FUNDAMENTALS OF ECON 1

LESSON 1: SCARCITY AND TRADE-OFFS

KEY TERMS

- Scarcity
- Shortages
- Productive Resources
- Land
- Labor
- Human Capital
- Physical Capital
- Entrepreneurship
- Profit Motive
- Innovation
- Opportunity cost
- Marginal
- Marginal Benefit/Cost
- Incentives
- Specialization
- Division of labor
- Voluntary exchange

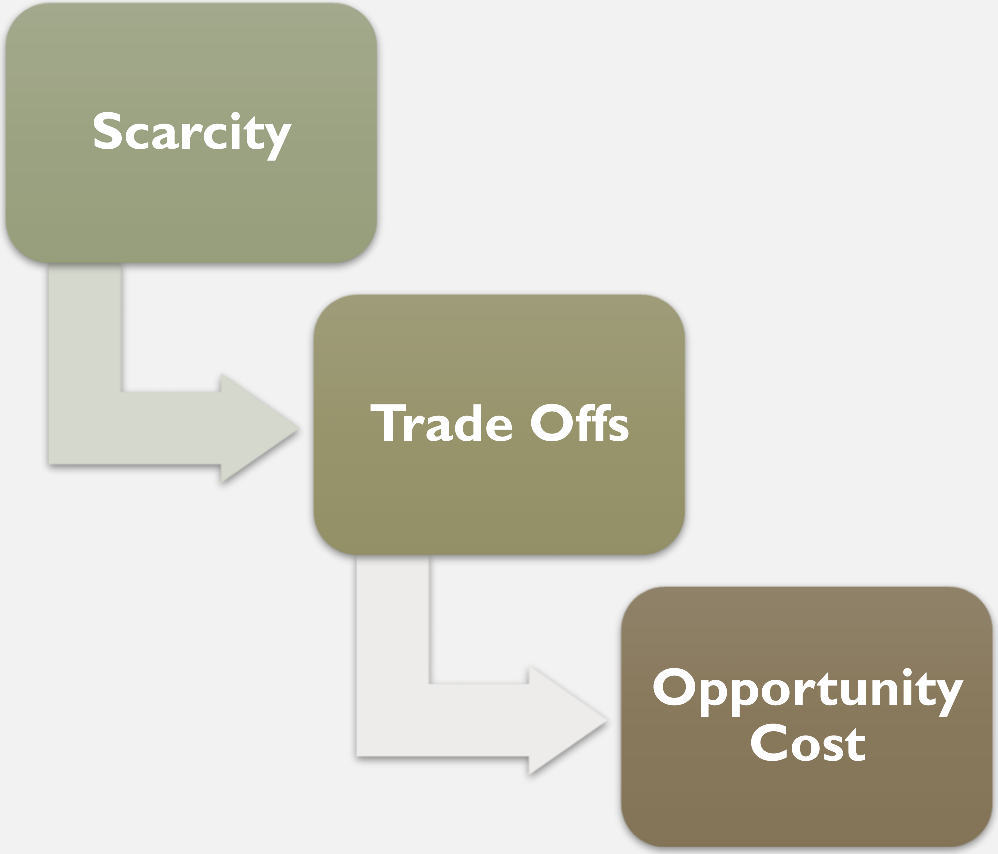
STANDARDS

- **SSEF1 Explain why limited productive resources and unlimited wants result in scarcity, opportunity costs, and tradeoffs for individuals, businesses, and governments.**
- **a. Define scarcity as a basic condition that exists when unlimited wants exceed limited productive resources.**

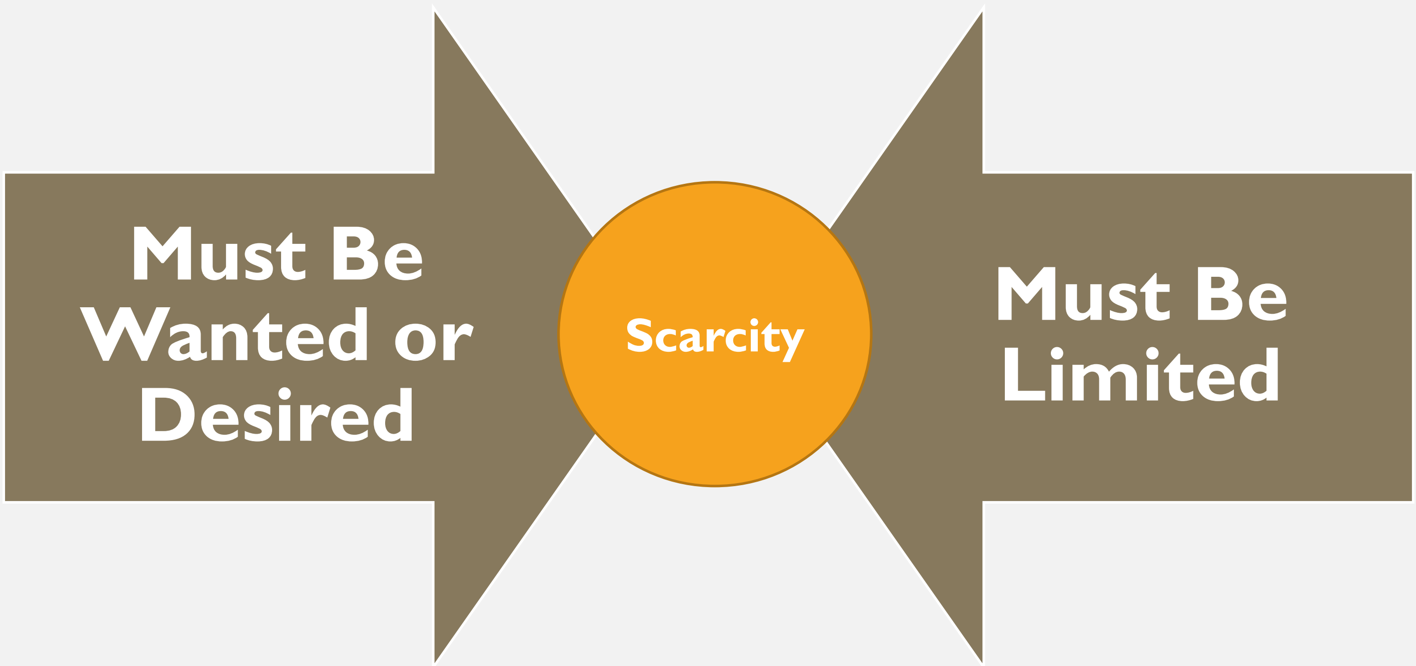
KEY QUESTIONS

- What is Scarcity?
- What are some things that are scarce?
- What is something that isn't Scarce?
- What is a shortage?

