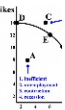


This is Macroeconomics and Microeconomics

The Basics: Part 1

1. in this chapter, we will learn that economics (eh-koe-nah-mics) is all about the choices we make with scarce resources
2. **economics** is the study of how people deal with scarcity
 - A. **scarcity** is a situation in which individuals, businesses, and governments have unlimited wants but their resources are limited
3. **economic interaction** between people occurs every time they trade or exchange goods with each other, usually in a market
 - A. a **market** is an arrangement by which buyers and sellers can interact and exchange goods and services with each other



please take out
your multiple
choice practice
go to #2

Please also...

Introduction- Questions

2. The basic economic problem of all economies is essentially one of deciding how to make the best use of
- (A) unlimited resources to satisfy unlimited wants
 - (B) limited resources to satisfy unlimited wants
 - (C) unlimited resources to satisfy limited wants
 - (D) limited resources to satisfy limited wants
 - (E) limited resources to provide public goods

Introduction- Questions

2. The basic economic problem of all economies is essentially one of deciding how to make the best use of

(A) unlimited resources to satisfy unlimited wants

resources are never unlimited

☒ (B) limited resources to satisfy unlimited wants

(C) unlimited resources to satisfy limited wants

(D) limited resources to satisfy limited wants

humans are not limited in their "wants"

(E) limited resources to provide public goods

resources are not just about public goods

Consumer Decisions and Opportunity Cost

1. scarcity of funds and resources causes everyone to make choices
2. the **opportunity cost** of a choice is the value or cost of a positive alternative that was not chosen
 - A. if you buy sunglasses instead of a hat, then the opportunity cost (or, as we call it in class, the opportunity *lost*) is the hat
 - B. in teenager terminology, the opportunity cost (or lost) is the girl or boy you decided not to go out with when you chose to date someone
 - C. but, the loss must be a positive loss
 - i. choosing not to date someone who cheats all the time is not an example of opportunity cost; that is just a smart decision

Consumer Decisions and Opportunity Cost- Questions

16. The amount of product Z that must be forgone in order to obtain some amount of product Y is called
- (A) factor payments
 - (B) opportunity cost
 - (C) marginal product
 - (D) income effect
 - (E) substitution effect

Consumer Decisions and Opportunity Cost- Questions

16. The amount of product Z that must be forgone in order to obtain some amount of product Y is called

- (A) factor payments
- ☒ (B) opportunity cost ← straight definition of opportunity cost
- (C) marginal product
- (D) income effect
- (E) substitution effect

Consumer Decisions and Opportunity Cost- Questions

1. After graduating from high school, Maria chose to go to college, while Omar chose to work full-time. Which of the following best describes the opportunity costs for these decisions?
 - (A) Maria's opportunity cost includes the salary she could have earned if she had gone to work.
 - (B) Maria's opportunity cost is her living expenses while attending college.
 - (C) Omar's opportunity cost is the salary he will earn from working.
 - (D) Omar's opportunity cost is the tuition and expenses he would have paid for college.
 - (E) Omar's opportunity cost is definitely greater than Maria's.

Consumer Decisions and Opportunity Cost- Questions

1. After graduating from high school, Maria chose to go to college, while Omar chose to work full-time. Which of the following best describes the opportunity costs for these decisions?
- ☒ (A) Maria's opportunity cost includes the salary she could have earned if she had gone to work.
 - (B) Maria's opportunity cost is her living expenses while attending college. ← opportunity cost is about not getting positives, not negatives like expenses
 - (C) Omar's opportunity cost is the salary he will earn from working. ← opportunity cost is about what you *don't* get
 - (D) Omar's opportunity cost is the tuition and expenses he would have paid for college. ← opportunity cost is about not getting positives, not negatives like expenses
 - (E) Omar's opportunity cost is definitely greater than Maria's. ← this is no way to know this

Macro/Micro Do-Now

1.

Nirali is a student at the University of Ainsley. She has 5 hours to study for two exams today. The tables below show Nirali's expected scores given the amount of time she studies for each exam.

Number of Hours Spent Studying Microeconomics	Expected Score on Microeconomics Exam (100-point scale)
5	100
4	96
3	90
2	82
1	60
0	0

Number of Hours Spent Studying History	Expected Score on History Exam (100-point scale)
0	0
1	40
2	60
3	72
4	77
5	80

- Nirali spends 3 hours studying microeconomics and 2 hours studying history. Calculate her gain from the second hour spent studying history.
- Calculate Nirali's opportunity cost of the second hour spent studying history.
- Assume Nirali increases the time she allocates to studying history. What happens to the opportunity cost of studying history? Explain.
- Assume that Nirali has a goal of maximizing the sum of her test scores (the score on microeconomics plus the score on history). How many hours should she study for each exam?
- Nirali learns that her tennis practice has been canceled, freeing up an additional hour for studying. Given your answer to part (d), will Nirali allocate the additional hour to studying microeconomics or to studying history to maximize the sum of her test scores? Explain using marginal analysis.

Macro/Micro Do-Now

1.

6 points (1 + 1 + 1 + 1 + 2)

(a) 1 point:

- One point is earned for correctly calculating the gain, 20 points.

(b) 1 point:

- One point is earned for correctly calculating the opportunity cost, 6 points for that hour (or 6/20).

(c) 1 point:

- One point is earned for stating that the opportunity cost increases and for using one the following explanations:
 - The expected score on microeconomics decreases at an increasing rate with each additional hour spent studying history.
 - The marginal cost is rising (expected score on microeconomics decreases) for each additional hour spent studying history.

(d) 1 point:

- One point is earned for stating that Nirali should spend 2 hours on studying microeconomics and 3 hours on studying history to maximize the sum of expected scores.

(e) 1 point:

- One point is earned for stating that Nirali will spend the additional hour studying microeconomics because studying microeconomics will increase her expected total score by 8 points compared to 5 points if spent studying history.

Gains from trade, Specialization, and Division of Labor

1. economic interaction between multiple people, companies, countries, etc. can lead to **gains from trade** which reallocates (exchanges) goods in a way that benefits everyone involved
2. economic interaction allows for **specialization**: people concentrating on what they are good at
3. economic interaction also can allow for a **division of labor** (when some workers specialize in one task while others specialize in another task)

Production Possibilities

1. suppose that an economy can produce either computers or movies
2. with a scarcity of resources such as labor (workers) and capital (money for business), there is a choice between producing some goods versus others
3. the table below gives an example of the alternative choices, or the **production possibilities**, for computers and movies
4. each choice, A-F, leads to different production numbers
5. **marginal analysis** (a cost-benefit analysis) is used to determine if the potential increase in profits outweigh the costs of making different decisions

Production Possibilities

	<u>Movies</u>		<u>Computers</u>
A. if you make	0	you can make	25,000
B. if you make	100	you can make	24,000
C. if you make	200	you can make	22,000
D. if you make	300	you can make	18,000
E. if you make	400	you can make	13,000
F. if you make	500	you can make	0

Increasing Opportunity Costs

1. the opportunity cost of producing more movies is the value of the computers not produced, and vice versa
 2. the opportunity cost, or lost, in terms of computers, of producing more movies increases as we require a loss of more and more computers
- A. this is called **increasing opportunity costs**
- i. moving from production possibility A to B requires an opportunity cost of 1,000 computers (25,000 to 24,000), but moving from production possibility A to C increases the opportunity cost to 3,000 computers (25,000 to 22,000)

Production Possibilities

	<u>Movies</u>		<u>Computers</u>
A. if you make	0	you can make	25,000
B. if you make	100	you can make	24,000
C. if you make	200	you can make	22,000
D. if you make	300	you can make	18,000
E. if you make	400	you can make	13,000
F. if you make	500	you can make	0

The Production Possibilities Curve/Frontier

1. the figure on the right is a graphical representation of the production possibilities table on the left

