

**CHAPTER 3—Interdependence and the gains from trade**

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**TRUE/FALSE**

1. People's motivation to trade comes from the goods or services they expect to get in return.

ANS: T                      PTS: 1                      DIF: Easy                      TOP: Introduction

2. Two individuals or two nations can benefit from trade even if one country has an absolute advantage over the other in producing all goods.

ANS: T                      PTS: 1                      DIF: EASY                      TOP: A parable for the modern economy

3. If trade is not possible, then each person's production possibility frontier is the same as each person's consumption possibility frontier.

ANS: T                      PTS: 1                      DIF: Moderate                      TOP: Production possibilities

4. A constant trade-off in the production of two goods implies that the production possibility frontier will be a curve rather than a straight line.

ANS: F                      PTS: 1                      DIF: Easy                      TOP: Production possibilities

5. One reason trade benefits both parties is that it allows each to specialise in what they do better.

ANS: T                      PTS: 1                      DIF: Easy                      TOP: Specialisation and trade

6. Trade allows a country to pivot outwards its production possibilities frontier.

ANS: F                      PTS: 1                      DIF: Moderate                      TOP: Specialisation and trade

7. Jean grows rice at a higher cost than Lee. Suppose Lee catches fish at a higher cost than Jean. They should trade.

ANS: F                      PTS: 1                      DIF: Moderate                      TOP: Specialisation and trade

8. It takes Barbara four hours to make a pie and four hours to make a shirt. It takes Gary two hours to make a pie and five hours to make a shirt. Barbara should specialise in making shirts and Gary should specialise in making pies. Then they should trade.

ANS: T                      PTS: 1                      DIF: Moderate                      TOP: Specialisation and trade

9. Suppose it takes Jean four hours to catch 10 fish and one hour to collect one kilogram of mushrooms. It takes Lee four hours to catch 10 fish and 30 minutes to collect 1 kg of mushrooms. Lee should specialise in catching fish and Jean should specialise in collecting mushrooms.

ANS: F                      PTS: 1                      DIF: Moderate                      TOP: Specialisation and trade

10. Robinson Crusoe can produce 20 coconuts or 10 palm leaves in one day. Friday can produce 25 coconuts or five palm leaves in one day. Both individuals will be made better off through trade if Robinson specialises in producing coconuts and Friday specialises in producing palm leaves.

ANS: F                      PTS: 1                      DIF: Moderate                      TOP: Specialisation and trade

11. Suppose Aaron can build a table in three days and clean a house in one hour, while Jack can clean a house in three hours but it only takes him one day to build a table. Jack has an absolute advantage over Aaron.

ANS: F                      PTS: 1                      DIF: Moderate                      TOP: Specialisation and trade

12. The producer who requires a smaller quantity of inputs to produce a good is said to have an absolute advantage in producing that good.

ANS: T                      PTS: 1                      DIF: Easy                      TOP: Absolute advantage

13. 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: Moderate                      TOP: The principle of comparative advantage

14. If one country can produce all goods more cheaply than another, there is no reason to trade.

ANS: F                      PTS: 1                      DIF: Moderate                      TOP: The principle of comparative advantage

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

ANS: T                      PTS: 1                      DIF: Easy                      TOP: The principle of comparative advantage

16. Trade is not based on absolute advantage; rather it is based on comparative advantage.

ANS: T                      PTS: 1                      DIF: Easy                      TOP: The principle of comparative advantage

17. 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 both an absolute and a comparative advantage in editing and Emily has both an absolute and a comparative advantage in typing.

ANS: T                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage

18. Michael can score 30 points per basketball game and Scottie can score 22 points per game. Michael has an absolute advantage over Scottie in scoring.

ANS: T                      PTS: 1                      DIF: Easy                      TOP: Absolute advantage

19. Shaquille can score 32 points or produce 12 rebounds in one game. Karl can score three points or produce one rebound in one game. Shaquille has both an absolute and a comparative advantage in both scoring and rebounding.

ANS: F                      PTS: 1                      DIF: Moderate                      TOP: The principle of

comparative advantage

20. Andy is the greatest ukulele player in the world, but he also has a job as a highly paid executive in a human resources firm. He should quit his job to play ukulele full time.

ANS: F                      PTS: 1                      DIF: Moderate                      TOP: Applications of comparative advantage

21. Lee can pick 30 apples in one hour. He can pick 60 kiwifruit in half an hour. The opportunity cost to Lee of picking one apple is four kiwifruit.

ANS: F                      PTS: 1                      DIF: Easy                      TOP: Opportunity cost and comparative advantage

22. It takes Andy eight hours (including his lunch break) to write a report for the minister or three hours to take his cat to the vet. His opportunity cost of taking his cat to the vet is 2.7 hours.

ANS: F                      PTS: 1                      DIF: Easy                      TOP: Opportunity cost and comparative advantage

23. The principle of absolute advantage explains the gains from trade and why economic interdependence occurs.

ANS: F                      PTS: 1                      DIF: Easy                      TOP: The principle of comparative advantage

24. Mark is a computer company executive, and earns \$500 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 in repairing the computer.

ANS: F                      PTS: 1                      DIF: Difficult                      TOP: Applications of comparative advantage

25. Differences in opportunity cost and comparative advantage allow for gains from trade.

ANS: T                      PTS: 1                      DIF: Easy                      TOP: Comparative advantage and trade

26. When parties specialise in the production of goods they have a comparative advantage in, total production is increased and both parties can gain from trade.

ANS: T                      PTS: 1                      DIF: Easy                      TOP: Comparative advantage and trade

27. Comparative advantage will always occur when two parties have different opportunity costs in production.

ANS: T                      PTS: 1                      DIF: Easy                      TOP: Opportunity cost and comparative advantage

28. 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: Moderate                      TOP: Comparative advantage and trade

29. A person is able 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: Moderate                      TOP: Applications of comparative advantage

30. If a country imports goods from overseas, it will always suffer a reduction in welfare.

ANS: F                      PTS: 1                      DIF: Easy                      TOP: Should a country trade with other countries?

31. 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                      TOP: Should a country trade with other countries?

32. A Korean worker can produce 10 cars per month or grow 1500 kg of wheat per month and an American worker can produce four cars or 1700 kg of rice per month. Korea and the US can both gain if Korea makes more cars and exports them to the US in exchange for imports of increased output of Australian rice.

ANS: T                      PTS: 1                      DIF: Moderate                      TOP: Should a country trade with other countries?

33. If it takes Australian workers fewer hours to produce every good than it takes Malaysian workers, Australia cannot gain from trade with Malaysia.

ANS: F                      PTS: 1                      DIF: Easy                      TOP: Should a country trade with other countries?

34. Adam Smith discusses that countries should be self-sufficient in his 1776 book *An Inquiry into the Nature and Causes of the Wealth of Nations*.

ANS: F                      PTS: 1                      DIF: Easy                      TOP: FYI: The legacy of Adam Smith and David Ricardo

35. David Ricardo developed the theory of imports and exports, as we know them today.

ANS: F                      PTS: 1                      DIF: Moderate                      TOP: FYI: The legacy of Adam Smith and David Ricardo

36. Adam Smith's book *An Inquiry into the Nature and Causes of the Wealth of Nations* inspired David Ricardo, a millionaire stockbroker, to become an economist.

ANS: T                      PTS: 1                      DIF: Easy                      TOP: FYI: The legacy of Adam Smith and David Ricardo

37. David Ricardo made the statement that 'It is a maxim of every prudent master of a family never to attempt to make at home what it will cost him more to make than to buy'.

ANS: F                      PTS: 1                      DIF: Moderate                      TOP: *FYI: The legacy of Adam Smith and David Ricardo*

38. The principle of comparative advantage was developed in Adam Smith's 1817 book *Principles of Political Economy and Taxation*.

ANS: F                      PTS: 1                      DIF: Easy                      TOP: *FYI: The legacy of Adam Smith and David Ricardo*

39. The conclusions of Adam Smith and David Ricardo on the gains from trade are no longer valid due to the increase of barriers to trade.

ANS: F                      PTS: 1                      DIF: Easy                      TOP: *FYI: The legacy of Adam Smith and David Ricardo*

40. The central argument for free trade has changed a lot in the past two centuries.

ANS: F                      PTS: 1                      DIF: Easy                      TOP: *FYI: The legacy of Adam Smith and David Ricardo*

41. Economists' support of trade restrictions is still based largely on the failure of the principle of comparative advantage.

ANS: F                      PTS: 1                      DIF: Moderate                      TOP: Should a country trade with other countries?