ECONOMICS: THE STUDY OF CHOICES



CONDITIONS FOR SCARCITY TO EXIST



IS IT SCARCE?

IS IT SCARCE?

IS IT SCARCE?

IT IS
SCARCE?

IT IS SCARCE?


BITCOIN·DIGITAL·DECENTRALIZED·PEER TO PEER
999 FINE COPPER

STANDARDS

- **SSEF1 Explain why limited productive resources and unlimited wants result in scarcity, opportunity costs, and tradeoffs for individuals, businesses, and governments.**
- **b. Define and give examples of productive resources (i.e. factors of production): natural resources (i.e. land), human resources (i.e. labor and human capital), physical capital and entrepreneurship.**

KEY QUESTIONS

- What are the four factors of production?

PRODUCTIVE RESOURCES

- Land

- Labor

- Capital

- Entrepreneurship

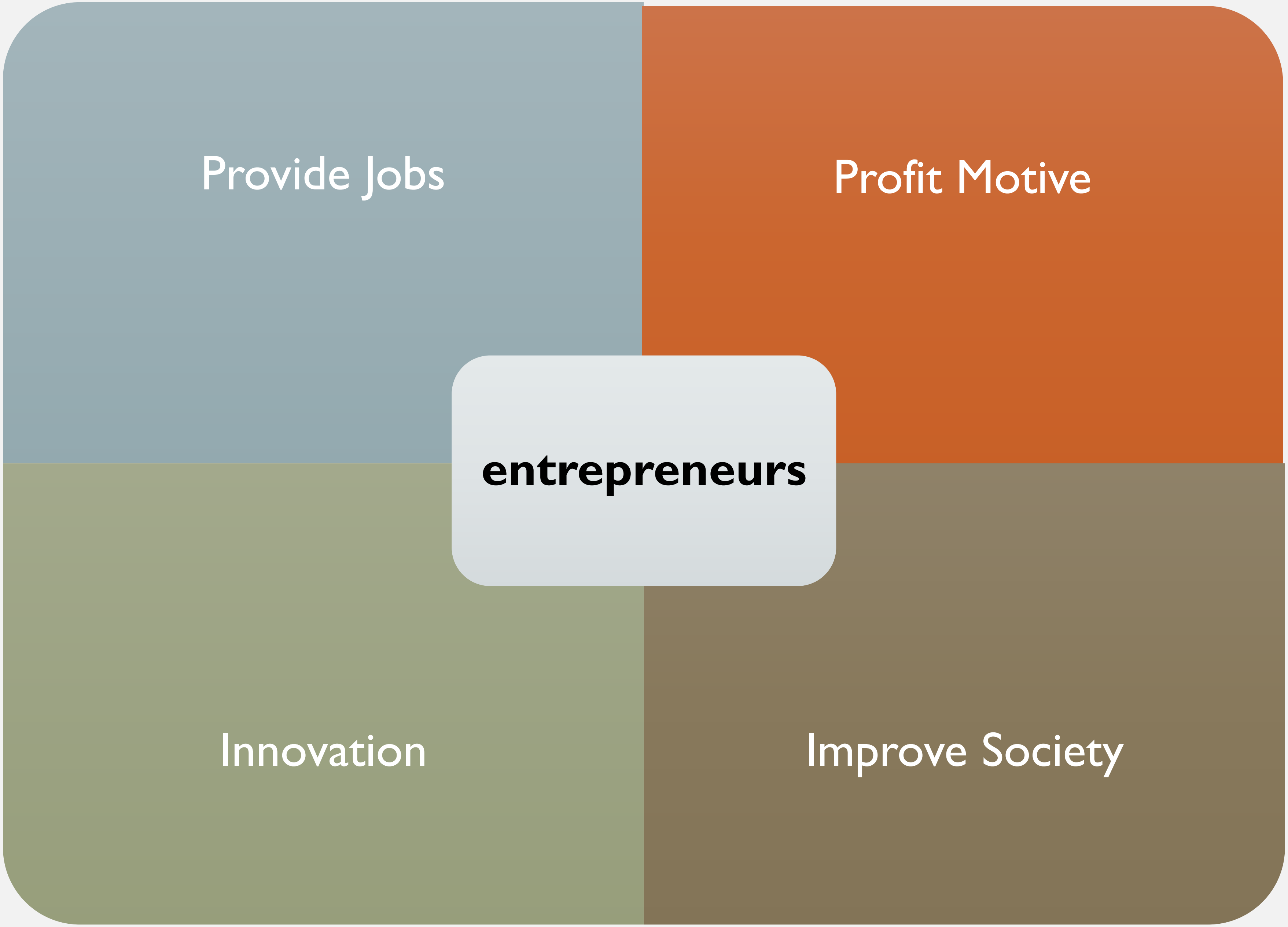
WHERE'S THE LAND, LABOR, & CAPITAL?

STANDARDS

- **SSEF1 Explain why limited productive resources and unlimited wants result in scarcity, opportunity costs, and tradeoffs for individuals, businesses, and governments.**
- **c. Explain the motivations that influence entrepreneurs to take risks (e.g., profit, job creation, innovation, and improving society).**

KEY QUESTIONS

- What risks do entrepreneurs take when starting a business?
- What is the primary factor that influences entrepreneurs to take risks?
- What other factors influence entrepreneurs to take risks?


Provide Jobs
Profit Motive
entrepreneurs
Innovation
Improve Society

WHICH MOTIVE?

WHICH MOTIVE?

STANDARDS

- **SSEF1 Explain why limited productive resources and unlimited wants result in scarcity, opportunity costs, and tradeoffs for individuals, businesses, and governments.**
- **d. Define opportunity cost as the next best alternative given up when individuals, businesses, and governments confront scarcity by making choices.**

KEY QUESTIONS

- What must be considered when making a choice?
- Define opportunity cost.

TRADE OFFS

Choices

1.

2.

3.

4.

5.

Top two choices

1.

2.

Your Choice (Benefit)

Opportunity Cost

IS THERE A COST

LESSON 2: RATIONAL DECISION MAKING

STANDARDS

SSEF2 Give examples of how rational decision making entails comparing the marginal benefits and the marginal costs of an action.

- **a. Define marginal cost and marginal benefit.**
- **b. Explain that rational decisions occur when the marginal benefits of an action equal or exceed the marginal costs.**

KEY QUESTIONS

- Define marginal benefit and marginal cost.
- When should a choice be made when weighing costs and benefits?

