and sold them all to Bolivia, Argentina could buy a maximum of 2 × 0.615 = 1.23 fish, which is more than what Argentina could possibly produce.

c. If Bolivia specializes in the production of fish and sells it all to Argentina, Bolivia could buy 4 × 1.625 = 6.5 groceries, which is more than what Bolivia could possibly produce.

d. Each country's consumption possibilities frontiers are shown in dotted lines in the graphs below.

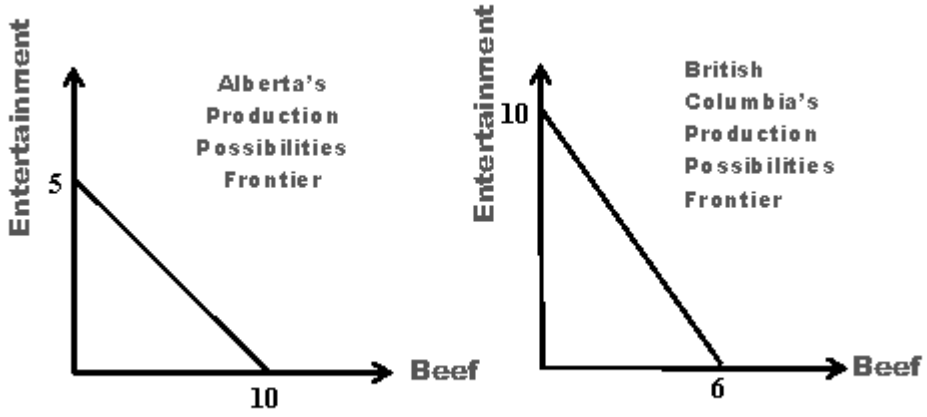


e. Argentina cannot purchase all of Bolivia's fish production, so that Bolivia cannot sell all its fish in exchange for groceries. While Argentina's consumption possibilities frontier is not affected by this limitation, Bolivia's is. For instance, if Bolivians would all become vegans and wish to consume only groceries from Argentina, they couldn't because Argentina cannot produce that much. The solution for the now vegan Bolivians would be to produce just enough fish to buy all of Argentina's groceries (that would be 1.23 fish) and use the remaining resources in the production of groceries for their own consumption. If Bolivia produces 1.23 fish, it needs to give up 1.23 × 1.25 = 1.54 groceries of their own production, so that their remaining resources could produce at most 5 – 1.54 = 3.46 groceries. This amount, plus the 2 units of groceries imported, allows the Bolivians to consume maximum 3.46 + 2 = 5.46 groceries. Their adjusted consumption possibilities frontier is shown in the next graph, where 2.77 = 3.46 × (4/5).



PTS: 1 NOT: Micro TB_3-203

4. Suppose Alberta and British Columbia (BC) have the production possibilities frontiers shown in the following graph. Suppose you wanted to determine which of the two provinces was economically better off. Is the given information sufficient? If yes, which province is better off? If not, make assumptions about the additional information that you need and determine which province is better off. How sensitive is your answer to variations in your assumptions?



ANS:
The usual measure of economic well-being is real GDP, which is the market value of the goods and services that a country produces. Real GDP, however, cannot be compared across provinces in the absence of common market prices. If one of the provinces produced more of each good than the other, one could safely conclude that the respective province was doing better. This is not the case here. Therefore, we need more information. Let us assume that the common ("international") price of beef is the average of the autarky prices (prices that would prevail in each province if trade was not possible). In Alberta, the price of beef would be 5/10 = 0.5 units of entertainment. In BC, it would be 10/6 = 1.67 units of entertainment. The international price would be 1.085. Alberta has a comparative advantage in beef, and BC in entertainment. According to the theory of comparative advantage, Alberta will only produce beef, which is valued at $10 \times 1.085 = 10.085$ units of entertainment. BC, on the other hand, will produce only entertainment, at the maximum rate of 10 units. Now, we can compare Alberta's GDP (= 10.085 units of entertainment) to BC's GDP (= 10 units of entertainment) and conclude that Alberta is slightly better off than BC. However, our assumption that the international price of beef was the average of the two autarkic prices was arbitrary. In reality, it depends on people's preferences. This price can vary across the wide range of (0.5, 1.67). Alberta's GDP would, accordingly, vary between 5 and 16.7 units of entertainment, which need to be compared with BC's always 10 units. Thus, we see that our conclusion that Alberta is slightly better off than BC is very sensitive to the fluctuations in market prices.

PTS: 1 NOT: Micro TB_3-204

5. Ann and Jess work for a home cleaning company and they form a team. In each room, there are two broad cleaning areas: floor and windows. Ann can do a floor in 45 minutes and windows in 20 minutes. Jess does floors in 30 minutes and windows in 30 minutes.
   a. How long does it take to clean an apartment with 4 rooms if Ann takes 2 rooms and Jess takes 2 rooms, assuming that if one finishes earlier she takes a break waiting for the other?
   b. Later on, they decide that if one finishes earlier she would help the other to finish so that they can move on to another client. How long does it take now to finish?
   c. After a while, they realize that it is better if one does the floors in all rooms and the other does the windows. How long does it take now?

   ANS:
   a. It takes Ann 130 minutes to finish her rooms, and Jess 120 minutes. Jess has a 10-minute break before Ann finishes.
   b. It takes less than 130 and more than 120 minutes, but one cannot tell unless more is known about how Jess works: for instance, does she do first the windows and then the floors, or the other way around? Different scenarios lead to different answers.
   c. Ann's opportunity cost for a floor is 45/20 = 2.25 windows; Jess's opportunity cost for a floor is 30/30 = 1 window. Jess has a comparative advantage in floors. If she does all the floors and Ann all windows, they can finish in the maximum time between Ann's time to do the windows ($4 \times 20 = 80$ minutes) and Jess's time to do the floors ($4 \times 30 = 120$ minutes). However, since Ann has plenty of time left after finishing the windows, she can do some floors and thus bring the time well below 120 minutes.

   PTS: 1 NOT: Micro TB_3-205