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

ANS: T                      PTS: 1                      DIF: Moderate                      TOP: Should a country trade with other countries?

## **MULTIPLE CHOICE**

1. The reason most people provide you with goods and services is because:
- A. their beliefs make them feel charitable to you
  - B. they want to be your friend
  - C. they will receive something they want in return
  - D. they aren't as good at bargaining as you are

ANS: C                      PTS: 1                      DIF: Easy                      TOP: Introduction

2. A butcher can produce only hamburgers, and a farmer can produce only potato chips. The butcher and the farmer both like both foods. They:
- A. cannot gain from trade
  - B. could gain from trade under certain circumstances, but not always
  - C. could gain from trade because each would enjoy a greater variety of food
  - D. could gain from trade only if each were indifferent between hamburgers and potato chips

ANS: C                      PTS: 1                      DIF: Easy                      TOP: Introduction

3. In the absence of international importing and exporting:
- A. a country's consumption possibilities frontier is always below the production possibilities

frontier

- B. a country will be able to specialise more in producing goods it is most productive in
- C. a country's production possibilities frontier is also its consumption possibilities frontier
- D. a country will have access to greater product variety

ANS: C                      PTS: 1                      DIF: Easy                      TOP: Production possibilities

4. A country's consumption possibilities frontier can be moved outside its production possibilities frontier:
- A. by producing a greater variety of goods and services
  - B. by allocating resources differently
  - C. through trade
  - D. by lowering unemployment in the country

ANS: C                      PTS: 1                      DIF: Moderate                      TOP: Specialisation and trade

5. In order to have a linear production possibilities frontier (one that is not bowed out), it must be that:
- A. there are no trade-offs
  - B. the trade-off between two goods is constant
  - C. resources are being used efficiently
  - D. there is no technological advances occurring

ANS: B                      PTS: 1                      DIF: Easy                      TOP: Production possibilities

**NARRBEGIN: Table 3-1**

**Table 3-1**

	Labour hours needed to make 1 kg of:		Kgs produced in 20 hours:	
	<u>Meat</u>	<u>Potatoes</u>	<u>Meat</u>	<u>Potatoes</u>
Potato farmer	10	5	2	4
Cattle farmer	4	1	5	20

NARREND

6. Refer to Table 3-1. For the potato farmer, the opportunity cost of 1 kg of meat is:
- A. eight hours of labour
  - B. four hours of labour
  - C. 2 kg of potatoes
  - D. 1/2 kg of potatoes

ANS: C                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage  
NAR: Table 3-1

7. Refer to Table 3-1. For the cattle farmer, the opportunity cost of 1 kg of meat is:
- A. five hours of labour
  - B. one hour of labour
  - C. 1/4 kg of potatoes
  - D. 4 kg of potatoes

ANS: D                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage NAR: Table 3-1

8. Refer to Table 3-1. For the potato farmer, the opportunity cost of 1 kg of potatoes is:
- A. eight hours of labour
  - B. 1/2 kg of meat
  - C. 2 kg of meat
  - D. four hours of labour

ANS: B                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage NAR: Table 3-1

9. Refer to Table 3-1. For the cattle farmer, the opportunity cost of one kg of potatoes is:
- A. four hours of labour
  - B. two hours of labour
  - C. 1/4 kg of meat
  - D. 4 kg of meat

ANS: C                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage NAR: Table 3-1

10. According to Table 3-1:
- A. the potato farmer has an absolute advantage in meat, and the cattle farmer has an absolute advantage in potatoes
  - B. the potato farmer has an absolute advantage in potatoes, and the cattle farmer has an absolute advantage in meat
  - C. the potato farmer has an absolute advantage in meat, and the cattle farmer has an absolute advantage in meat
  - D. the potato farmer has an absolute advantage in neither goods, and the cattle farmer has an absolute advantage in both goods

ANS: D                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage NAR: Table 3-1

11. According to Table 3-1:
- A. the cattle farmer has an absolute advantage in both goods, and the potato farmer has a comparative advantage in meat
  - B. the cattle farmer has an absolute advantage in meat, and the potato farmer has a comparative advantage in potatoes
  - C. the cattle farmer has an absolute advantage in meat, and the potato farmer has a comparative advantage in neither goods
  - D. the cattle farmer has an absolute advantage in both goods, and the potato farmer has a comparative advantage in potatoes

ANS: A                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage NAR: Table 3-1

12. According to Table 3-1:
- A. the potato farmer has an absolute advantage in meat, and the cattle farmer has a comparative advantage in meat
  - B. the potato farmer has an absolute advantage in potatoes, and the cattle farmer has a comparative advantage in potatoes
  - C. the potato farmer has an absolute advantage in neither goods, and the cattle farmer has a comparative advantage in potatoes

D. the potato farmer has an absolute advantage in neither goods, and the cattle farmer has a comparative advantage in meat

ANS: C                      PTS: 1                      DIF: Moderate                      TOP: Absolute advantage and comparative advantage NAR: Table 3-1

13. According to Table 3-1:

- A. the cattle farmer has a comparative advantage in potatoes, and the potato farmer has a comparative advantage in meat
- B. the cattle farmer has a comparative advantage in both goods, and the potato farmer has a comparative advantage in neither goods
- C. the cattle farmer has a comparative advantage in meat, and the potato farmer has a comparative advantage in potatoes
- D. the cattle farmer has a comparative advantage in neither goods, and the potato farmer has a comparative advantage in both goods

ANS: A                      PTS: 1                      DIF: Moderate                      TOP: Absolute advantage and comparative advantage NAR: Table 3-1

14. Mark can cook dinner in 30 minutes and wash the laundry in 20 minutes while his housemate John can cook dinner in 15 minutes and wash the laundry in 30 minutes. How should they allocate their work?

- A. Mark should cook dinner based on his comparative advantage
- B. John should cook dinner based on his absolute advantage
- C. John should cook dinner based on his comparative advantage
- D. Mark should do the laundry based on his absolute advantage

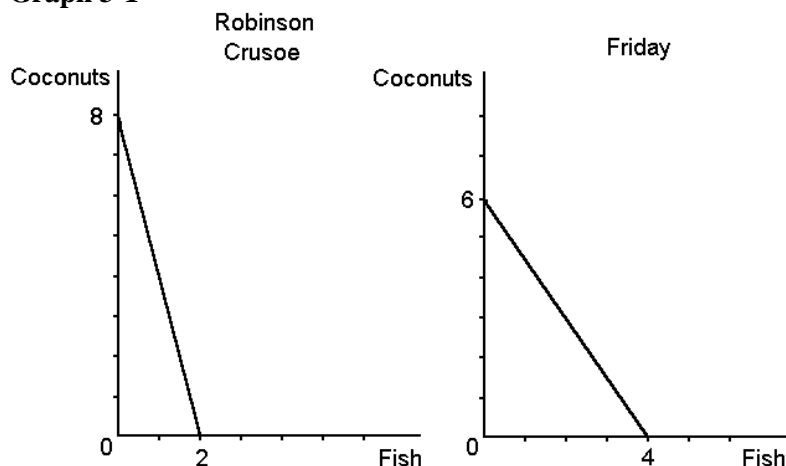
ANS: C                      PTS: 1                      DIF: Moderate                      TOP: Comparative advantage and trade

15. Refer to Graph 3-1. For Robinson Crusoe, the opportunity cost of 1 kg of fish is:

- A. 2 kg of coconuts
- B. 1/2 kg of coconuts
- C. 4 kg of coconuts
- D. 1/4 kg of coconuts

**NARRBEGIN: 3-1**

**Graph 3-1**



These figures illustrate the production possibilities frontiers for Robinson Crusoe and Friday with 12 hours of labour.