MARGINAL DECISIONS

MARGINAL DECISIONS

MARGINAL
DECISIONS

RATIONAL DECISION MAKING

- Decision making should happen on the 'margins'
- Marginal = 1 more
- If the benefits of the decision out-weight the costs then the action should happen.

Example: Mrs. Garvey's Petting Zoo

- To start his Zoo, Mrs. G rents a piece of land with a fence for $100 a month. This cost remains the same no matter what.

- she gets one animal donated from a local animal shelter. Food for one animal costs $50 a month.

- With this animal he gets 200 visitors who pay $1 each to visit his zoo.

Example: Mrs. Garvey's Petting Zoo

After the first month, Mrs. Garvey's cost/benefit table looks like this:

# of animals	Fixed cost	**Marginal Cost**	Total Revenue	Marginal Revenue **(Marginal Benefit)**
0	$100	$0	$0	$0
1	$100	$50	$200	$200

Should Mrs. G buy the first animal?

Yes, because her marginal benefit is greater than her marginal cost.

Example: Mrs. Garvey's Petting Zoo

After the first month, all Mrs. Garvey has to compare is the marginal cost of additional animals to the marginal revenue.

# of animals	Marginal Cost	Marginal Revenue (Marginal Benefit)
1	$50	$200
2	$50	$100
3	$50	$75

A 2nd animal will costs another $50.

But will bring in another 100 people.

A 3rd animal will cost $50.

But will bring in 75 more people.

Example: Garvey's Petting Zoo

How many animals should she get?

# of animals	Marginal Cost	Marginal Revenue (Marginal Benefit)
0	$0	$0
1	$50	$200
2	$50	$100
3	$50	$75
4	$50	$65
5	$50	$55
6	$50	$48
7	$50	$35

Example: Mr. J's Petting Zoo

How many animals should he get?

# of animals	Marginal Cost	Marginal Revenue (Marginal Benefit)	TOTAL Cost	Total REVENUE	Profit
0	$0	$0	100	0	-100
1	$50	$200	150	200	50
2	$50	$100	200	300	100
3	$50	$75	250	375	125
4	$50	$65	300	440	140
5	$50	$55	350	495	145
6	$50	$48	400	543	143
7	$50	$35	450	578	128

STANDARDS

SSEF2 Give examples of how rational decision making entails comparing the marginal benefits and the marginal costs of an action.

- **c. Explain that people, businesses, and governments respond to positive and negative incentives in predictable ways.**

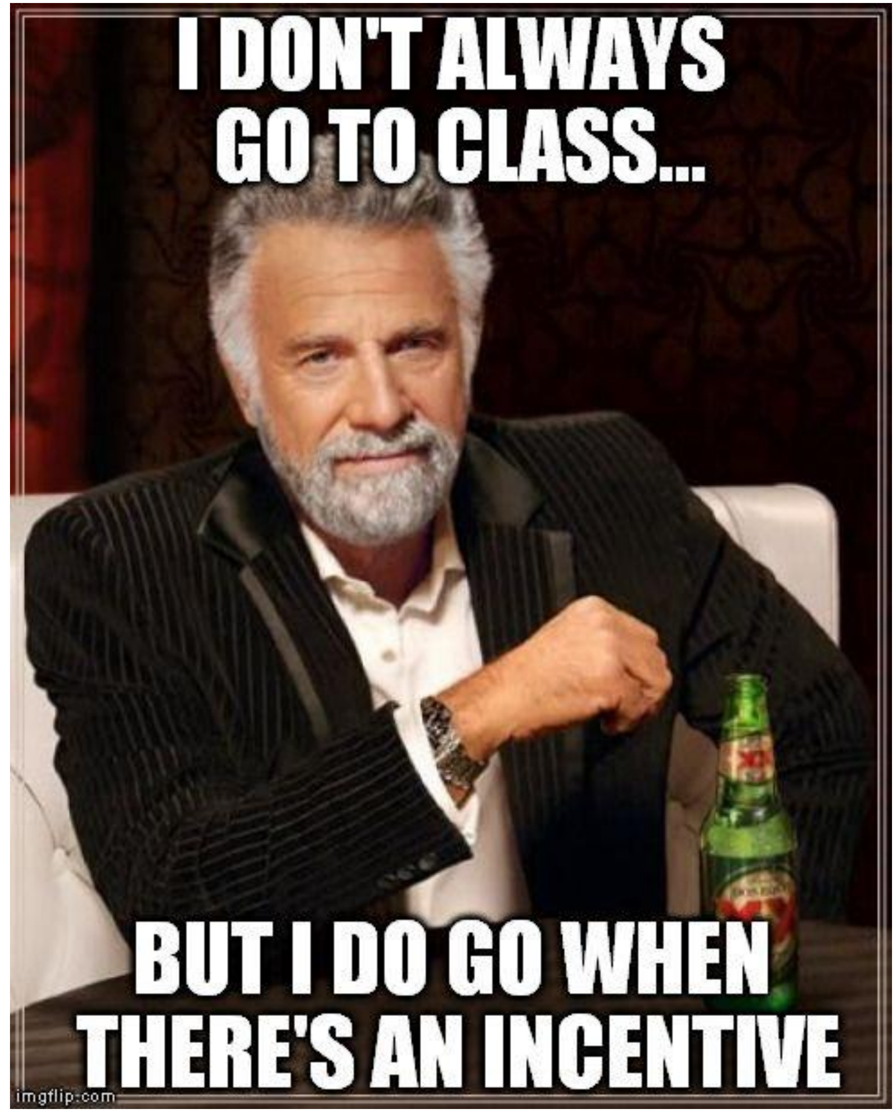
KEY QUESTIONS

- What are incentives?
- How do incentives influence our behavior?

INCENTIVES

- Incentives motive people to either do, or not do something.
- Two types of incentives
  - Positive
  - Negative

WHAT IS A POSITIVE INCENTIVE OF ATTENDING CLASS?



LESSON 3: SPECIALIZATION AND VOLUNTARY EXCHANGE

STANDARDS

SSEF3 Explain how specialization and voluntary exchange influence buyers and sellers.