2. movies are on the horizontal axis and computers on the vertical axis

Always put your vertical variable here just like this →

Computers

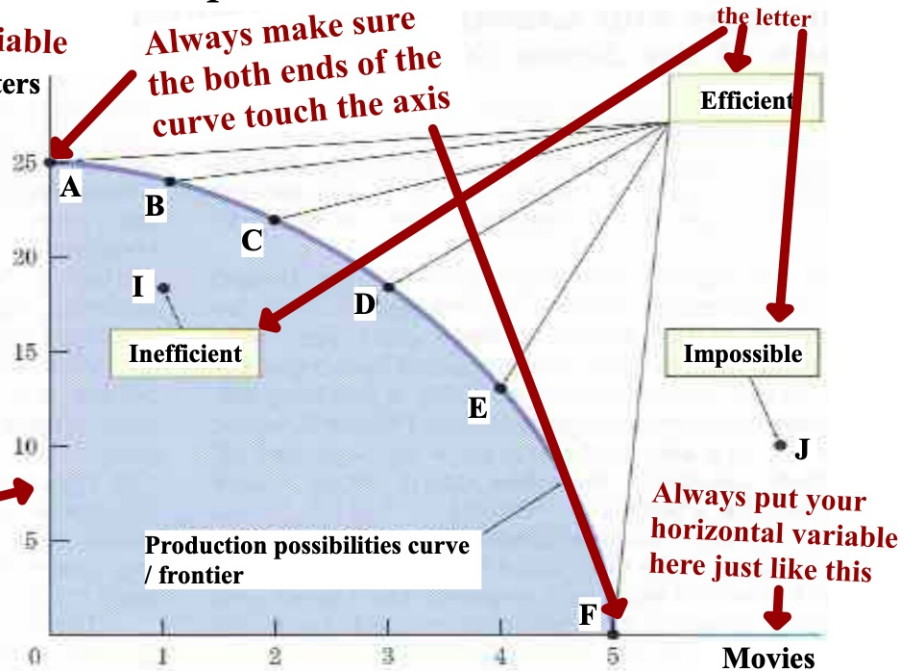
Production Possibilities

Movies

Computers

A. if you make	0	you can make	25,000
B. if you make	100	you can make	24,000
C. if you make	200	you can make	22,000
D. if you make	300	you can make	18,000
E. if you make	400	you can make	13,000
F. if you make	500	you can make	0

The lines you see inside the graph and the numbers outside are only needed when you have to show numbers. Don't include them anywhere unless a question tells you to.



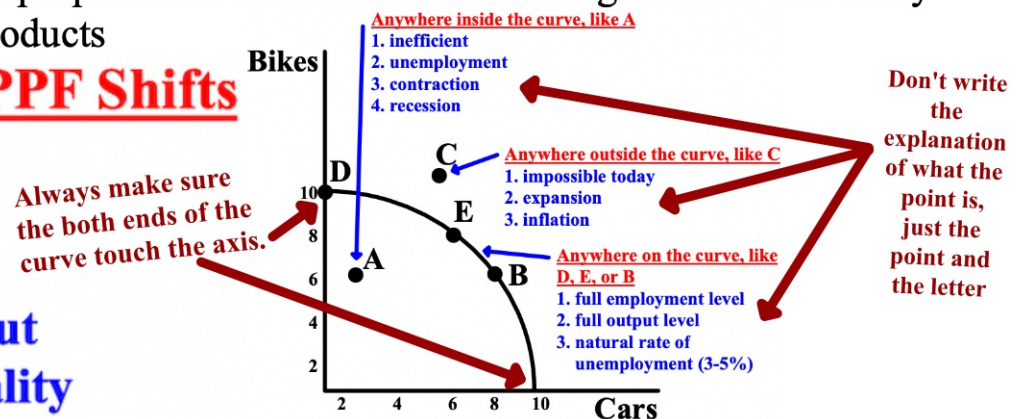
The Production Possibilities Curve/Frontier (cont.)

1. a **production possibilities curve/frontier** (PPC/PPF) graphs both short-run (SR) and long-run (LR) tradeoffs, communicates choices, scarcity, and opportunity costs
2. a production possibilities curve/frontier with a curved curve indicates increasing/not proportional opportunity costs anywhere on the line for both items
3. when moving from point D to E, to make 6 cars (0 to 6) requires an opportunity cost (loss) of 2 bikes (10 to 8)
4. moving from E to B increases the number of cars by 2 (6 to 8), but the opportunity cost is now another 2 bikes (8 to 6)
5. the changes aren't constant/proportional and the resources being used are not easily adaptable between both products

Why the PPC/PPF Shifts

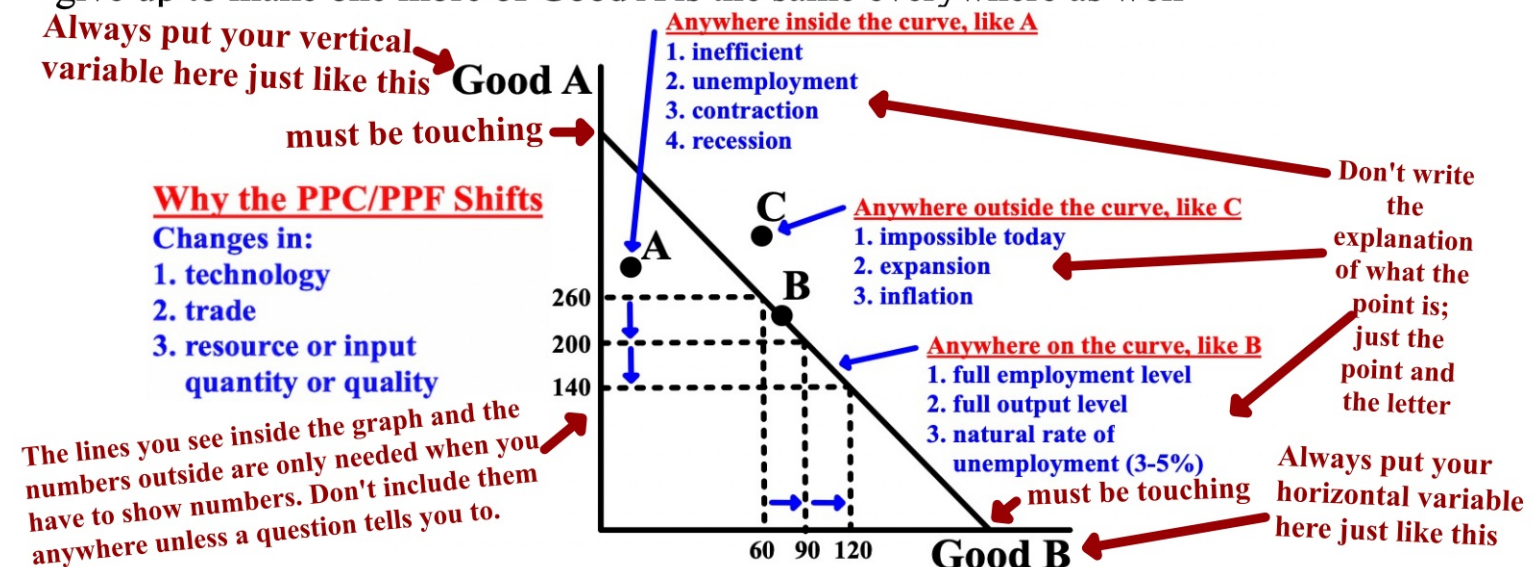
Changes in:

1. technology
2. trade
3. resource or input quantity or quality



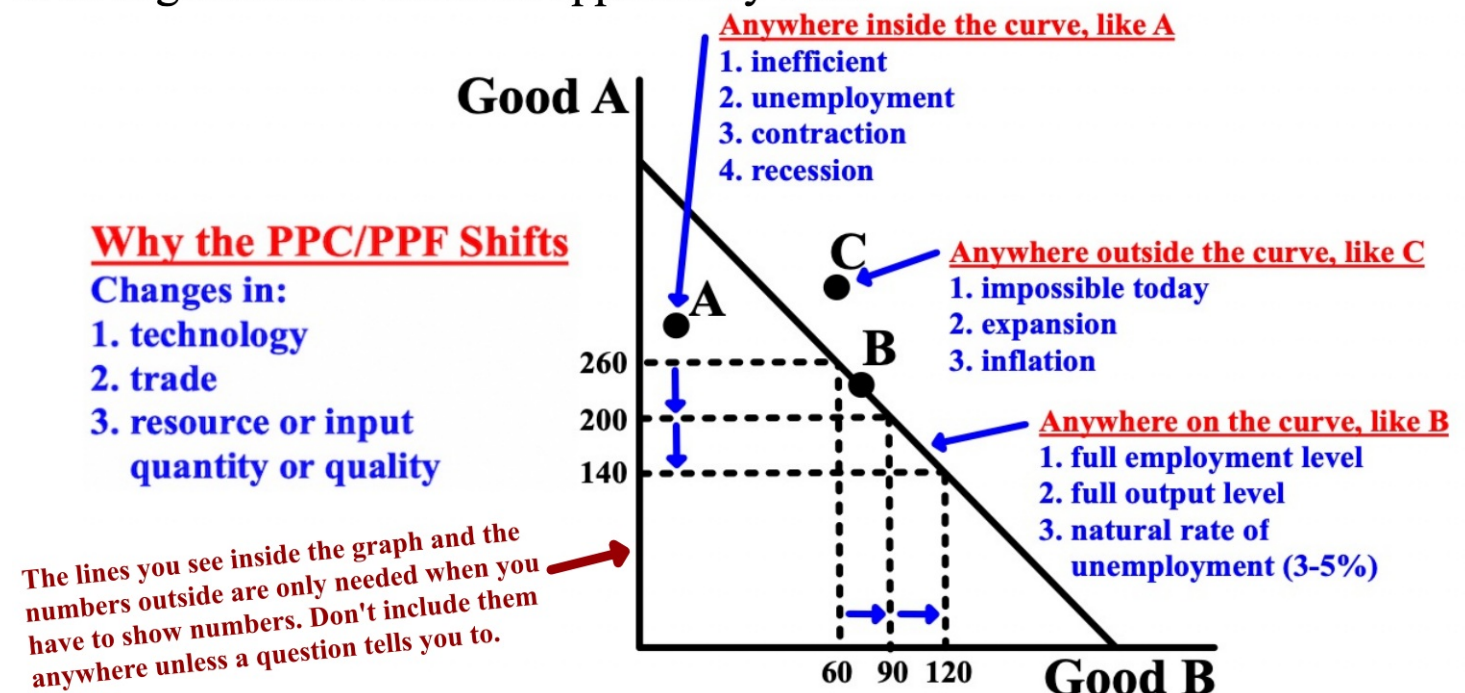
The Production Possibilities Curve/Frontier (cont.)

1. a production possibilities curve/frontier with a straight curve indicates constant and proportional opportunity costs anywhere on the curve
2. the resources are easily adaptable between both products and are perfect substitutes
3. if the PPC/PPF is a straight curve, the amount of Good A you have to give up to make one more of Good B is the same everywhere, and the amount of Good B you have to give up to make one more of Good A is the same everywhere as well



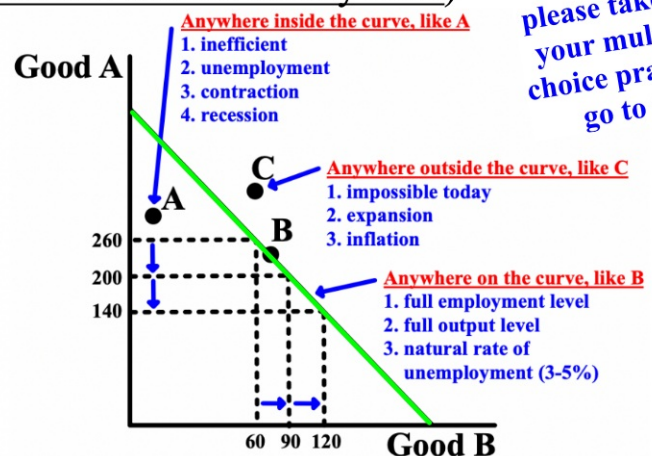
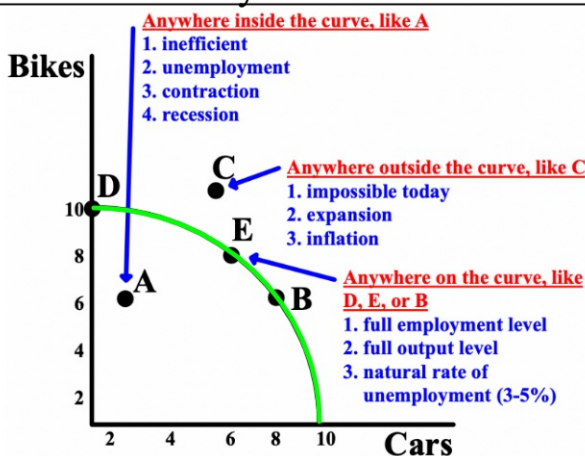
The Production Possibilities Curve/Frontier (cont.)

1. for every increase of 30 of Good B, there is a decrease of Good A by 60
2. for every increase of Good A by 60, there is a decrease of Good B by 30
3. both goods have constant opportunity costs



The Production Possibilities Curve/Frontier (cont.)

1. depending on where an economy is, this determines the location of the dot "
2. on either green curve, curved or straight, indicates **efficient** or **production efficient** (the maximum amount that can be produced with the available resources at that time)
3. on either curve usually but not always indicates full use of resources, full employment, and peak output in an economy
 - A. this means that production is **allocatively efficient** (the most efficient distribution of available resources for a firm/country)
4. on either curve can also mean that production is **socially optimal** (the optimal distribution of resources in society that is best for firms/countries and for society itself)



*please take out
your multiple
choice practice;
go to #1*

Macro/Micro Do-Now

Please do this:

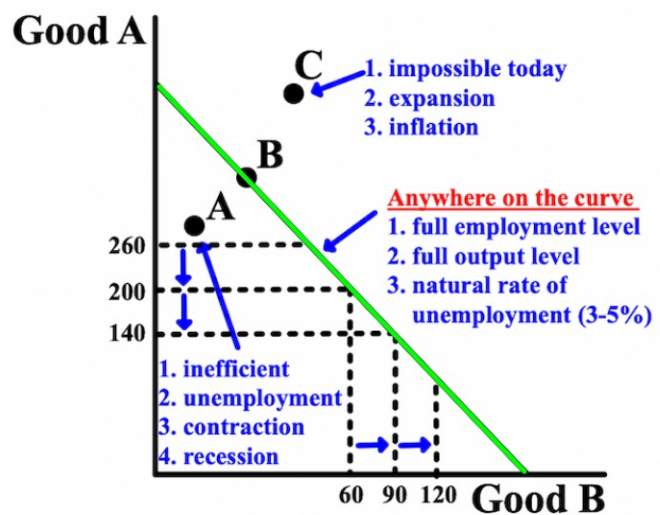
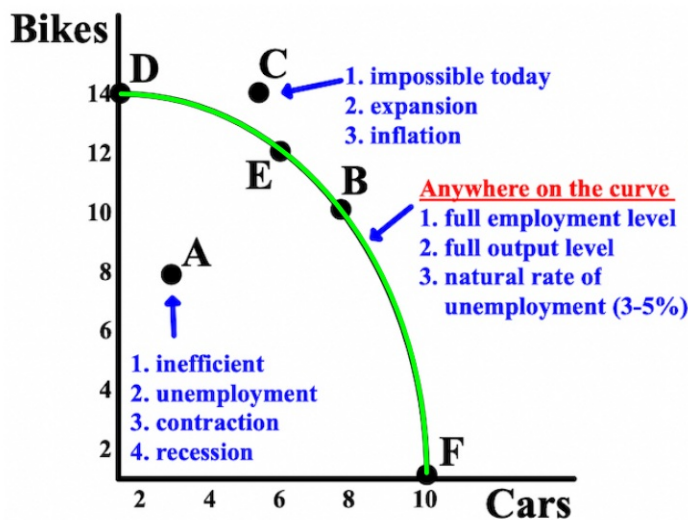
1. After turning anything you owe into the black bin, please take out your notes, multiple choice practice and graph paper. Please draw a production possibilities curve showing not proportional/increasing opportunity costs. Put cars as the vertical variable and gas as the horizontal variable. Label point F as being inefficient/contraction/recession/unemployment, point N as being impossible/expansion/inflation, and point U as being efficient/full output natural rate of unemployment. Last, show an increase in production of gas only.
2. In the table below, which country has the absolute advantage. Explain using marginal analysis. In each, which country has the comparative advantage? Show your work.