NARREND

ANS: C                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage  
NAR: 3-1

16. Refer to Graph 3-1. For Friday, the opportunity cost of 1 kg of fish is:
- A. 1 kg of coconuts
  - B.  $\frac{3}{2}$  kg of coconuts
  - C.  $\frac{1}{3}$  kg of coconuts
  - D. 2 kg of fish

ANS: B                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage  
NAR: 3-1

17. Refer to Graph 3-1. For Robinson Crusoe, the opportunity cost of 1 kg of coconuts is:
- A. 2 kg of fish
  - B.  $\frac{1}{2}$  kg of fish
  - C. 4 kg of fish
  - D.  $\frac{1}{4}$  kg of fish

ANS: D                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage  
NAR: 3-1

18. Refer to Graph 3-1. For Friday, the opportunity cost of 1 kg of coconuts is:
- A.  $\frac{2}{3}$  kg of fish
  - B. 3 kg of fish
  - C. 1 kg of fish
  - D. 2 kg of fish

ANS: A                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage  
NAR: 3-1

19. According to Graph 3-1:
- A. Robinson Crusoe has a comparative advantage in fish, and Friday has a comparative advantage in coconuts
  - B. Robinson Crusoe has a comparative advantage in coconuts, and Friday has a comparative advantage in fish
  - C. Robinson Crusoe has a comparative advantage in fish, and Friday has a comparative advantage in fish
  - D. Robinson Crusoe has a comparative advantage in fish, and Friday has a comparative advantage in neither goods

ANS: B                      PTS: 1                      DIF: Difficult                      TOP: Opportunity cost and comparative advantage  
NAR: 3-1

20. According to Graph 3-1:
- Robinson Crusoe has an absolute advantage in fish, and Friday has an absolute advantage in coconuts
  - Robinson Crusoe has an absolute advantage in coconuts, and Friday has an absolute advantage in fish
  - Robinson Crusoe has an absolute advantage in neither goods, and Friday has an absolute advantage in both goods
  - Robinson Crusoe has an absolute advantage in both goods, and Friday has an absolute advantage in neither goods

ANS: B                      PTS: 1                      DIF: Difficult                      TOP: Absolute advantage  
NAR: 3-1

21. According to Graph 3-1:
- Robinson Crusoe has a comparative advantage in fish, and Friday has an absolute advantage in both goods
  - Robinson Crusoe has a comparative advantage in fish, and Friday has an absolute advantage in coconuts
  - Robinson Crusoe has a comparative advantage in fish, and Friday has an absolute advantage in neither goods
  - Robinson Crusoe has a comparative advantage in coconuts, and Friday has an absolute advantage in fish

ANS: D                      PTS: 1                      DIF: Difficult                      TOP: Absolute advantage  
NAR: 3-1

22. According to Graph 3-1:
- Robinson Crusoe has an absolute advantage in coconuts, and Friday has a comparative advantage in fish
  - Robinson Crusoe has an absolute advantage in both goods, and Friday has a comparative advantage in coconuts
  - Robinson Crusoe has an absolute advantage in fish, and Friday has a comparative advantage in coconuts
  - Robinson Crusoe has an absolute advantage in neither goods, and Friday has a comparative advantage in fish

ANS: A                      PTS: 1                      DIF: Difficult                      TOP: Absolute advantage  
NAR: 3-1

**NARRBEGIN: Table 3-2**

**Table 3-2**

	Labour hours needed to produce one unit of:		Amount produced in 60 hours:	
	<u>Butter (kg)</u>	<u>Butter (kg)</u>	<u>Rice (kg)</u>	<u>Rice (kg)</u>
Lee	6	10	15	4
John	3	20	15	4

NARREND

23. Refer to Table 3-2. The opportunity cost of 1 kg of butter for Lee is:
- $\frac{3}{2}$  kg of rice

- B.  $\frac{4}{3}$  kg of rice
- C.  $\frac{3}{4}$  kg of rice
- D.  $\frac{2}{3}$  kg of rice

ANS: D                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage  
NAR: Table 3-2

24. Refer to Table 3-2. The opportunity cost of 1 kg of butter for John is:
- A.  $\frac{3}{2}$  kg of rice
  - B.  $\frac{4}{3}$  kg of rice
  - C.  $\frac{3}{4}$  kg of rice
  - D.  $\frac{2}{3}$  kg of rice

ANS: B                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage  
NAR: Table 3-2

25. Refer to Table 3-2. For Lee the opportunity cost of 1 kg of rice is:
- A.  $\frac{4}{3}$  kg of butter
  - B.  $\frac{3}{4}$  kg of butter
  - C.  $\frac{2}{3}$  kg of butter
  - D.  $\frac{3}{2}$  kg of butter

ANS: D                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage  
NAR: Table 3-2

26. Refer to Table 3-2. For John the opportunity cost of one kg of rice:
- A.  $\frac{3}{4}$  kg of butter
  - B.  $\frac{3}{2}$  kg of butter
  - C.  $\frac{4}{3}$  kg of butter
  - D.  $\frac{2}{3}$  kg of butter

ANS: A                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage  
NAR: Table 3-2

27. According to Table 3-2:
- A. Lee has a comparative advantage in rice, and John has an absolute advantage in butter
  - B. Lee has a comparative advantage in butter, and John has an absolute advantage in rice
  - C. Lee has a comparative advantage in rice, and John has an absolute advantage in neither goods
  - D. Lee has a comparative advantage in butter, and John has an absolute advantage in neither goods

ANS: C                      PTS: 1                      DIF: Difficult                      TOP: Absolute advantage and comparative advantage  
NAR: Table 3-2

28. According to Table 3-2:
- A. Lee has an absolute advantage in neither goods, and John has a comparative advantage in butter

- B. Lee has an absolute advantage in rice, and John has a comparative advantage in butter
- C. Lee has an absolute advantage in rice, and John has a comparative advantage in neither goods
- D. Lee has an absolute advantage in neither goods, and John has a comparative advantage in rice

ANS: A                      PTS: 1                      DIF: Difficult                      TOP: Absolute advantage and comparative advantage  
NAR: Table 3-2

29. According to Table 3-2:

- A. Lee has an absolute advantage in neither goods, and John has an absolute advantage in both goods
- B. Lee has an absolute advantage in neither goods, and John has an absolute advantage in butter
- C. Lee has an absolute advantage in rice, and John has an absolute advantage in butter
- D. Lee has an absolute advantage in rice, and John has an absolute advantage in both goods

ANS: B                      PTS: 1                      DIF: Difficult                      TOP: Absolute advantage and comparative advantage  
NAR: Table 3-2

30. According to Table 3-2:

- A. Lee and John both could benefit by Lee specialising in butter, and John specialising in rice
- B. Lee and John both could benefit by Lee specialising in butter, and John specialising in butter
- C. Lee and John both could benefit by Lee specialising in rice, and John specialising in butter
- D. Lee and John both could benefit by Lee specialising in rice, and John specialising in rice

ANS: C                      PTS: 1                      DIF: Difficult                      TOP: Absolute advantage and comparative advantage  
NAR: Table 3-2

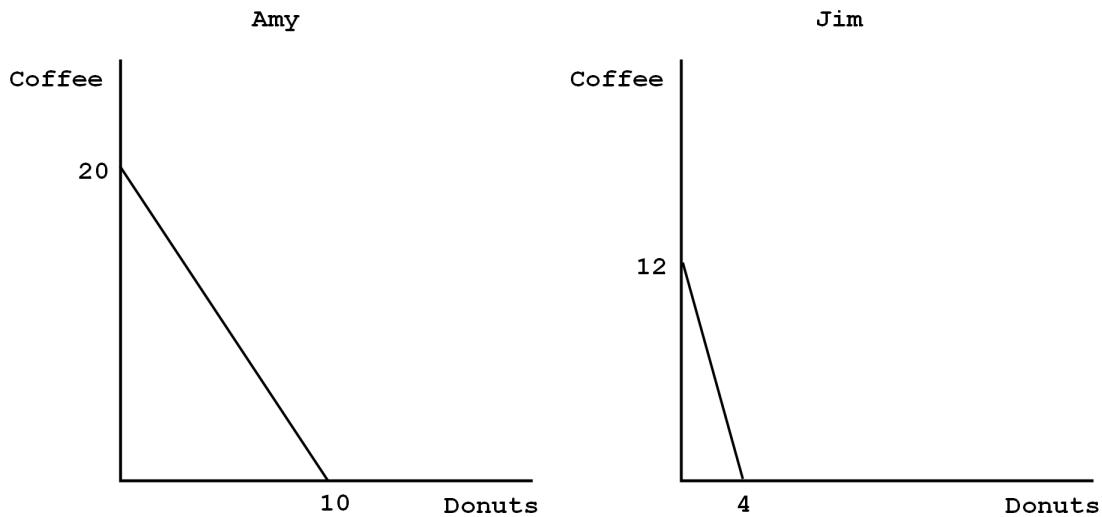
31. According to Table 3-2:

- A. Lee has a comparative advantage in butter, and John has a comparative advantage in rice
- B. Lee has a comparative advantage in butter, and John has a comparative advantage in butter
- C. Lee has a comparative advantage in rice, and John has a comparative advantage in butter
- D. Lee has a comparative advantage in rice, and John has a comparative advantage in rice

ANS: C                      PTS: 1                      DIF: Difficult                      TOP: Absolute advantage and comparative advantage  
NAR: Table 3-2

**NARRBEGIN: 3-2**

**Graph 3-2**



These figures illustrate the production possibilities available to Amy and Jim with 8 hours of labour.