- **a. Explain how and why individuals and businesses specialize, including division of labor.**
- **b. Explain that both parties gain as a result of voluntary, non-fraudulent exchange.**

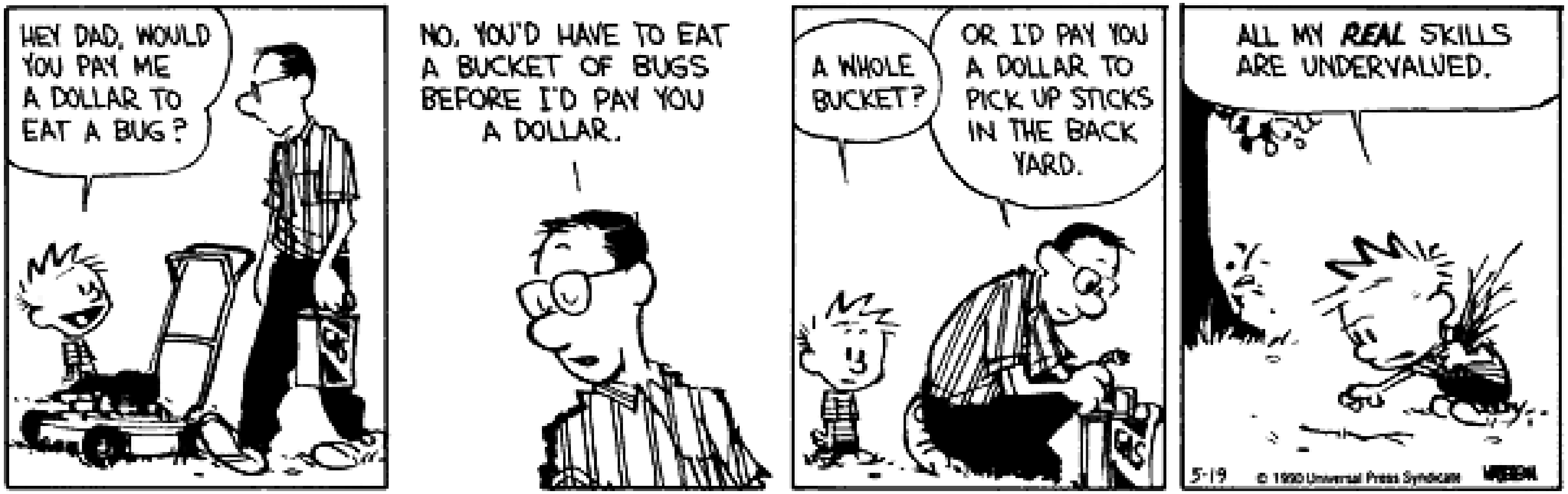
KEY QUESTIONS

- What is specialization.
- Why does specialization increase productivity?
- When does voluntary exchange occur?

HOW IS THIS SPECIALIZATION?

SPECIALIZATION

- In a business, specialization can lead to higher productivity.



VOLUNTARY EXCHANGE

LESSON 4: ECONOMIC SYSTEMS

KEY TERMS

- Economic systems
- Traditional economy
- Command Economy
- Market Economy
- Mixed Economy
- Social Economic Goals
- Public Goods
- Allocation
- Non-Exclusion
- Freerider
- Income redistribution
- Private property rights
- Market failures
- Externalities
- Government Regulation
- Productivity
- Standard of living
- Human capital
- PPC Curve

STANDARDS

SSEF4 Compare and contrast different economic systems and explain how they answer the three basic economic questions of what to produce, how to produce, and for whom to produce.

a. Compare traditional, command, market, and mixed economic systems with regard to private ownership, profit motive, consumer sovereignty, competition, and government regulation.

KEY QUESTIONS

- What main factor do economists consider when classifying economic systems?
- What are the three main economic systems?
- How are most real world economies viewed today?

3 BASIC ECONOMIC QUESTIONS

- Land
- Labor
- Capital
- Entrepreneurship

What to Produce?

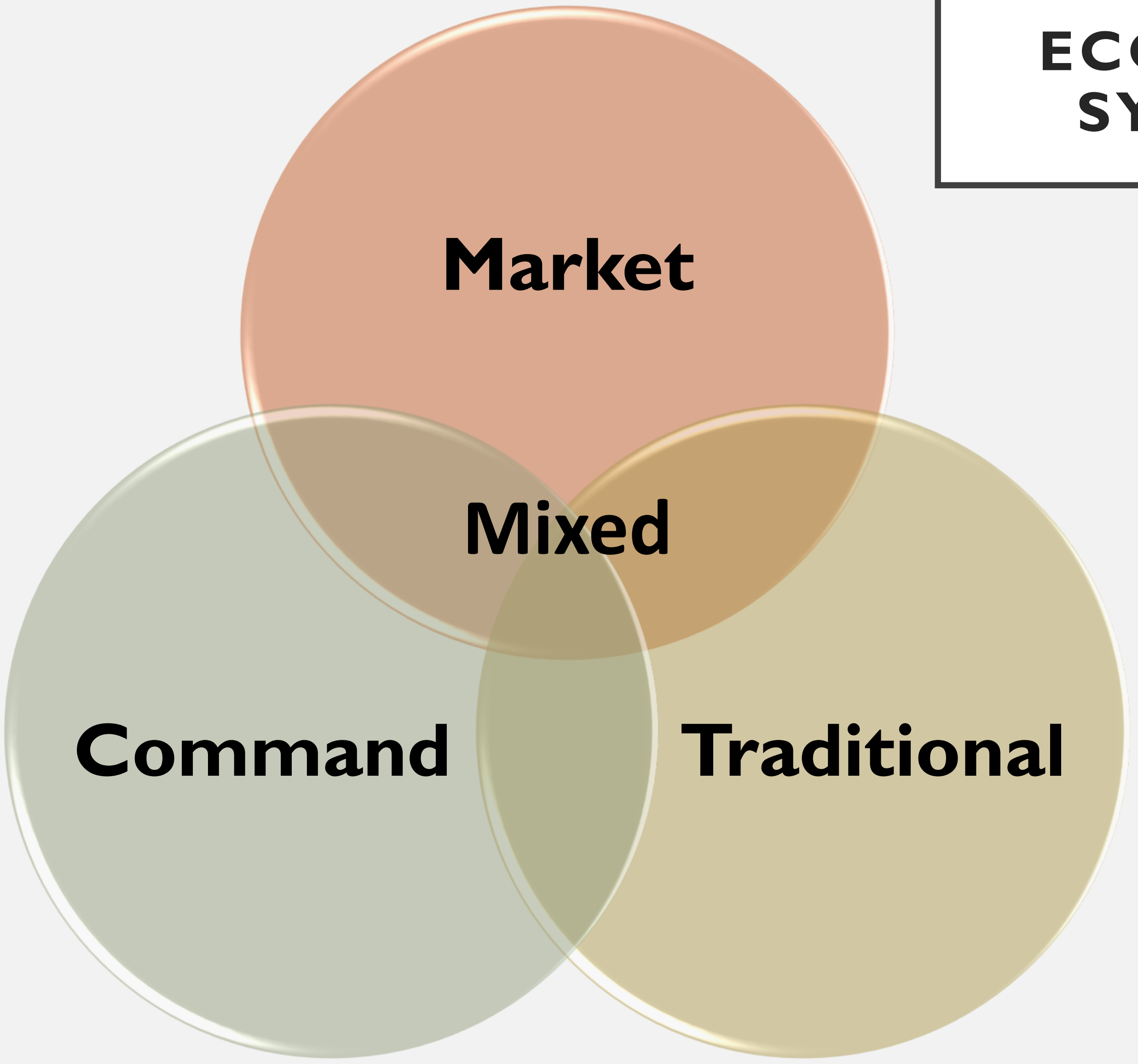
- Land
- Labor
- Capital
- Entrepreneurship