United States	4	8
Japan	6	3



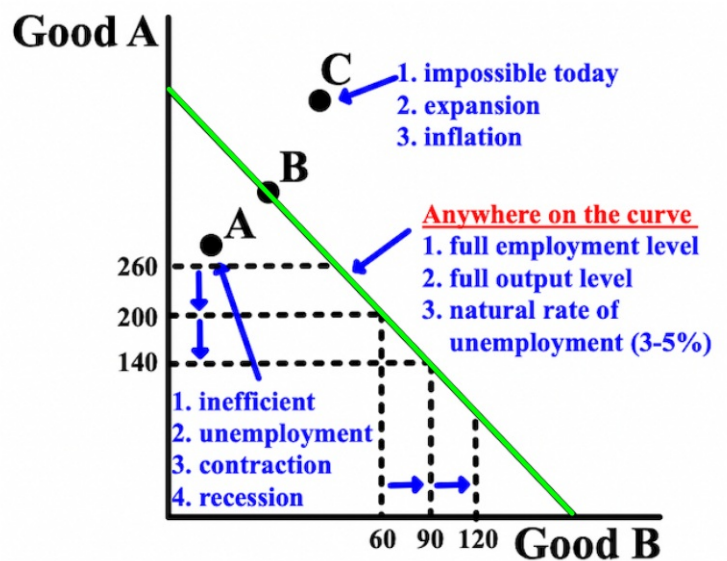
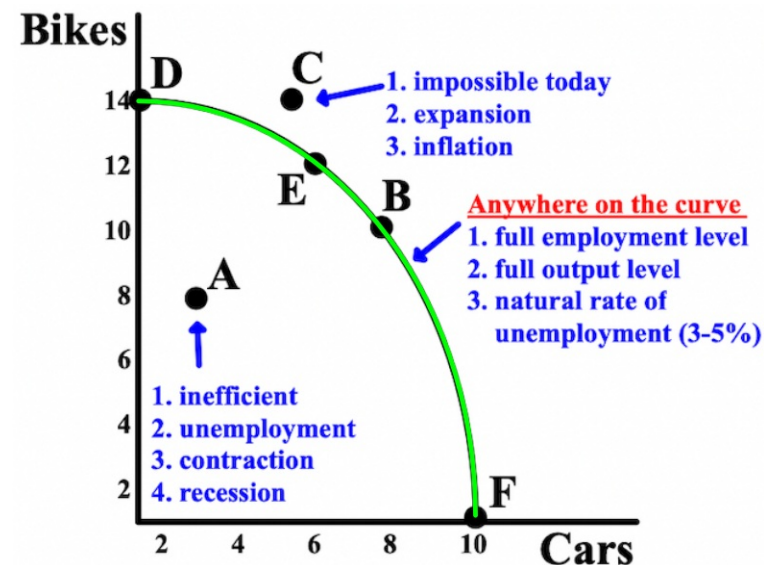
The Production Possibilities Curve/Frontier (cont.)

1. to the left of the green line indicates unemployment, contraction of the economy, under production, possible labor force reduction and recession, and **inefficiency** because the economy can produce a larger number
2. points inside the production possibilities curve/frontier (to the left of the green line), like A, are possible, but they are inefficient

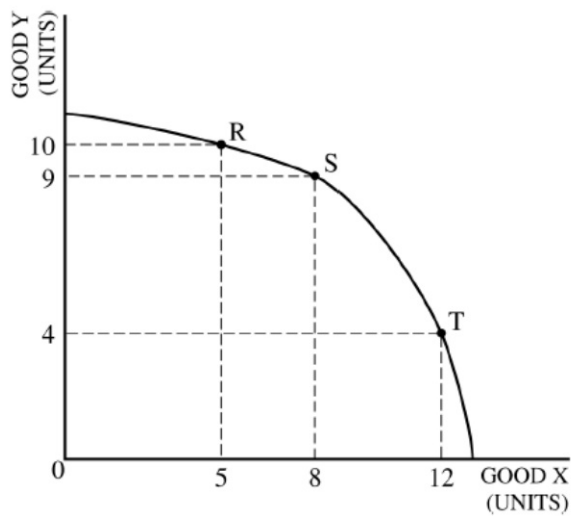


The Production Possibilities Curve/Frontier (cont.)

1. to the right of the green line indicates long-run aggregate supply (LRAS) (a country's total supply of goods and services in the long-run) expansion, over production, and an **impossibility** because the economy does not have the resources at that time to produce those quantities



The Production Possibilities Curve/Frontier- Questions



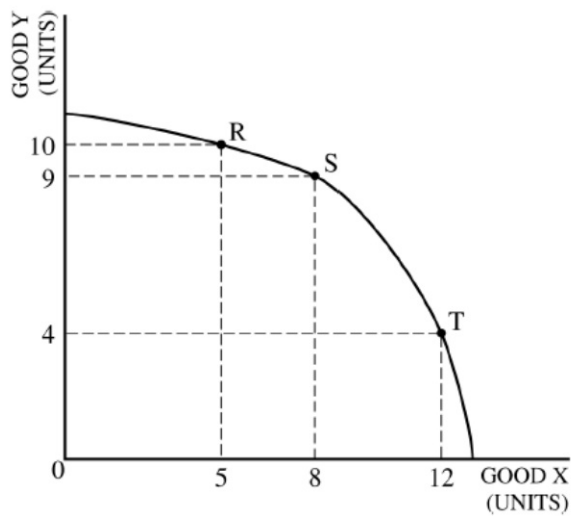
from point R to point S?

from point S to point T?

1. The opportunity cost of moving production from point R to point T is

- (A) one unit of Good Y
- (B) five units of Good Y
- (C) six units of Good Y
- (D) three units of Good X
- (E) seven units of Good X

The Production Possibilities Curve/Frontier- Questions



from point R to point S?
one unit of Good Y

from point S to point T?
five units of Good Y

1. The opportunity cost of moving production from point R to point T is

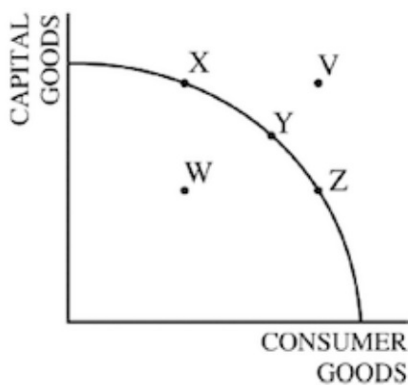
- (A) one unit of Good Y
- (B) five units of Good Y
- ☒ (C) six units of Good Y
- (D) three units of Good X
- (E) seven units of Good X

if X moves from 5 to 12 units, Y has to decrease from 10 to 4

X is gaining (moving from 5 to 12 units), so Y has to be "who" is losing

The Production Possibilities Curve/Frontier- Questions

Questions 1-2 are based on the production possibilities curve depicted below.



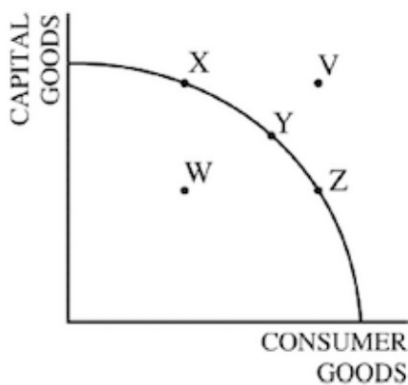
inefficiency to impossibility/
(economic expansion)?

efficiency to inefficiency/
(economic contraction)?