NARREND

32. Refer to Graph 3-2. The opportunity cost of one doughnut for Amy is:

A. three coffees  
 B. two coffees  
 C. 1/2 coffee  
 D. 1/3 coffee

ANS: C  
 PTS: 1  
 DIF: Moderate  
 TOP: Opportunity cost and comparative advantage

NAR: 3-2

33. Refer to Graph 3-2. The opportunity cost of one doughnut for Jim is:

A. three coffees  
 B. two coffees  
 C. 1/2 coffee  
 D. 1/3 coffee

ANS: D  
 PTS: 1  
 DIF: Moderate  
 TOP: Opportunity cost and comparative advantage

NAR: 3-2

34. Refer to Graph 3-2. The opportunity cost of one coffee for Amy is:

A. three doughnuts  
 B. two doughnuts  
 C. 1/2 doughnut  
 D. 1/3 doughnut

ANS: B  
 PTS: 1  
 DIF: Moderate  
 TOP: Opportunity cost and comparative advantage

NAR: 3-2

35. Refer to Graph 3-2. The opportunity cost of one coffee for Jim is:

A. three doughnuts

- B. two doughnuts
- C. 1/2 doughnut
- D. 1/3 doughnut

ANS: A                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage  
NAR: 3-2

36. According to Graph 3-2:
- A. Amy has an absolute advantage in both goods, and Jim has an absolute advantage in neither goods
  - B. Amy has an absolute advantage in neither goods, and Jim has an absolute advantage in both goods
  - C. Amy has an absolute advantage in coffee, and Jim has an absolute advantage in doughnuts
  - D. Amy has an absolute advantage in doughnuts, and Jim has an absolute advantage in coffee

ANS: A                      PTS: 1                      DIF: Difficult                      TOP: Absolute advantage  
NAR: 3-2

37. According to Graph 3-2:
- A. Amy has a comparative advantage in doughnuts, and Jim has a comparative advantage in coffee
  - B. Amy has a comparative advantage in both goods, and Jim has a comparative advantage in neither goods
  - C. Amy has a comparative advantage in coffee, and Jim has a comparative advantage in doughnuts
  - D. Amy has a comparative advantage in neither goods, and Jim has a comparative advantage in both goods

ANS: C                      PTS: 1                      DIF: Difficult                      TOP: Absolute advantage  
NAR: 3-2

38. According to Graph 3-2:
- A. Amy has a comparative advantage in doughnuts, and Jim has an absolute advantage in coffee
  - B. Amy has a comparative advantage in doughnuts, and Jim has an absolute advantage in neither goods
  - C. Amy has a comparative advantage in coffee, and Jim has an absolute advantage in doughnuts
  - D. Amy has a comparative advantage in coffee, and Jim has an absolute advantage in neither goods

ANS: D                      PTS: 1                      DIF: Difficult                      TOP: Absolute advantage  
NAR: 3-2

39. According to Graph 3-2:
- A. Amy has an absolute advantage in both goods, and Jim has a comparative advantage in coffee
  - B. Amy has an absolute advantage in both goods, and Jim has a comparative advantage in doughnuts
  - C. Amy has an absolute advantage in coffee, and Jim has a comparative advantage in doughnuts
  - D. Amy has an absolute advantage in doughnuts, and Jim has a comparative advantage in coffee

ANS: B                      PTS: 1                      DIF: Difficult                      TOP: Absolute advantage  
NAR: 3-2

40. According to Graph 3-2:
- A. Amy should specialise in doughnuts, and Jim should specialise in coffee
  - B. Amy should specialise in coffee, and Jim should specialise in doughnuts
  - C. Amy should specialise in coffee, and Jim should specialise in neither goods
  - D. Amy should specialise in both goods, and Jim should specialise in coffee

ANS: B                      PTS: 1                      DIF: Difficult                      TOP: Specialisation and trade  
NAR: 3-2

41. According to Graph 3-2, if Amy and Jim devote half of their time (four hours) to the production of each good, total production of coffee and total production of doughnuts by both would be \_\_\_\_\_ respectively.
- A. 7 and 16
  - B. 16 and 7
  - C. 3.5 and 8
  - D. 8 and 3.5

ANS: B                      PTS: 1                      DIF: Difficult                      TOP: Specialisation and trade  
NAR: 3-2

42. According to Graph 3-2, if Amy and Jim both specialise *completely* in the good in which they have a comparative advantage, total production of coffee and total production of doughnuts will be \_\_\_\_\_ respectively.
- A. 20 and 4
  - B. 4 and 20
  - C. 16 and 7
  - D. 7 and 16

ANS: A                      PTS: 1                      DIF: Difficult                      TOP: Opportunity cost and comparative advantage  
NAR: 3-2

43. According to Graph 3-2, if Amy and Jim both specialise in the good in which they have a comparative advantage, total consumption of coffee and total consumption of doughnuts will be \_\_\_\_\_ respectively.
- A. 20 and 4
  - B. 4 and 20
  - C. 16 and 7
  - D. 7 and 16

ANS: A                      PTS: 1                      DIF: Difficult                      TOP: Opportunity cost and comparative advantage  
NAR: 3-2

44. Comparative advantage is based on:
- A. capital costs
  - B. labour costs
  - C. dollar price
  - D. opportunity costs

ANS: D  
comparative advantage

PTS: 1

DIF: Easy

TOP: Opportunity cost and

45. Trade is based on:
- A. absolute advantage
  - B. comparative advantage
  - C. trade subsidies
  - D. international free trade agreements

ANS: B

PTS: 1

DIF: Easy

TOP: Specialisation and trade

46. Absolute advantage is found by:
- A. comparing opportunity costs
  - B. calculating the dollar cost of production
  - C. comparing the productivity of one nation to that of another
  - D. first determining which country has a comparative advantage

ANS: C

PTS: 1

DIF: Easy

TOP: Absolute advantage

47. Trade can benefit society as a whole because it allows:
- A. people to specialise in activities in which they have a comparative advantage
  - B. for a more efficient use of resources
  - C. for goods to be obtained at a lower opportunity cost
  - D. all of the above are correct

ANS: A

PTS: 1

DIF: Easy

TOP: Specialisation and trade

**NARRBEGIN: Table 3-3**

**Table 3-3**

	Hours needed to make one unit of:		Amount produced in 2400 hours:	
	<u>Cars</u>	<u>Aeroplanes</u>	<u>Cars</u>	<u>Aeroplanes</u>
US	40	160	60	15
Europe	50	150	48	16

NARREND

48. Refer to Table 3-3. The opportunity cost of one car for Europe is:
- A. four aeroplanes
  - B. three aeroplanes
  - C. 1/3 aeroplane
  - D. 1/4 aeroplane

ANS: C  
comparative advantage

PTS: 1

DIF: Moderate

TOP: Opportunity cost and

NAR: Table 3-3

49. Refer to Table 3-3. The opportunity cost of one aeroplane for Europe is:
- A. four cars
  - B. three cars
  - C. 1/3 car
  - D. 1/4 car

ANS: B                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage  
NAR: Table 3-3

50. Refer to Table 3-3. The opportunity cost of one car for the US is:
- A. four aeroplanes
  - B. three aeroplanes
  - C. 1/3 aeroplane
  - D. 1/4 aeroplane

ANS: D                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage  
NAR: Table 3-3

51. Refer to Table 3-3. The opportunity cost of one aeroplane for the US is:
- A. four cars
  - B. three cars
  - C. 1/3 car
  - D. 1/4 car

ANS: A                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage  
NAR: Table 3-3

52. According to Table 3-3:
- A. Europe has a comparative advantage in aeroplanes, and the US has an absolute advantage in cars
  - B. Europe has a comparative advantage in cars, and the US has an absolute advantage in aeroplanes
  - C. Europe has a comparative advantage in cars, and the US has an absolute advantage in neither goods
  - D. Europe has a comparative advantage in aeroplanes, and the US has an absolute advantage in both goods

ANS: A                      PTS: 1                      DIF: Difficult                      TOP: Absolute advantage  
NAR: Table 3-3

53. According to Table 3-3:
- A. Europe has an absolute advantage in both goods, and the US has a comparative advantage in cars
  - B. Europe has an absolute advantage in both goods, and the US has a comparative advantage in neither goods
  - C. Europe has an absolute advantage in cars, and the US has a comparative advantage in aeroplanes
  - D. Europe has an absolute advantage in aeroplanes, and the US has a comparative advantage in cars