How to Produce?

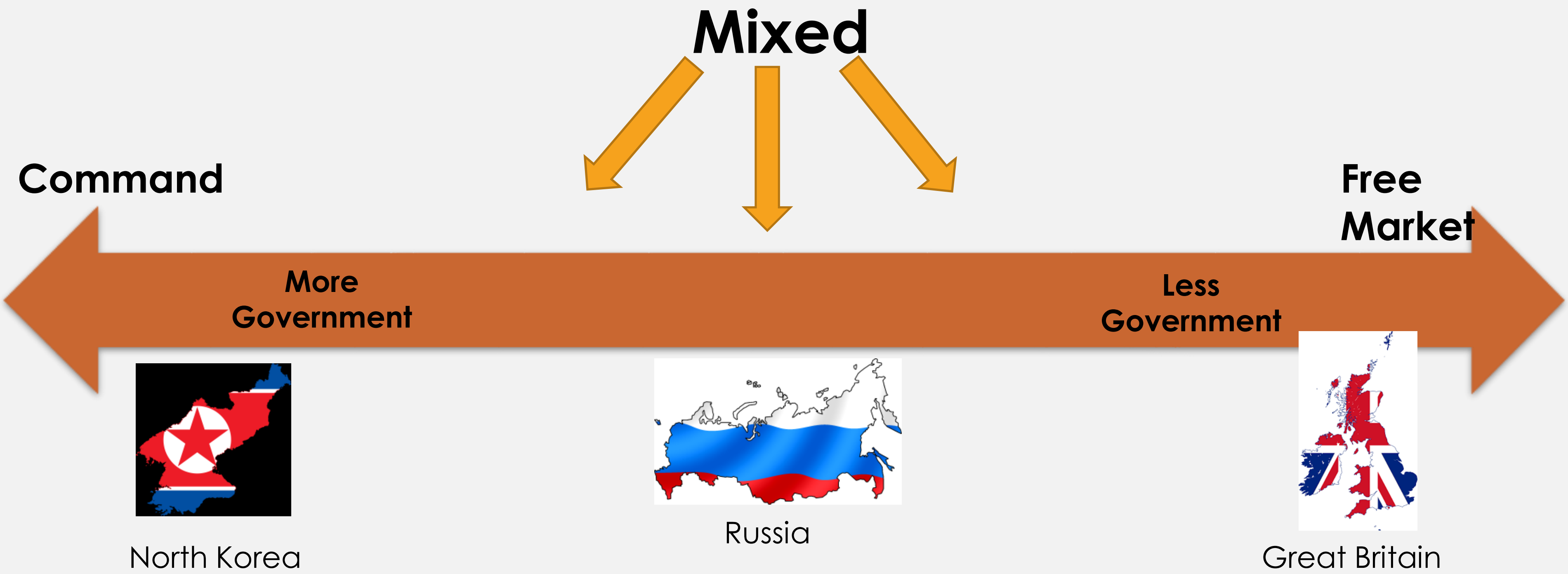
- Land
- Labor
- Capital
- Entrepreneurship

For Whom to Produce?

ECONOMIC SYSTEMS



ECONOMIC SYSTEMS CONTINUUM: GOVERNMENT



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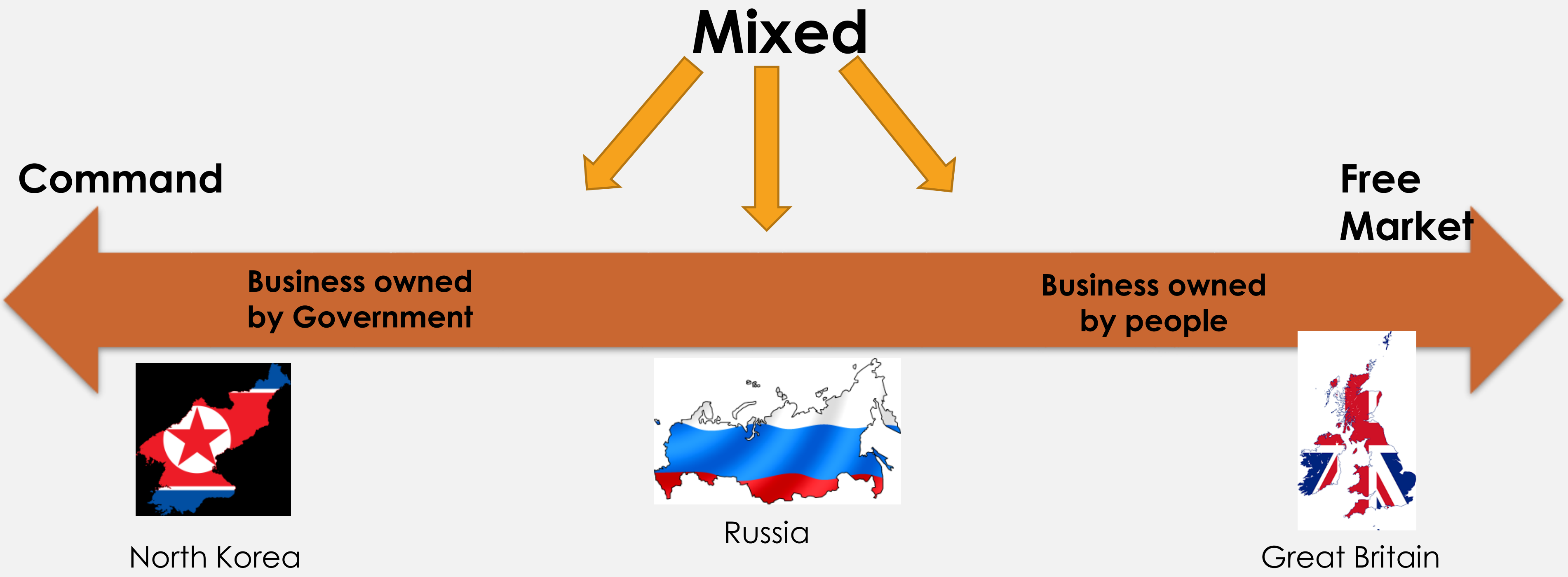
https://en.wikipedia.org/wiki/File:Flag-map_of_Russia.svg

https://commons.wikimedia.org/wiki/File:Flag-map_of_the_Kingdom_of_Great_Britain_(1707-1801).svg