1. Given the production possibilities curve above, which of the following represents a movement from efficiency to inefficiency?
 - (A) Point X to point W
 - (B) Point X to point Z
 - (C) Point Y to point Z
 - (D) Point W to point Z
 - (E) Point V to point Y

The Production Possibilities Curve/Frontier- Questions

Questions 1-2 are based on the production possibilities curve depicted below.



inefficiency to impossibility/
(economic expansion)?

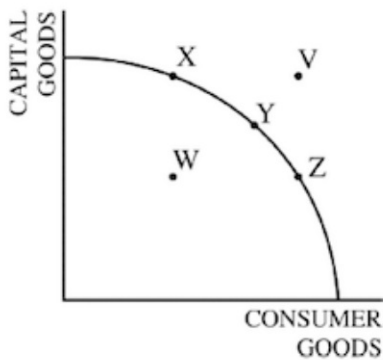
efficiency to inefficiency/
(economic contraction)?

1. Given the production possibilities curve above, which of the following represents a movement from efficiency to inefficiency?

- ☒ Point X to point W
- (B) Point X to point Z **this is a move from efficiency to efficiency because they are**
- (C) Point Y to point Z **both on the line**
- (D) Point W to point Z **this is a move from inefficiency to efficiency**
- (E) Point V to point Y **this is a move from the impossible to efficiency**

The Production Possibilities Curve/Frontier- Questions

Questions 1-2 are based on the production possibilities curve depicted below.

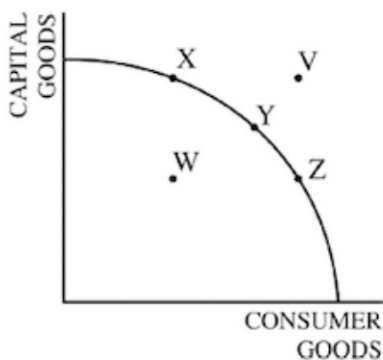


lowest at?

2. Based on a comparison of points X, Y, and Z, the opportunity cost of an additional consumer good is
- (A) highest at point X
 - (B) highest at point Y
 - (C) highest at point Z
 - (D) lowest at point Y
 - (E) the same at points X, Y, and Z

The Production Possibilities Curve/Frontier- Questions

Questions 1-2 are based on the production possibilities curve depicted below.



lowest at?

X

2. Based on a comparison of points X, Y, and Z, the opportunity cost of an additional consumer good is

- (A) highest at point X **← point X is the lowest point of opportunity cost (lowest consumer and highest capital goods)**
- (B) highest at point Y **← point Y is the center point of opportunity cost (middle consumer and middle capital goods)**
- ☒ (C) highest at point Z
- (D) lowest at point ~~X~~ **X**
- (E) the same at points X, Y, and Z **← hmmmmm, NO; they are different points**

The Production Possibilities Curve/Frontier- Questions

1. Two alternative production possibility frontiers for apples and wheat are shown in the figures below.

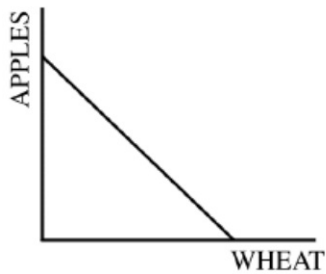


Figure 1

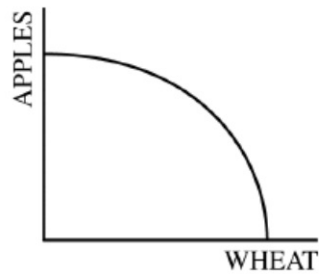


Figure 2

As more wheat is produced, how will the opportunity cost of producing wheat, as represented in Figures 1 and 2, be affected?

Figure 1

- (A) Decrease
- (B) Increase
- (C) No change
- (D) No change
- (E) Increase

Figure 2

- Increase
- Decrease
- Increase
- Decrease
- No change

The Production Possibilities Curve/Frontier- Questions

1. Two alternative production possibility frontiers for apples and wheat are shown in the figures below.

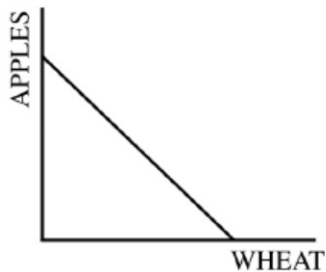


Figure 1

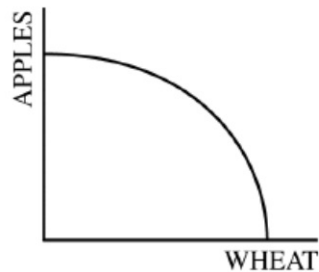


Figure 2

As more wheat is produced, how will the opportunity cost of producing wheat, as represented in Figures 1 and 2, be affected?

Figure 1

- (A) Decrease
- (B) Increase
- ☒ (C) No change
- (D) No change
- (E) Increase

Figure 2

- Increase
 - Decrease
 - Increase
 - Decrease
 - No change
- figure 1 is a production possibilities curve/frontier with proportional/not increasing opportunity costs
- increase; making more wheat = increased loss of apples
- figure 1 is a production possibilities curve/frontier with proportional/not increasing opportunity costs

The Production Possibilities Curve/Frontier- Questions

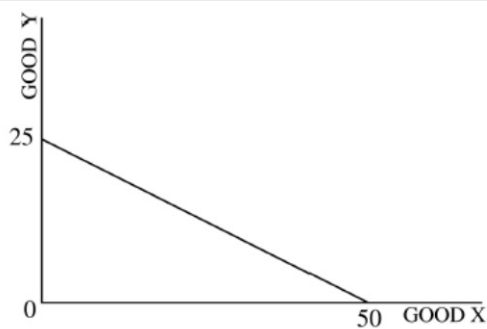
54. For an economy that is operating inside its production possibilities curve, which of the following is true?
- (A) It can increase the production of both goods.
 - (B) Its population is growing faster than the economy's ability to increase production.
 - (C) It is using all available resources efficiently.
 - (D) It cannot move to a point on the production possibilities curve with available technology.
 - (E) It lacks the resources to increase production beyond its current output.

The Production Possibilities Curve/Frontier- Questions

54. For an economy that is operating inside its production possibilities curve, which of the following is true?

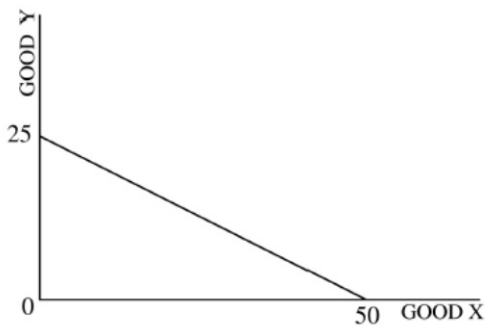
- (A) It can increase the production of both goods.
- (B) Its population is growing faster than the economy's ability to increase production. ← population by itself has nothing to do with production
- (C) It is using all available resources efficiently. ← nope
- (D) It cannot move to a point on the production possibilities curve with available technology. ← not true
- (E) It lacks the resources to increase production beyond its current output. ← not known with this information

The Production Possibilities Curve/Frontier- Questions



16. According to the production possibilities curve above, which of the following is true?
- (A) The opportunity cost of producing another unit of good Y in terms of good X increases as more of good Y is produced.
 - (B) The opportunity cost of producing another unit of good Y in terms of good X decreases as more of good Y is produced.
 - (C) The opportunity cost of producing another unit of good X in terms of good Y increases as more of good X is produced.
 - (D) The opportunity cost of producing another unit of good X in terms of good Y decreases as more of good X is produced.
 - (E) The opportunity cost of producing another unit of either good remains constant as the production of the other good increases.

The Production Possibilities Curve/Frontier- Questions



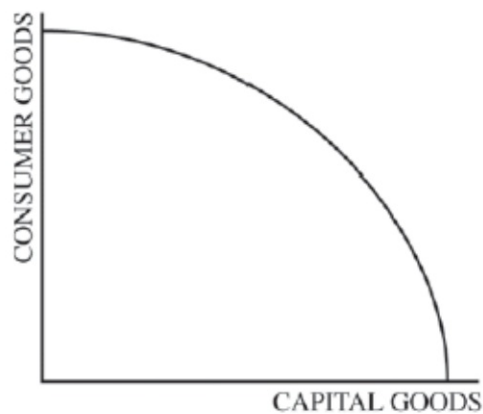
16. According to the production possibilities curve above, which of the following is true?