ANS: D                      PTS: 1                      DIF: Difficult                      TOP: Absolute advantage  
NAR: Table 3-3

54. According to Table 3-3:
- A. the US has an absolute advantage in aeroplanes, and Europe has an absolute advantage in cars

- B. the US has an absolute advantage in neither goods, and Europe has an absolute advantage in both goods
- C. the US has an absolute advantage in cars, and Europe has an absolute advantage in aeroplanes
- D. the US has an absolute advantage in neither goods, and Europe has an absolute advantage in cars

ANS: C                      PTS: 1                      DIF: Difficult                      TOP: Absolute advantage  
NAR: Table 3-3

55. According to Table 3-3:

- A. the US has a comparative advantage in aeroplanes, and Europe has a comparative advantage in aeroplanes
- B. the US has a comparative advantage in cars, and Europe has a comparative advantage in aeroplanes
- C. the US has a comparative advantage in aeroplanes, and Europe has a comparative advantage in cars
- D. the US has a comparative advantage in neither goods, and Europe has a comparative advantage in cars

ANS: B                      PTS: 1                      DIF: Difficult                      TOP: Absolute advantage  
NAR: Table 3-3

56. According to Table 3-3, the US and Europe could benefit by specialising in \_\_\_\_\_ respectively.

- A. aeroplanes and aeroplanes
- B. cars and aeroplanes
- C. aeroplanes and cars
- D. neither goods and cars

ANS: B                      PTS: 1                      DIF: Difficult                      TOP: Specialisation and trade  
NAR: Table 3-3

57. Refer to Table 3-3. If the US and Europe trade according to the principle of comparative advantage, the US will export what product to Europe?

- A. cars
- B. both aeroplanes and cars
- C. aeroplanes
- D. the US should buy both products from Europe

ANS: A                      PTS: 1                      DIF: Difficult                      TOP: Specialisation and trade  
NAR: Table 3-3

58. Refer to Table 3-3. If the US and Europe trade according to the principle of comparative advantage, Europe will export what product to the US?

- A. cars
- B. both aeroplanes and cars
- C. aeroplanes
- D. Europe should buy both products from the US

ANS: C                      PTS: 1                      DIF: Difficult                      TOP: Specialisation and trade  
NAR: Table 3-3

59. Refer to Table 3-3. If the US and Europe trade according to the principle of comparative advantage:

- A. the US will export cars and Europe will export aeroplanes
- B. the US will export aeroplanes and Europe will export cars
- C. the US will export cars and Europe will export cars
- D. the US will export aeroplanes and Europe will export aeroplanes

ANS: A                      PTS: 1                      DIF: Difficult                      TOP: Specialisation and trade  
NAR: Table 3-3

60. Refer to Table 3-3. If Europe and the US trade according to the principle of comparative advantage:
- A. all individuals in both countries will gain
  - B. car producers in Europe and aeroplane producers in the US will gain
  - C. some individuals within each society will be made worse off
  - D. one country will be better off and the other country will be worse off

ANS: C                      PTS: 1                      DIF: Difficult                      TOP: Specialisation and trade  
NAR: Table 3-3

61. Refer to Table 3-3. If Europe and the US trade according to the principle of comparative advantage:
- A. all individuals in both countries will gain
  - B. both countries can have more aeroplanes and cars
  - C. Europe will specialise in cars and the US will specialise in aeroplanes
  - D. both countries will consume on their own production possibilities frontier

ANS: B                      PTS: 1                      DIF: Difficult                      TOP: Specialisation and trade  
NAR: Table 3-3

Use the accompanying table to answer the following questions.

**NARRBEGIN: Table 3-4**

**Table 3-4**

	Labour hours needed to make one unit of:		Amount Produced in 40 hours:	
	<u>Cheese</u>	<u>Bread</u>	<u>Cheese</u>	<u>Bread</u>
England	3	2	13.3	20
Spain	1	5	40	8

NARREND

62. Refer to Table 3-4. The opportunity cost of one unit of cheese in England is:
- A. four units of bread
  - B. two units of bread
  - C. 1/2 unit of bread
  - D. 1.5 units of bread

ANS: D                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage  
NAR: Table 3-4

63. Refer to Table 3-4. The opportunity cost of one unit of bread in England is:
- A. 2/3 unit of cheese

- B. two units of cheese
- C. one unit of cheese
- D. 1/2 unit of cheese

ANS: A                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage  
NAR: Table 3-4

64. Refer to Table 3-4. The opportunity cost of one unit of cheese in Spain is:
- A. one unit of bread
  - B. five units of bread
  - C. 1/5 unit of bread
  - D. 1/3 unit of bread

ANS: C                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage  
NAR: Table 3-4

65. Refer to Table 3-4. The opportunity cost of one unit of bread in Spain is:
- A. one unit of cheese
  - B. five units of cheese
  - C. 1/5 unit of cheese
  - D. 1/3 unit of cheese

ANS: B                      PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage  
NAR: Table 3-4

66. According to Table 3-4:
- 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 goods
  - D. England has a comparative advantage in neither goods, and Spain has a comparative advantage in both goods

ANS: A                      PTS: 1                      DIF: Difficult                      TOP: Opportunity cost and comparative advantage  
NAR: Table 3-4

67. According to Table 3-4:
- 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 both goods, and Spain has an absolute advantage in neither goods
  - D. Neither England nor Spain has an absolute advantage

ANS: D                      PTS: 1                      DIF: Difficult                      TOP: Absolute advantage  
NAR: Table 3-4

68. According to Table 3-4, England and Spain could benefit by specialising in \_\_\_\_\_ respectively:
- A. bread and cheese
  - B. cheese and bread
  - C. both goods and neither goods
  - D. neither goods and both goods

ANS: A                      PTS: 1                      DIF: Difficult                      TOP: Absolute advantage  
NAR: Table 3-4

69. Refer to Table 3-4. If England and Spain trade according to the principle of comparative advantage, England will export which product to Spain:
- A. bread
  - B. cheese
  - C. both cheese and bread
  - D. England cannot benefit from trade with Spain

ANS: A                      PTS: 1                      DIF: Difficult                      TOP: Absolute advantage  
NAR: Table 3-4

70. Refer to Table 3-4. If England and Spain trade according to the principle of comparative advantage, Spain will export which product to England?
- A. bread
  - B. both bread and cheese
  - C. cheese
  - D. Spain cannot benefit from trade with England

ANS: C                      PTS: 1                      DIF: Difficult                      TOP: Specialisation and trade  
NAR: Table 3-4

71. Refer to Table 3-4. If England reduced the labour hours needed for it to produce cheese by 2.5 hours, it would:
- A. have a comparative advantage over Spain in the production of cheese
  - B. have an absolute advantage over Spain in the production of both goods
  - C. have a comparative advantage over Spain in the production of both goods
  - D. have an absolute advantage over Spain in the production of cheese but not in the production of bread

ANS: B                      PTS: 1                      DIF: Moderate                      TOP: Specialisation and trade  
NAR: Table 3-4

72. Refer to Table 3-4. If England imports cheese from Spain, who will benefit and who will lose?
- A. the producers of bread will lose and the consumers of cheese will benefit
  - B. the producers of cheese will lose and the consumers of bread will benefit
  - C. the producers of bread will lose and the consumers of bread will benefit
  - D. the producers of cheese will lose and the consumers of cheese will benefit

ANS: D                      PTS: 1                      DIF: Difficult                      TOP: Specialisation and trade  
NAR: Table 3-4

73. According to Table 3-4, if England and Spain do not trade:
- A. they will both be better off
  - B. they will miss out on the opportunity to expand their production possibilities frontier
  - C. they will consume inside their production possibilities frontier

D. they will have absolute advantage over each other in the production of both goods

ANS: B                      PTS: 1                      DIF: Moderate                      TOP: Specialisation and trade  
NAR: Table 3-4

74. According to Table 3-4, if the English government decided to impose a tariff on cheese imports, this would:
- A. make bread and cheese cheaper for English consumers
  - B. make bread and cheese more expensive for English consumers
  - C. make bread more expensive for English consumers
  - D. make cheese more expensive for English consumers

ANS: D                      PTS: 1                      DIF: Difficult                      TOP: Specialisation and trade  
NAR: Table 3-4

75. Refer to Table 3-4. The fact of England imposing a tariff on cheese imports would be:
- A. protecting the English cheese industry from international competition
  - B. encouraging England to specialise in and export cheese
  - C. allowing a greater production of dairy products in England
  - D. a policy intended to harm the Spanish cheese industry