ECONOMIC SYSTEMS CONTINUUM: PRIVATE OWNERSHIP



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https://en.wikipedia.org/wiki/File:Flag-map_of_Russia.svg

https://commons.wikimedia.org/wiki/File:Flag-map_of_the_Kingdom_of_Great_Britain_(1707-1801).svg

TRADITIONAL ECONOMY: AMISH

https://commons.wikimedia.org/wiki/File:Amish_family,_Lyndenville,_New_York.jpg

https://commons.wikimedia.org/wiki/File:Amish_Buggie_sign.jpg


COMMAND ECONOMY
THE GOVERNMENT CONTROLS FACTORS


FREE
MARKET
SYSTEM

The USA has a MIXED, MARKET economy based on a CAPITALIST ideal!

- **MIXED: the U.S. system is a *MIX* of both MARKET & COMMAND qualities**
  - **Citizens have freedoms but gov't also regulates**

- **Capitalism: private CITIZENS OWN the FACTORS of production**

COMMAND VS. MARKET SYSTEMS AT NIGHT:

STANDARDS

SSEF4 Compare and contrast different economic systems and explain how they answer the three basic economic questions of what to produce, how to produce, and for whom to produce.

b. Analyze how each type of system answers the three economic questions and meets the broad social and economic goals of freedom, security, equity, growth, efficiency, price stability, full employment, and sustainability.

KEY QUESTIONS

- What are the economic goals for most nations?
- What goals would be most important for the U.S. (a mixed/market economy)?
- What goals would be most important for Cuba (a command economy)?

ECONOMIC GOALS

-Economic freedom: the right to make your own economic decisions about where to work, what to buy, etc.

-Economic Efficiency: using resources wisely because they are scarce so that more wants and needs can be satisfied in the long run.

-Economic Equity: justice and fairness for all. (example: no job discrimination)

-Economic Security: protection from bad economic situations such as unemployment. The Social Security program was set up to help meet this goal for those people who are retired and/or disabled.

-Full Employment: to provide as many jobs as possible so that everyone has the opportunity to work.

-Price Stability: to have stable prices overall with no major inflation (a rise in the general level of prices) because many people have fixed incomes. See Federal Reserve/Monetary Policy.

-Economic Growth: to have better things in the future such as more money, better jobs, etc.

STANDARDS

SSEF4 Compare and contrast different economic systems and explain how they answer the three basic economic questions of what to produce, how to produce, and for whom to produce.

c. Compare and contrast strategies for allocating scarce resources, such as by price, majority rule, contests, force, sharing, lottery, authority, first-come-first-served, and personal characteristics

KEY QUESTIONS

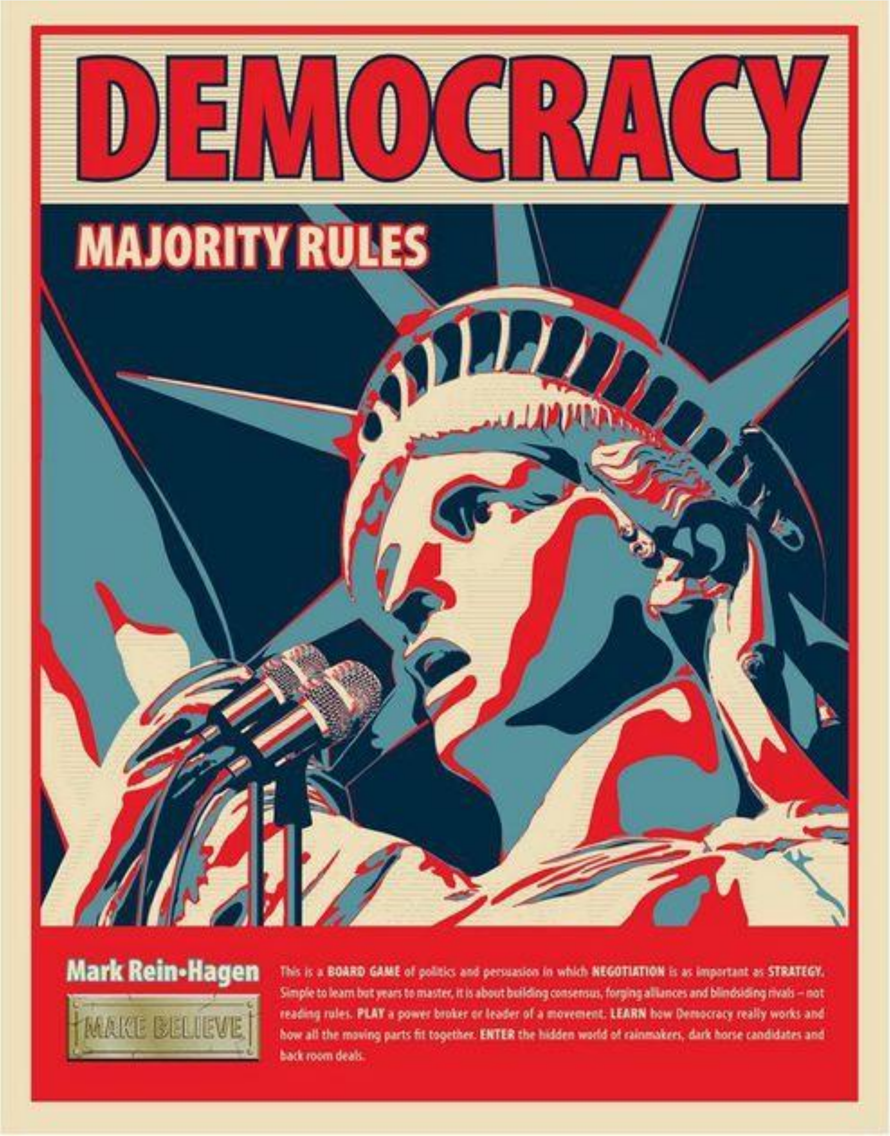
- How does price allocate resources throughout the economy?
- What are other methods of allocating resources?