- (A) The opportunity cost of producing another unit of good Y in terms of good X ~~increases~~ as more of good Y is produced.
 - (B) The opportunity cost of producing another unit of good Y in terms of good X ~~decreases~~ as more of good Y is produced.
 - (C) The opportunity cost of producing another unit of good X in terms of good Y ~~increases~~ as more of good X is produced.
 - (D) The opportunity cost of producing another unit of good X in terms of good Y ~~decreases~~ as more of good X is produced.
- ☒ The opportunity cost of producing another unit of either good remains constant as the production of the other good increases.

**the graph is a
PPC/F that has
constant
opportunity costs**

Macro/Micro Do-Now

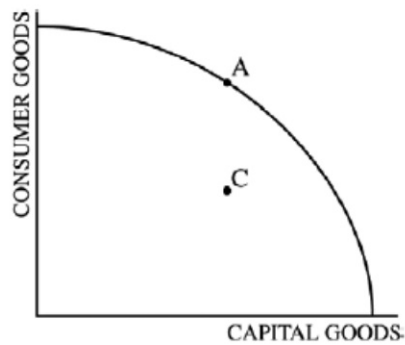
1. Assume that the country of Fischerland produces only consumer goods and capital goods.



- (a) The graph above shows the production possibilities curve for Fischerland. The production of which of the following exhibits increasing opportunity costs: consumer goods only, capital goods only, both goods, or neither good?
- (b) Redraw the graph given above. Show a point that represents fully employed and efficiently used resources on the redrawn graph and label it A.
- (c) Assume there is a recession in Fischerland. On your graph in part (b), label as C a point representing the recession.

Macro/Micro Do-Now

1. 3 points (1 + 1 + 1)



(a) 1 point:

- One point is earned for answering both goods.

(b) 1 point:

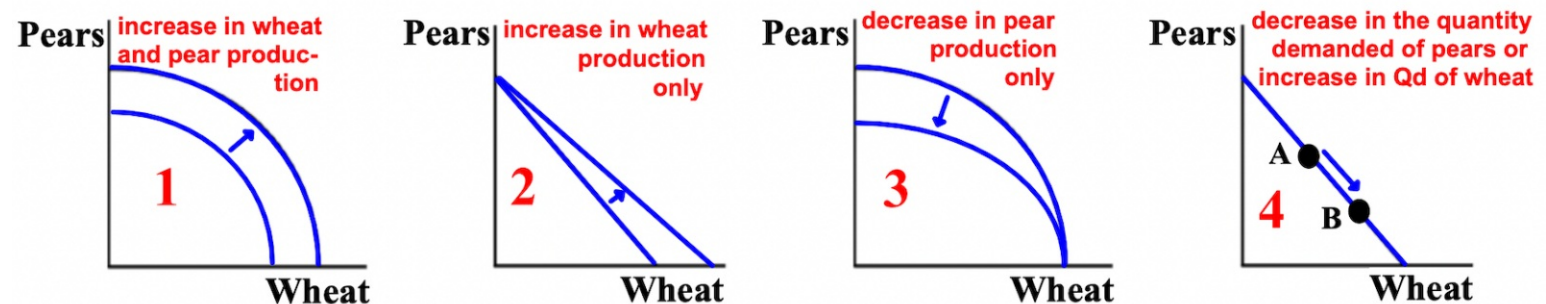
- One point is earned for showing point A on the production possibilities curve.

(c) 1 point:

- One point is earned for showing point C inside the production possibilities curve.

Shifts in the Production Possibilities Curve/Frontier

1. regardless of which production possibilities curve/frontier (PPC/PPF) is graphed, both represent a tradeoff and decisions about scarce resources
2. when the PPC/PPF shifts out, the economy grows because more goods and services are being produced (#1 below), but it can also shift in, usually during natural disasters
3. the PPC/PPF can also shift in or out for only one of the variables while the other variable remains the same (#2 and #3 below)
4. the PPC/PPF can also show an increase or decrease in the quantity demanded (Qd) of only one of the variables (#4 below)



Absolute and Comparative Advantage

1. **absolute advantage** is a situation in which a person, business, or country can produce more of a good than another can
 - A. one entity can simply make more of a product than another
2. **comparative advantage** is a situation in which a person, business, or country can produce a good more efficiently and with less opportunity cost (loss) than another
 - A. McDonalds can certainly produce hamburgers more efficiently and with less opportunity cost than Best Buy
3. comparative advantage is the most important calculation because it determines who should make what products allowing many to benefit from trade and specialization in the production of a product

Absolute and Comparative Advantage (cont.)

1. the USA has an absolute advantage in producing both food and clothing; they made more of both than Japan, but, comparative advantage matters more
2. to calculate opportunity costs= what we give up / what we get
3. the lowest opportunity cost (lost)/most efficient is the winner
3. in food, the USA has a comparative advantage: $3/6 = .5$ vs. $2/1 = 2$ (Japan), and $.5$ is less than 2
4. in clothing, Japan wins: $1/2 = .5$ vs. $6/3 = 2$ (USA), and $.5$ is less than 2

macro/micro.
formula
#1

give
get

	Food	Clothing
United States	6 absolute advantage comparative advantage	3 absolute advantage
Japan	1	2 comparative advantage

Absolute and Comparative Advantage (cont.)

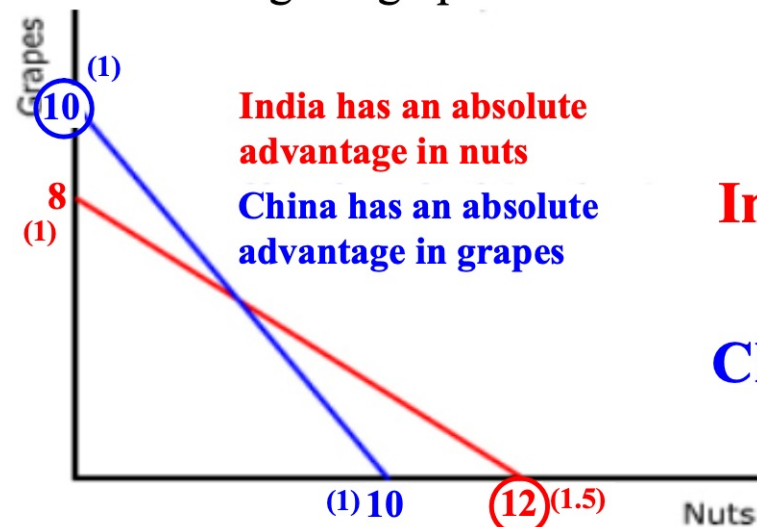
give
get

	Food	Clothing
United States	4	8
Japan	6	3

**Which country has the absolute advantage
and comparative advantage in each?**

Absolute and Comparative Advantage (cont.)