ANS: A                      PTS: 1                      DIF: Difficult                      TOP: Specialisation and trade  
NAR: Table 3-4

76. One reason for which the English government might impose a tariff on Spanish cheese imports is:
- A. national pride
  - B. a general rivalry between Spain and England
  - C. the possibility of disease in Spanish cheese
  - D. pressure from English cheese lobby groups

ANS: D                      PTS: 1                      DIF: Difficult                      TOP: Specialisation and trade  
NAR: Table 3-4

77. Trade will:
- A. make everyone better off
  - B. make some people produce better goods
  - C. make some countries pay more for all goods
  - D. make some people better off and some people worse off

ANS: D                      PTS: 1                      DIF: Moderate                      TOP: Specialisation and trade

78. If two countries have identical opportunity costs, then:
- A. one country must be more productive in producing all goods than the other
  - B. the benefits resulting from trade are increased
  - C. there are no gains from specialisation and trade
  - D. each country should specialise in the production of a particular commodity

ANS: C                      PTS: 1                      DIF: Difficult                      TOP: Specialisation and trade

79. Which of the following is correct?
- A. trade allows for specialisation
  - B. trade is good for some nations only
  - C. trade is based on absolute advantage
  - D. trade allows countries to consume inside their production possibilities curve

ANS: A                      PTS: 1                      DIF: Easy                      TOP: Specialisation and trade

80. If capital in China is less productive than capital in Australia in agricultural production:
- A. neither nation can benefit from trade
  - B. only China can benefit from trade in agricultural goods
  - C. only Australia can benefit from trade in agricultural goods
  - D. both nations can benefit from increased trade in agricultural goods

ANS: D                      PTS: 1                      DIF: Easy                      TOP: Specialisation and trade

81. Imports arise because:
- A. the importing country can produce the good more cheaply than the exporting country
  - B. the exporting country can produce the good at a higher cost than the importing country
  - C. the importing country can produce the good at an equal cost to the exporting country
  - D. the exporting country can produce the good more cheaply than the importing country

ANS: D                      PTS: 1                      DIF: Easy                      TOP: Specialisation and trade

82. Exports arise because:
- A. the importing country has a comparative advantage in consuming a good
  - B. the exporting country has a comparative advantage in producing a good
  - C. the exporting country has a comparative advantage in consuming a good
  - D. the importing country has a comparative advantage in producing a good

ANS: B                      PTS: 1                      DIF: Easy                      TOP: Specialisation and trade

83. Spain can produce everything more cheaply than France. What should they do?
- A. still trade with each other because it is comparative, not absolute, advantage that is important
  - B. not trade with each other because it is not profitable for either of them
  - C. France should buy all goods from Spain in order to make the most of their cheaper prices
  - D. Spain should sell everything to France because other countries might have a comparative advantage

ANS: A                      PTS: 1                      DIF: Easy                      TOP: Should a country trade with other countries?

84. Trade is likely to:
- A. lead to self-sustaining countries
  - B. reduce the quantity of goods available in the economy
  - C. allow each country to do what they are better at, than other countries
  - D. lead to goods being produced at a lower quality

ANS: C                      PTS: 1                      DIF: Easy                      TOP: Specialisation and trade

85. Adam Smith:
- A. wrote *An Inquiry into the Nature and Causes of the Wealth of Nations*
  - B. opposed free trade
  - C. wrote the general theory of economics
  - D. all of the above are correct

ANS: A                      PTS: 1                      DIF: Easy                      TOP: FYI: The legacy of Adam Smith and David Ricardo

86. Adam Smith:
- A. was one of the first scholars to write about the principle of comparative advantage
  - B. wrote in the 18th century about the benefits available from trade
  - C. inspired David Ricardo
  - D. all of the above are true

ANS: D                      PTS: 1                      DIF: Easy                      TOP: FYI: The legacy of Adam Smith and David Ricardo

87. The principle of comparative advantage was developed by:
- A. Harry Truman
  - B. David Ricardo
  - C. John Maynard Keynes
  - D. Adam Smith

ANS: B                      PTS: 1                      DIF: Easy                      TOP: FYI: The legacy of Adam Smith and David Ricardo

88. David Ricardo:
- A. wrote books opposing the ideas of Adam Smith
  - B. argued in favour of Britain following a free-trade policy
  - C. was the founder of modern economics
  - D. wrote *An Inquiry into the Nature and Causes of the Wealth of Nations* in 1776

ANS: B                      PTS: 1                      DIF: Easy                      TOP: FYI: The legacy of Adam Smith and David Ricardo

89. David Ricardo was the author of:
- A. *An 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                      TOP: FYI: The legacy of Adam Smith and David Ricardo

## SHORT ANSWER

1. Give an example of a good or service that you regularly buy. Then give an example of a good or service you provide in your own household. Why don't you become more self-sufficient?

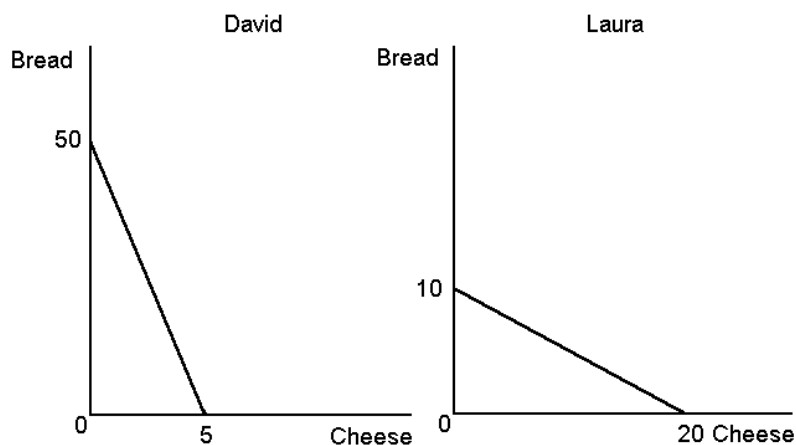
ANS:

Examples of regularly purchased items or services could include food for meals or a contracted lawn-mowing service.

Examples of goods or services could include home-grown vegetables or washing dishes. Self-sufficiency would mean producing goods and services you don't have a comparative advantage in. This would tend to make you worse off.

PTS: 1                      DIF: Easy                      TOP: Introduction

2. Suppose that there are two goods in the world: bread and cheese. Without trade, David can bake 50 loaves of bread in a week. Alternatively, he can make five kg of cheese in a week. Laura can make 20 kg of cheese in one week, or she can bake 10 loaves of bread in one week. Draw the production possibilities frontiers for David and for Laura, assuming that the frontiers are linear.



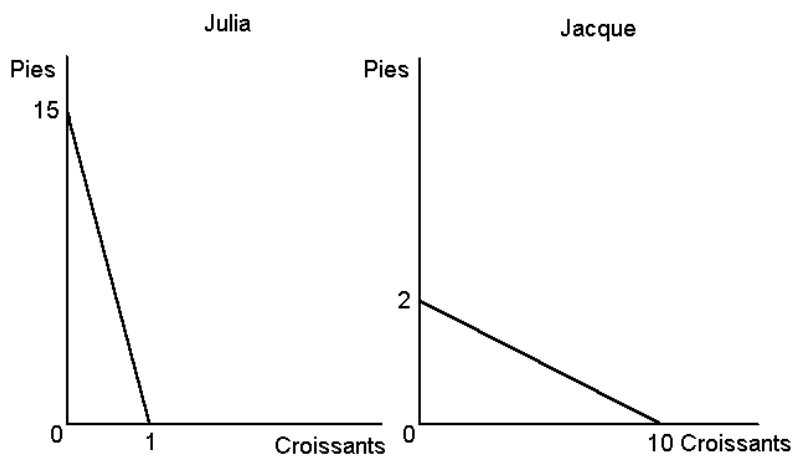
PTS: 1      DIF: Moderate      TOP: Production possibilities

3. Julia can produce 15 apple pies or one dozen croissants in one day. Jacques can produce two apple pies or 10 dozen croissants in one day.

- Draw the production possibilities frontiers for Julia and Jacques.
- What pattern of specialisation and trade will benefit both Julia and Jacques?