PRICE

- resource goes to those who use market mechanisms such as trade, barter, or price;
- great for those who have money or a job with income;
- not good for those who have little or no income

MAJORITY

- resource goes to those who win an election; voting; consensus; largest number of people are satisfied
- great for those who are popular and those who have many members
- not good for the unpopular; those who don't have the skills to form alliances



CONTESTS

- resource goes to the most competitive – winner of a race or arm wrestle; survival of the fittest
- great for those who are talented and skillful
- not good for those who aren't competitive; unskilled

FORCE

- resource goes to the one who is strongest (physical, mental, political); most forceful
- great for those who are strong, powerful, bullish
- not good for those who are weak, small, easily intimidated

SHARING

- resource goes to multiple parties by dividing the resource; great in that everyone gets an equal part; no one is left out
- not good in that some resources can't be divided; no party may get enough; not everyone wants some of every resource

LOTTERY

- resource goes to the luckiest; random; fair
- great for those who are lucky and win things; everyone has an equal chance; random winners
- not good for those who are unlucky or who "never win anything"

LESSON 5: ROLE OF GOVERNMENT

STANDARDS

SSEF5 Describe the roles of government in the United States economy.

a. Explain why government provides public goods and services, redistributes income, protects property rights, and resolves market failures.

KEY QUESTIONS

1. What type of goods/services does the government provide?
2. How does the government fund the goods/services they provide?
3. What two characteristics help differentiate between a private good and a public good?
4. Who is a free rider?
5. What is an example of a public good at the local/state level of government?
6. What is an example of a public good at the federal level of government?
7. How does the U.S. try to meet the social economy goal of equity?
8. What is a market failure?
9. Define externalities and provide an example.
10. How does the government try to correct negative externalities?
11. What does market power refer to?

STANDARDS

SSEF5 Describe the roles of government in the United States economy.

b. Explain the effects on consumers and producers caused by government regulation and deregulation.

KEY QUESTIONS

1. Why does the U.S. government not allow monopolies?
2. Define regulation and deregulation. What is an example of each?

LESSON 6: ECONOMIC GROWTH

STANDARDS

SSEF6 Explain how productivity, economic growth, and future standards of living are influenced by investment in factories, machinery, new technology, and the health, education, and training of people.

STANDARDS

SSEF6 Explain how productivity, economic growth, and future standards of living are influenced by investment in factories, machinery, new technology, and the health, education, and training of people.

a. Define productivity as the relationship of inputs to outputs.

b. Explain how investment in equipment and technology can lead to economic growth.

c. Explain how investments in human capital (e.g., education, job training, and healthcare) can lead to a higher standard of living.