1. in the production possibilities curve/frontier, India has the absolute advantage in nuts and China in grapes
2. in grapes, China has the comparative advantage: $10/10 = 1$ vs. $12/8 = 1 \frac{1}{2}$ (India), and 1 is less than $1 \frac{1}{2}$
3. in nuts, India has the comparative advantage, $8/12 = .66$ to $10/10 = 1$ (China)
4. China will grow grapes and India will grow nuts and both will benefit



	Getting Grapes	Getting Nuts
India	$\frac{12}{8} = 1.5$	$\frac{8}{12} = .66$
China	$\frac{10}{10} = 1$	$\frac{10}{10} = 1$

or

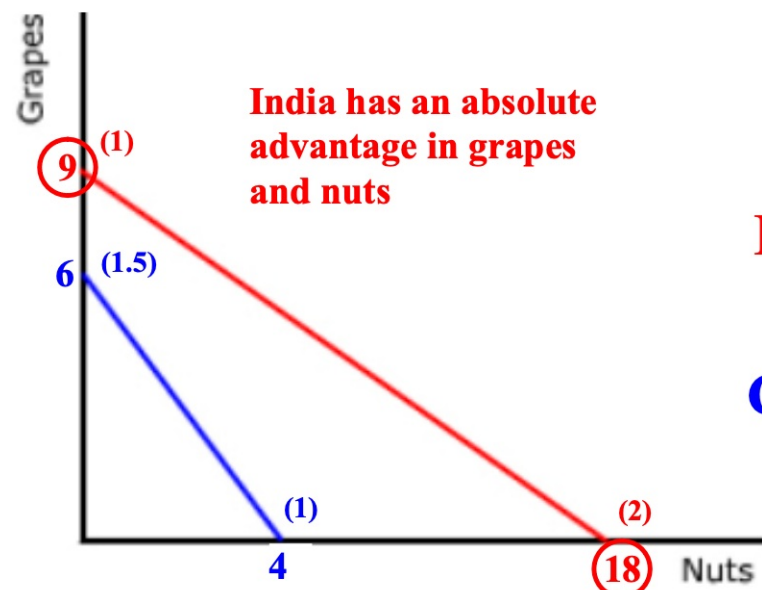
or

give
get

Absolute and Comparative Advantage (cont.)

1. in the PPC/PPF, India has the absolute advantage in nuts and grapes 2. in grapes, China has the comparative advantage, $4/6$ vs. $18/9$
2. in nuts, India has the comparative advantage, $9/18$ vs. $6/4$
3. China will grow grapes and India will grow nuts

*give
get*



	Getting Grapes	Getting Nuts
India	$\frac{18}{9} = 2$	$\frac{9}{18} = .5$
	or	or
China	$\frac{4}{6} = 4/6$	$\frac{6}{4} = 1.5$

*plea
you
cho*

Absolute and Comparative Advantage- Questions

20. Brazil and Peru produce both coffee and wheat using labor as the only input. The table below shows the labor hours required to produce a unit of coffee and a unit of wheat in each country.

	Labor Hours per Unit of Coffee	Labor Hours per Unit of Wheat
Brazil	12	4
Peru	6	4

Based on the information in the table above, which of the following is true?

give
get

- (A) Peru has a comparative advantage in producing coffee.
- (B) Peru has an absolute advantage in producing wheat.
- (C) Brazil has an absolute advantage in producing wheat.
- (D) Peru has a comparative advantage in producing wheat.
- (E) Brazil has a comparative advantage in producing wheat.

Absolute and Comparative Advantage- Questions

20. Brazil and Peru produce both coffee and wheat using labor as the only input. The table below shows the labor hours required to produce a unit of coffee and a unit of wheat in each country.

	Labor Hours per Unit of Coffee	Labor Hours per Unit of Wheat
Brazil	12	4
Peru	6	4

Based on the information in the table above, which of the following is true?

give
get

- (A) Peru has a comparative advantage in producing coffee.
- (B) Peru has an absolute advantage in producing wheat.
- (C) Brazil has an absolute advantage in producing wheat.  no one does
- ☒ (D) Peru has a comparative advantage in producing wheat.
- (E) Brazil has a comparative advantage in producing wheat.  Brazil has to give up 12 units of coffee vs. Peru's 6

Absolute and Comparative Advantage- Questions

46. Dana and Robin produce smoothies and pizza.

In one hour Dana can make 20 smoothies or 10 pizzas. In one hour Robin can make 18 smoothies or 6 pizzas. Which of the following statements is true?

give
get

- (A) Robin has an absolute advantage in making smoothies and a comparative advantage in making pizzas.
- (B) Robin has both an absolute advantage and a comparative advantage in making pizzas.
- (C) Dana has a comparative advantage in making both smoothies and pizzas.
- (D) Dana has a comparative advantage in making pizzas, and Robin has a comparative advantage in making smoothies.
- (E) Dana has a comparative advantage in making smoothies, and Robin has a comparative advantage in making pizzas.

Absolute and Comparative Advantage- Questions

46. Dana and Robin produce smoothies and pizza.

In one hour Dana can make 20 smoothies or

10 pizzas. In one hour Robin can make

18 smoothies or 6 pizzas. Which of the

following statements is true?

Dana	20s	10p
Robin	18s	6p

give
get

- (A) Robin has an absolute advantage in making smoothies and a comparative advantage in making pizzas. ← nope, 18 to 20
- (B) Robin has both an absolute advantage and a comparative advantage in making pizzas. ← nope, 6 to 10
- (C) Dana has a comparative advantage in making both smoothies and pizzas. ← nope, Robin does: smoothies, .33 to .5
- ☒ Dana has a comparative advantage in making pizzas, and Robin has a comparative advantage in making smoothies.
- (E) Dana has a comparative advantage in making smoothies, and Robin has a comparative advantage in making pizzas. ← nope, Robin does: smoothies, .33 to .5

Absolute and Comparative Advantage- Questions

47. Using the same amount of time and resources, Jack can assemble either 10 bikes or 5 computers, whereas Sam can assemble either 5 bikes or 5 computers. Based on the data, which of the following statements is correct?

give
get

- (A) Sam has an absolute advantage in assembling bikes.
- (B) Sam has an absolute advantage in assembling computers.
- (C) Sam has a comparative advantage in assembling bikes.
- (D) Jack has a comparative advantage in assembling bikes.
- (E) Jack has a comparative advantage in assembling both bikes and computers.

Absolute and Comparative Advantage- Questions

47. Using the same amount of time and resources, Jack can assemble either 10 bikes or 5 computers, whereas Sam can assemble either 5 bikes or 5 computers. Based on the data, which of the following statements is correct?

Jack	Sam
10b	5b
5c	5c

- (A) Sam has an absolute advantage in assembling bikes. ← nope, 5 vs. 10
- (B) Sam has an absolute advantage in assembling computers. ← neither does, 5 vs. 5
- (C) Sam has a comparative advantage in assembling bikes. ← nope, $5/5$ vs. $5/10 = 1$ vs. .5
- ☒ (D) Jack has a comparative advantage in assembling bikes.
- (E) Jack has a comparative advantage in assembling both bikes and computers. ← yes to bikes, but no to comps, $10/5$ vs. $5/5 = 2$ vs. 1

give
get

Absolute and Comparative Advantage- Questions

50. If nations specialize according to their comparative advantage and engage in international trade with each other, each nation can
- give
get*
- (A) produce outside its production possibilities curve
 - (B) consume outside its production possibilities curve
 - (C) shift its production possibilities curve to the right
 - (D) become more self-sufficient
 - (E) produce more of all goods

Absolute and Comparative Advantage- Questions

50. If nations specialize according to their comparative advantage and engage in international trade with each other, each nation can

give
get

(A) produce outside its production possibilities curve

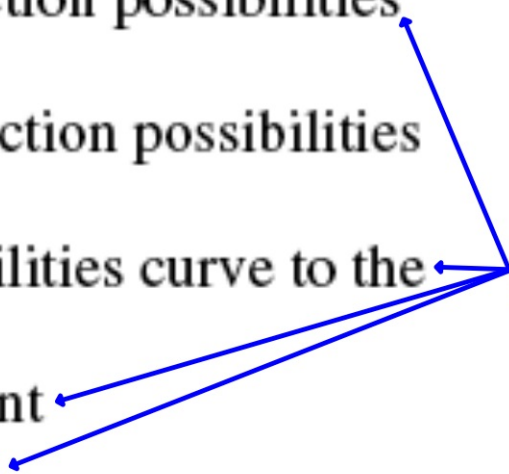
☒ (B) consume outside its production possibilities curve