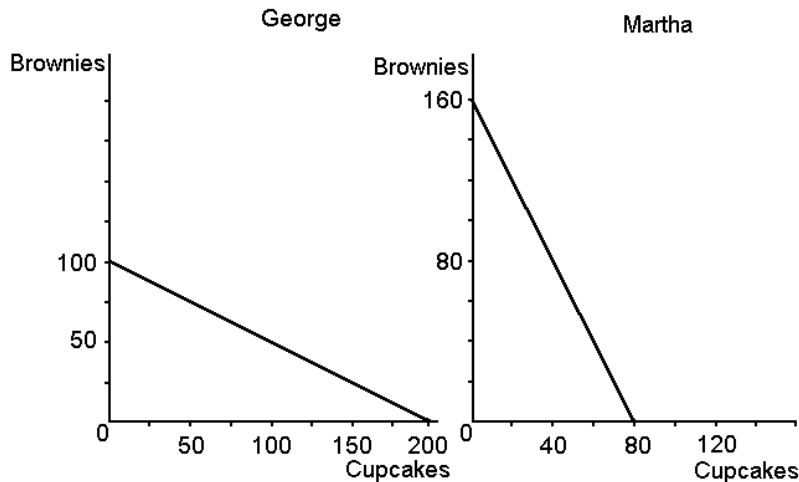
ANS:

- The production possibilities frontiers should look something like the graphs shown.
- Since Julia is so good at producing apple pies and Jacques is so good at producing croissants, if Julia specialises in producing apple pies and Jacques specialises in producing croissants, total production of apple pies and croissants will increase and both Julia and Jacques can benefit from the increased production through trade. (*Note:* Students may choose to answer this question using the tools of opportunity cost and comparative advantage developed on p. 54.)



PTS: 1      DIF: Moderate      TOP: Specialisation and trade

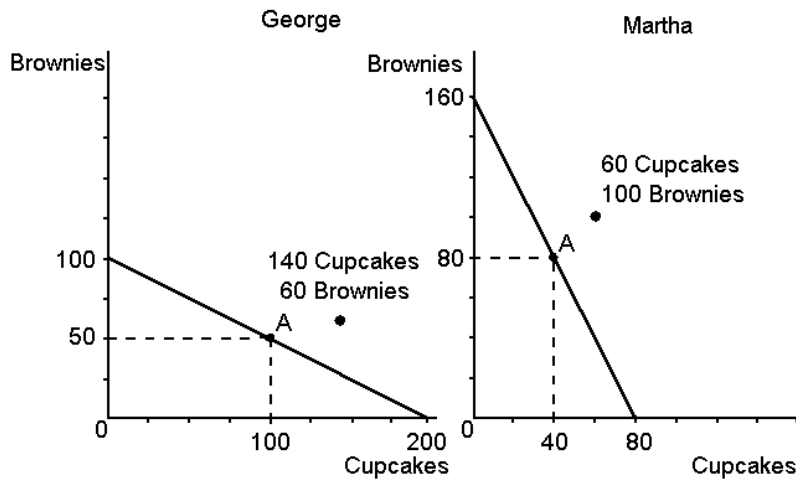
4. George and Martha face the production possibilities frontiers shown for brownies and cupcakes.



- If George and Martha choose not to trade and divide their time equally between the production of brownies and cupcakes, how many of each would they be able to consume? (Show this point on your graphs.)
- Now assume that George and Martha each decide to specialise in the good in which they have a comparative advantage and then trade. Who would trade brownies and who would trade cupcakes?
- If George and Martha decided to trade 60 brownies for 60 cupcakes, how many cupcakes and brownies would each have to consume?
- How do we know each is better off with trade than acting alone?

ANS:

- If George and Martha divide their time equally, George would be able to produce 50 brownies and 100 cupcakes (point A on his PPF) and Martha would be able to produce 80 brownies and 40 cupcakes (point A on her PPF).
- George has a comparative advantage in and would trade, cupcakes; Martha has a comparative advantage in and would trade, brownies.
- Since George is producing 200 cupcakes and no brownies, if he traded 60 cupcakes, he would be left with 140 cupcakes and would expect to receive 60 brownies from Martha in return. Since Martha is producing 160 brownies and no cupcakes, if she traded 60 brownies, she would be left with 100 brownies and would expect to receive 60 cupcakes from George in return.
- We know that both George and Martha are better off with trade because both are able to consume outside their own production possibilities frontiers.

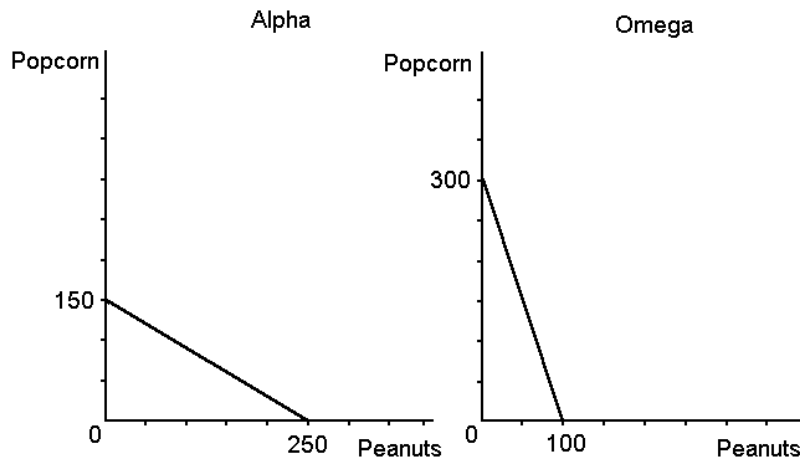


PTS: 1

DIF: Moderate

TOP: Specialisation and trade

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

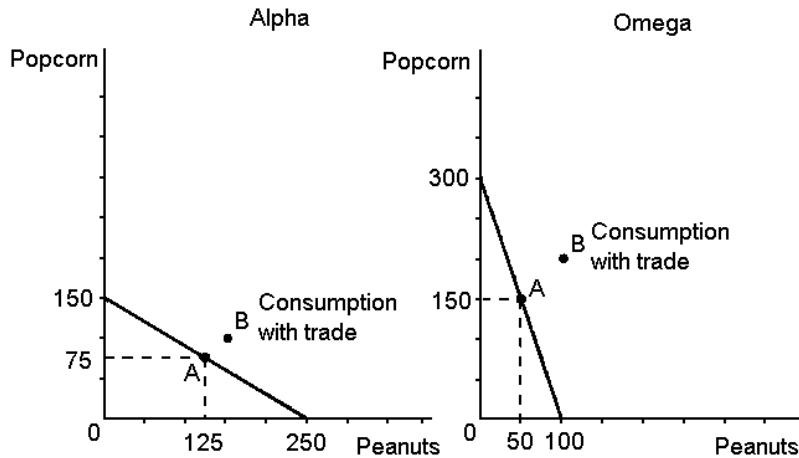


- Assume that each country decides to use half of its resources in the production of each good. Show these points on the graphs for each country as point A.
- If these countries choose not to trade, what will be the total world production of popcorn and peanuts?
- Now suppose that each country decides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

ANS:

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

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



PTS: 1      DIF: Moderate      TOP: Specialisation and trade

6. Why do countries outsource their jobs to other countries? Give an example to help explain why this might occur.

ANS:

Countries might outsource their jobs to other countries because the other country has the comparative advantage in providing that service. For example, highly-paid executives that like computer games might outsource the easier, time-consuming levels to workers in China because the opportunity cost of their time spent on this low-skilled gaming is very high due to their high salaries. However, when they are able to play the higher levels, the enjoyment and skill required justifies the opportunity cost of them playing and they no longer wish to outsource.

PTS: 1      DIF: Moderate      TOP: In the news: Who has the comparative advantage in slaying ogres?

7. How do consumption possibilities differ between a situation of no trade and a situation of trade?

ANS:

In the no trade case, the consumption possibilities are identical to the production possibilities. In the trade case, the consumption possibilities can exist outside of the subject's production possibilities.

PTS: 1      DIF: Moderate      TOP: Specialisation and trade

8. Explain the difference between absolute advantage and comparative advantage.

ANS:

Absolute advantage refers to 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.

PTS: 1      DIF: Easy      TOP: Opportunity cost and comparative advantage

9. Which is more important in determining trade patterns, absolute advantage or comparative advantage? Why?

ANS:

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 to buy it from someone else.

PTS: 1                      DIF: Easy                      TOP: Opportunity cost and comparative advantage

10. The table below describes the production possibilities for Lee and Amy in a four-hour shift.

	<u>Coffee</u>	<u>Croissants</u>
Lee	20	15
Amy	8	16

- What is the opportunity cost of one coffee for each person? What is the opportunity cost of one croissant?
- Who has a comparative advantage in coffees? Who has a comparative advantage in croissants?
- Who has an absolute advantage in coffees? Who has an absolute advantage in croissants?
- Who should produce coffees? Who should produce croissants?