(C) shift its production possibilities curve to the right

(D) become more self-sufficient

(E) produce more of all goods

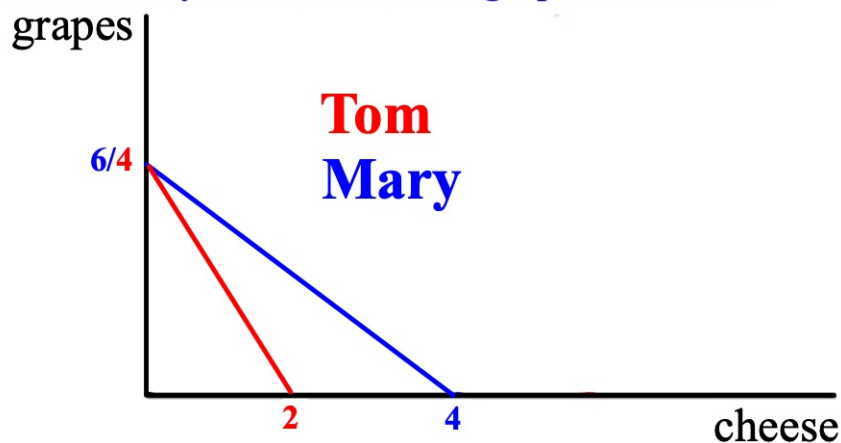
not
necessarily



Macro/Micro Do-Now

Please do this:

1. Please draw a production possibilities curve showing proportional/not increasing opportunity costs. Put apples as the vertical variable and oranges as the horizontal variable. Label point F as being inefficient/contraction/recession unemployment, point U as being impossible/expansion/inflation, and point S as being efficient/full output natural rate of unemployment. Last, show a decrease in the *quantity demanded* of apples only.
2. Who has the absolute and comparative advantages below? Show your calculations and explain
3. Calculate the opportunity cost of Tom making 1 piece of cheese.



1. abs

Macro/Micro Do-Now

1. The following table shows the number of donuts or cupcakes that John and Erica can each produce in one day.

	Donuts	Cupcakes
John	200	100
Erica	150	50

- (a) Who has the absolute advantage in producing donuts? Explain.
- (b) Who has the comparative advantage in producing donuts? Explain.
- (c) Assume that Erica discovers a new cupcake production technique that will increase her daily production of cupcakes only. Using donuts on the horizontal axis, draw a correctly labeled constant / proportional production possibilities curve for Erica, before and after the technology change in cupcake production.

Macro/Micro Do-Now

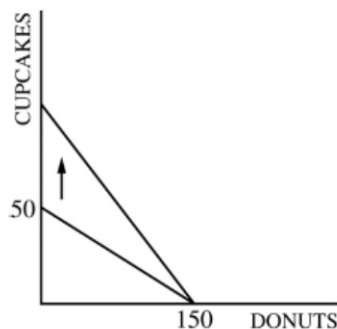
1. 3 points (1 + 1 + 1)

(a) 1 point:

- One point is earned for stating that John has the absolute advantage in producing donuts and for explaining that John can produce more donuts than Erica in one day ($200 > 150$).

(b) 1 point:

- One point is earned for stating that Erica has a comparative advantage in producing donuts and for explaining that Erica's opportunity cost of producing one donut ($1/3$ of a cupcake) is less than John's opportunity cost of producing one donut ($1/2$ of a cupcake).



(c) 1 point:

- One point is earned for drawing a correctly labeled graph of Erica's production possibilities curve, before the technology change, and for rotating the production possibilities curve outward showing greater production of cupcakes after the technology change.

Macro/Micro Do-Now

- 2.** Country X and Country Y are trading partners, and both produce furnaces and solar panels. The countries can produce the following amounts using equal amounts of resources.

Country X: 6 furnaces or 8 solar panels

Country Y: 6 furnaces or 12 solar panels

- (a) Which country has an absolute advantage in producing solar panels?
- (b) Calculate the opportunity cost of a furnace in Country Y.
- (c) Which country has the comparative advantage in producing furnaces? Explain.

Macro/Micro Do-Now

2. 3 points (1 + 1 + 1)

(a) 1 point:

- One point is earned for stating that Country Y has an absolute advantage in producing solar panels.

(b) 1 point:

- One point is earned for calculating the opportunity cost of a furnace for Country Y: 2 solar panels per furnace.

(c) 2 points:

- One point is earned for stating that Country X has the comparative advantage in producing furnaces.
- One point is earned for explaining that Country X has a lower opportunity cost of producing furnaces than Country Y.

Macro/Micro Do-Now

- 3.** Countries face trade-offs between producing consumer goods and producing capital goods.
- (a) Country X takes one hour to produce a unit of consumer goods and two hours to produce a unit of capital goods. Country Y takes two hours to produce a unit of consumer goods and four hours to produce a unit of capital goods. Which country has a comparative advantage in the production of consumer goods? Explain.
 - (d) Draw a correctly labeled graph of a production possibilities frontier indicating constant opportunity costs for country X. Put consumer goods on the horizontal axis and capital goods on the vertical axis. Show a point on your graph, labeled Z, that indicates the current level of unemployment is high.

Macro/Micro Do-Now

3. 5 points (1 + 1 + 1 + 2)

(a) 1 point:

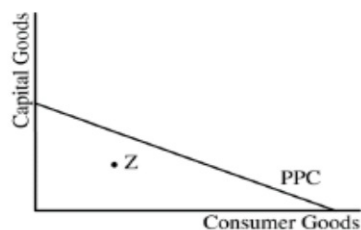
- One point is earned for stating that neither country has a comparative advantage in producing consumer goods and for explaining that the opportunity cost of producing 1 unit of consumer goods is the same for both countries (which is 1/2 a unit of capital goods).

~~(b) 1 point:~~

- ~~One point is earned for correctly calculating the unemployment rate as 10 percent ($20,000/200,000 \times 100 = 10\%$).~~

~~(c) 1 point:~~

- ~~One point is earned for correctly calculating the labor force participation rate as 66.67 percent ($200,000/300,000 \times 100 = 66.67\%$).~~



(d) 2 points:

- One point is earned for drawing a correctly labeled graph of the production possibilities curve (PPC).
- One point is earned for correctly showing point Z below the PPC.

Every Economy's Three Questions

1. there are three essential questions or problems that every economy must find a way to solve
 - A. what is to be produced
 - B. how are those goods to be produced
 - C. for whom are the goods to be produced
2. a **free market economy** and a **command/centrally planned economy** offer different approaches to these questions
 - A. in a free market economy, democracies base their economies on capitalism and most decisions about what, how, and for whom to produce are made by individual consumers (those who buy), firms (companies), governments, and other organizations interacting in the markets
 - B. in a command or centrally planned economy, such as in a communist or socialist country, decisions about what, how, and for whom to produce are made by those in control of the government
3. many economies are **mixed economies**, or a mixture of both

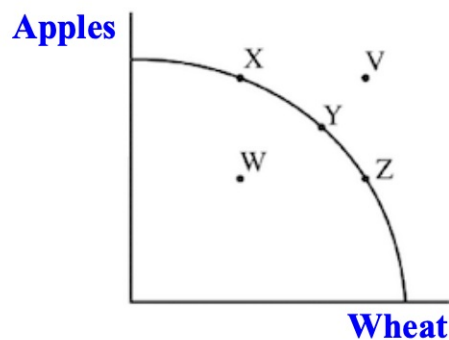
Ceteris Paribus and Laissez Faire in an Economy

1. in order to use models for prediction, economists use the assumption **ceteris paribus**, which means "all other things equal"; (the prediction that a variable will not change assumes there is nothing that can change it)
2. a key belief of classical economists is the concept of **laissez faire** ("hands off" or little government control), where the role of the government is mainly to promote competition and reduce restrictions on the exchange of goods and services

Macro/Micro Do-Now

Please do this:

- 1. Draw a production possibilities curve/frontier indicating increasing/not proportional opportunity costs. Use apples and wheat as your variables. Use apples on the vertical axis and wheat on the horizontal.**
- 2. Show point W as being a contraction, point V showing an expansion, and point X, Y, and Z as full output.**



Macro/Micro Do-Now

Please do this:

- 1. Create a production possibilities curve/frontier indicating not increasing and proportional opportunity costs using apples on the vertical axis and wheat on the horizontal.**
- 2. Using the same graph as in #1 above, show what would happen if apple production used better technology or if the quantity or quality of the resources/inputs needed to produce apples increased or improved.**