ANS:

- The opportunity cost of one coffee for Lee is  $\frac{3}{4}$  croissants and the opportunity cost of one coffee for Amy is two croissants. The opportunity cost of one croissant for Lee is  $1\frac{1}{3}$  coffee. The opportunity cost of one croissant for Amy is  $\frac{1}{2}$  coffee.
- Lee has a comparative advantage in coffees and Amy has a comparative advantage in croissants.
- Lee has an absolute advantage in coffees and Amy has an absolute advantage in croissants.
- Lee should produce coffees and Amy should produce croissants.

PTS: 1                      DIF: Moderate                      TOP: Opportunity cost and comparative advantage

11. Jess makes coconut brownies that all her friends rave about but is also a highly paid marketing executive. Should she open a healthy bakery, like her friends suggest?

ANS:

Probably not. Unless Jess can make more money from the bakery than she is at her current job, she should stay in her current role. However, if she includes the enjoyment she derives from making brownies into her equation, she might not mind taking a pay cut to follow her dream.

PTS: 1                      DIF: Difficult                      TOP: Opportunity cost and comparative advantage

12. Describe two ways in which trade benefits a country.

ANS:

Any two of the following answers would be appropriate.

- Trade allows a country to consume a greater variety of goods and services. Countries that are not capable of producing certain products may obtain those products through trade.

2. Trade allows a country to consume larger quantities of goods and services than it is capable of producing on its own. Because of specialisation and trade, a country is capable of consuming beyond its production possibilities frontier.
3. Trade allows a country to obtain a good at a price lower than its own opportunity cost.

PTS: 1                      DIF: Moderate                      TOP: Specialisation and trade

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

ANS:

Since Martha's opportunity cost of preparing a meal is \$50 and Stewart'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: Moderate                      TOP: Specialisation and trade

14. John can milk 20 cows or feed 40 calves in one hour. Jared can milk 10 cows or feed 50 calves in one hour.

- a. Who has the absolute advantage in milking cows? Who has the absolute advantage in feeding calves?
- b. Who has the comparative advantage in milking cows? Who has the comparative advantage in feeding calves?
- c. If John and Jared, who have been dividing their time equally between milking and feeding, each specialise in the activity in which they have a comparative advantage, how many additional cows can be milked and calves fed per hour?

ANS:

- a. John has an absolute advantage in milking cows and Jared has an absolute advantage in feeding calves.
- b. John has a comparative advantage in milking cows and Jared has a comparative advantage in feeding calves.
- c. Before specialisation, 15 cows were milked per hour and 45 calves were fed per hour. After specialisation, 20 cows are milked per hour and 50 calves are fed per hour.

PTS: 1                      DIF: Difficult                      TOP: Absolute advantage

15. In one day, Daniel can catch 10 frogs or 5 birds that are eating the crops on his farm. Miles can catch 20 frogs or 2 birds.
  - a. What is Daniel's opportunity cost of catching a bird? What is Miles' opportunity cost of catching a bird?
  - b. Who has comparative advantage in catching frogs? Birds?
  - c. The two farmers decide that Daniel will catch 2 birds for Miles if Miles catches 40 frogs in return. Who is gaining from this specialisation and trade?
  - d. If Miles hones his bird catching skills and can now catch 5 birds in an hour, have the farmers' advantages changed?

ANS:

- a. Daniel's opportunity cost of catching a bird is 2 frogs. Miles' opportunity cost of catching a bird is 10 frogs.
- b. Daniel has comparative advantage in catching birds and Miles has comparative advantage in catching frogs.

- c. Daniel is gaining here and Miles is not getting a good deal. Miles's opportunity cost of one frog is 0.1 birds. However, in this deal he is receiving only 0.05 birds per frog.
- d. Miles now has an absolute advantage over Daniel in catching birds and frogs, however, they both still have the same comparative advantages.

PTS: 1                      DIF: Difficult                      TOP: Absolute advantage

16. a. Neverland imports 60% of its beef. What does this say about Neverland's ability to produce beef compared to other countries?
- b. Imports of beef into Neverland have been falling over the last 10 years, and forecasts suggest that within another five years Neverland will become an exporter of beef. What does this say about Neverland's changing comparative advantage/disadvantage in producing beef?

ANS:

- a. Neverland has a comparative disadvantage in producing beef compared to other countries and is focusing its production on exporting other goods.
- b. Neverland's technology is changing such that it is gaining in advantage in producing beef. If Neverland begins to export beef, this will mean it has surpassed other countries in its competitive advantage in producing beef.

PTS: 1                      DIF: Moderate                      TOP: Comparative advantage and trade

17. Jack and Catherine have a cooperative project that must be completed for a business class. The project involves doing a series of calculations and writing a report. It would take Jack 10 hours to do the required calculation and 10 hours to write the report. It would take Catherine 12 hours to do the calculations and 20 hours to write the report.

- a. How much time would it take the two to complete the project if they divide the calculations equally and the writing equally?
- b. How much time would it take the two to complete the project if they use comparative advantage and specialise in calculating or writing?
- c. If Catherine and Jack have the same opportunity cost of \$5 per hour, is there a better solution than for each to specialise in calculating or writing?

ANS:

- a. If both tasks are divided equally, it will take 11 hours for the calculations and 15 hours for the writing, for a total of 26 hours.
- b. If Catherine specialises in calculating and Jack specialises in writing, it will take 22 hours to complete the project.
- c. If Catherine specialises in calculating, her opportunity cost will be \$60; hence Catherine would be better off if she paid Jack any amount less than \$60 to do the calculating. Since Jack's opportunity cost of doing the calculations is only \$50, he would be better off if Catherine 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: Difficult                      TOP: Absolute advantage

18. Maria is studying French and Economics. In one hour she can read 30 pages of Economics or five pages of French.
- a. What is her opportunity cost of reading 90 pages of Economics?
  - b. Draw her production possibilities frontier
  - c. If Mark can read 10 pages of French in an hour and 35 pages of economics, should Mark and Maria share their reading? Who should read what?

ANS:

- a. 15 pages of French
- b. This graph should duplicate the essential features of the graph in Chapter 2 of the text. The production possibilities frontier should be bowed outward. The feasible area is the frontier, and the area inside the frontier, while the infeasible area is the area outside the frontier.
- c. Mark has a comparative advantage over Maria for reading French, as his opportunity cost of one page of French is 3.5 pages of economics. Maria's opportunity cost of French is six pages of economics. Maria has the comparative advantage over Mark in reading economics, since her opportunity cost of reading economics is 0.17 French pages while Mark's is 0.3 pages of French.

PTS: 1

DIF: Moderate

TOP: Opportunity cost and comparative advantage

19. What factors might economists take into account when advising the Australian government on international trade?

ANS:

Economists would want to determine which goods Australia has a comparative advantage in producing. This would involve looking at the opportunity cost of producing certain goods in Australia and the opportunity cost of producing them in other countries, to work out which goods to import and which to export.

PTS: 1

DIF: Moderate

TOP: Should a country trade with other countries?

20. Is the statement 'international trade can make everyone better off' true? Why or why not?

ANS:

No, while trade can make a country as a whole better off, some individuals will be worse off. Imports cause an increase in competition on the domestic market. Businesses that experience increased competition may be forced to lower prices or reduce employment. This will make some workers worse off.

PTS: 1

DIF: Moderate

TOP: Specialisation and trade

21. What roles were played by Adam Smith and David Ricardo in developing the idea that trade is beneficial?

ANS:

Adam Smith, in his 1776 book, *An Inquiry into the Nature and Causes of the Wealth of Nations*, and David Ricardo, in his 1817 book, *Principles of Political Economy and Taxation*, developed and refined the theory of comparative advantage and the gains from trade.

PTS: 1

DIF: Moderate

TOP: FYI: The legacy of Adam Smith and David Ricardo

22. Keith is an Economics lecturer. He is extremely competent. And the students love his PowerPoint slideshows. He is one of the more creative designers of PowerPoints in the department. Using the appropriate language, what should Keith focus his energies on prior to a lecture?

ANS:

It will pay for Keith to do his own PowerPoint slideshow creations if his opportunity cost of creation is less than the cost of paying someone to create them for him. Since economics lecturers would be better paid than a PowerPoint creator, Keith's opportunity cost for creating Power Points will almost certainly be higher than the cost of using someone in the department to do it.

Even though he has an absolute advantage in designing PowerPoints over others in the department, he does not have a comparative advantage over others.

PTS: 1                      DIF: Moderate                      TOP: Absolute advantage