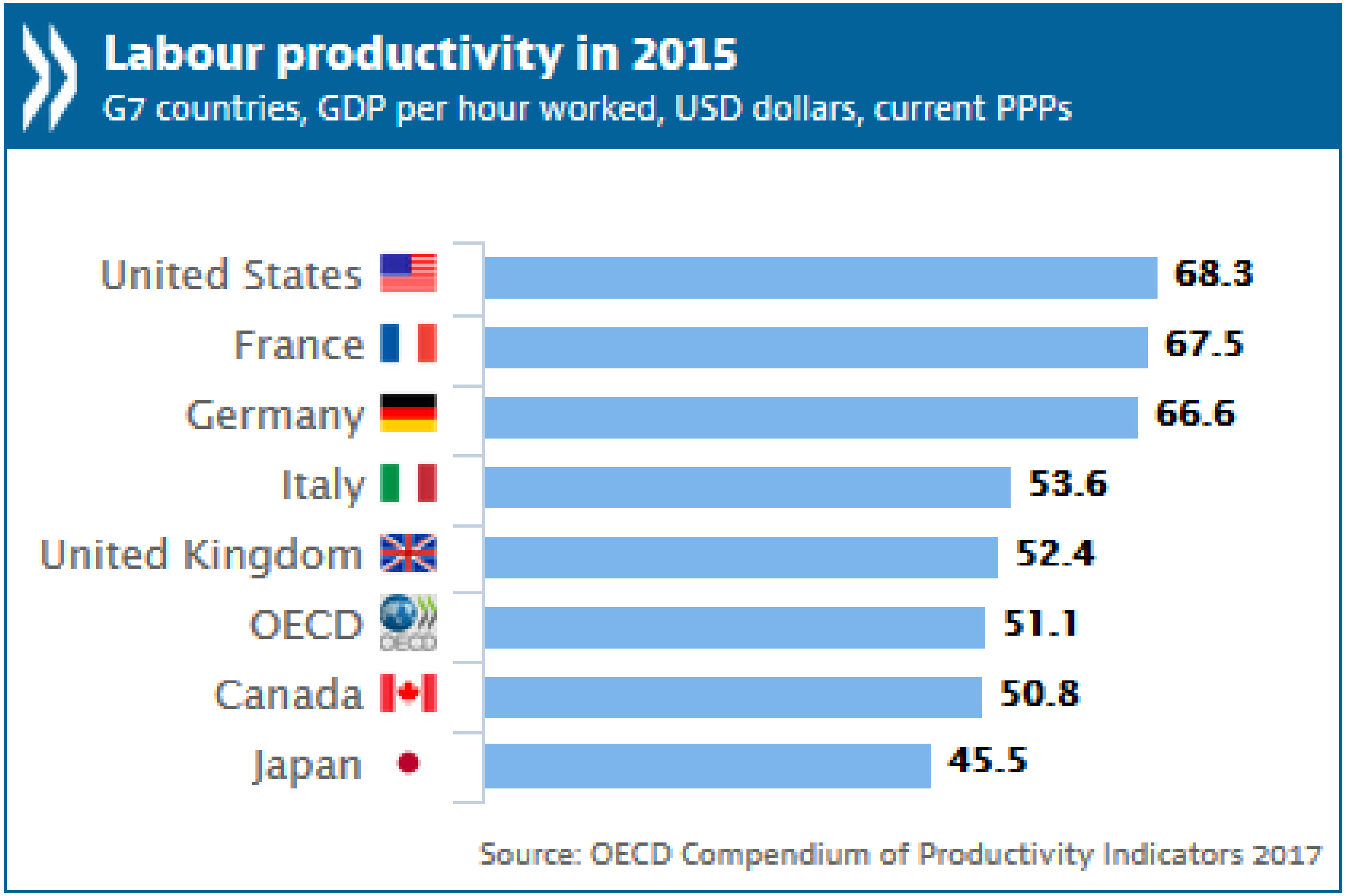
KEY QUESTIONS

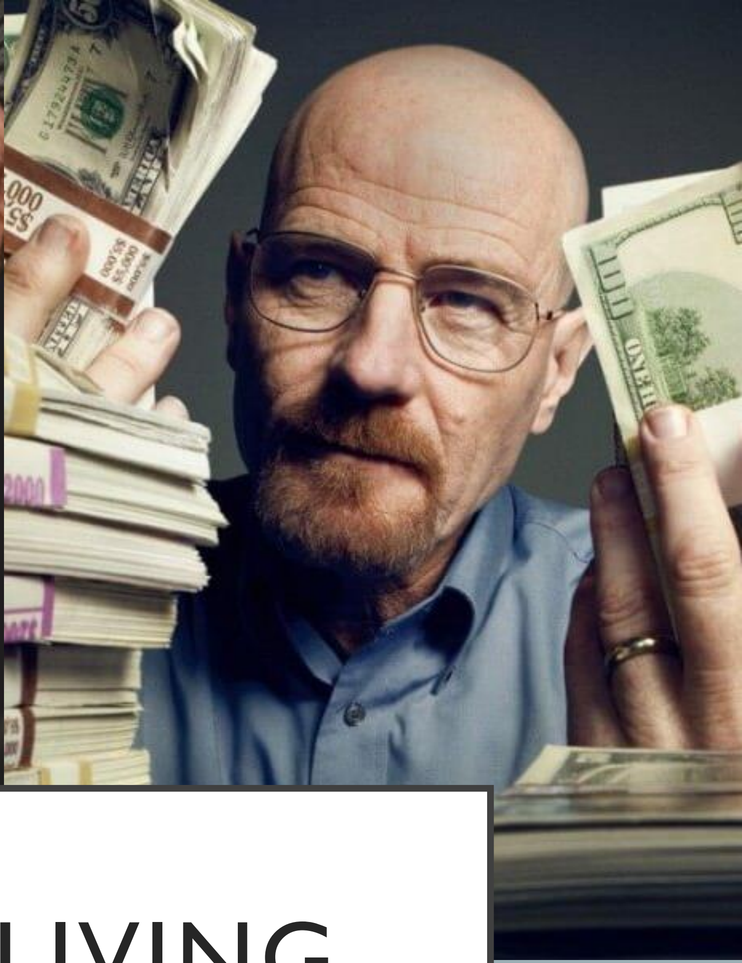
1. Define productivity.
2. What is an example of an input and an output?
3. How does technology and capital investment increase productivity and overall economic growth?
4. Define standard of living.
5. How does one typically increase their standard of living?
6. Define human capital.
7. What is the relationship between level of education, earnings, and unemployment rate?

FORD ASSEMBLY LINE - 1913

VOLKSWAGEN BEETLE ASSEMBLY LINE

MODERN ASSEMBLY LINE


Labour productivity in 2015
G7 countries, GDP per hour worked, USD dollars, current PPPs
United States
68.3
France
67.5
Germany
66.6
Italy
53.6
United Kingdom
52.4
OECD
51.1
Canada
50.8
Japan
45.5
Source: OECD Compendium of Productivity Indicators 2017

STANDARD OF LIVING

Sources of Human Capital

- Education
- Health
- On-the-Job-Training
- Migration
- Information

STANDARDS

SSEF6 Explain how productivity, economic growth, and future standards of living are influenced by investment in factories, machinery, new technology, and the health, education, and training of people.

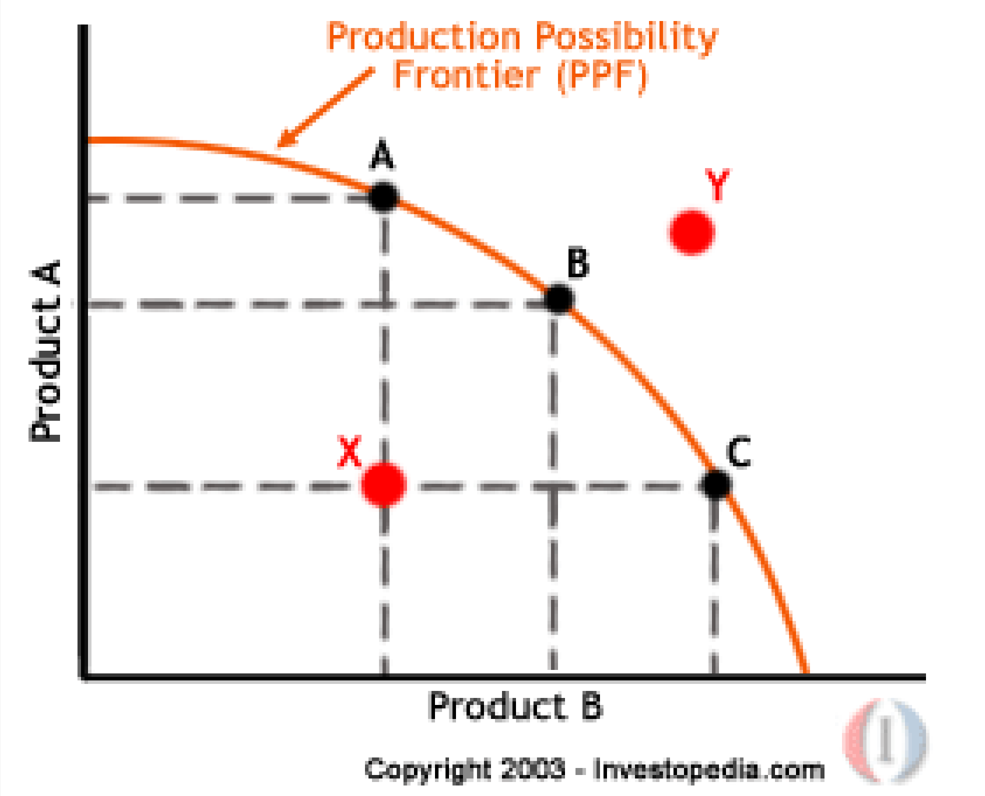
d. Analyze, by means of a production possibilities curve: trade-offs, opportunity cost, growth, and efficiency.

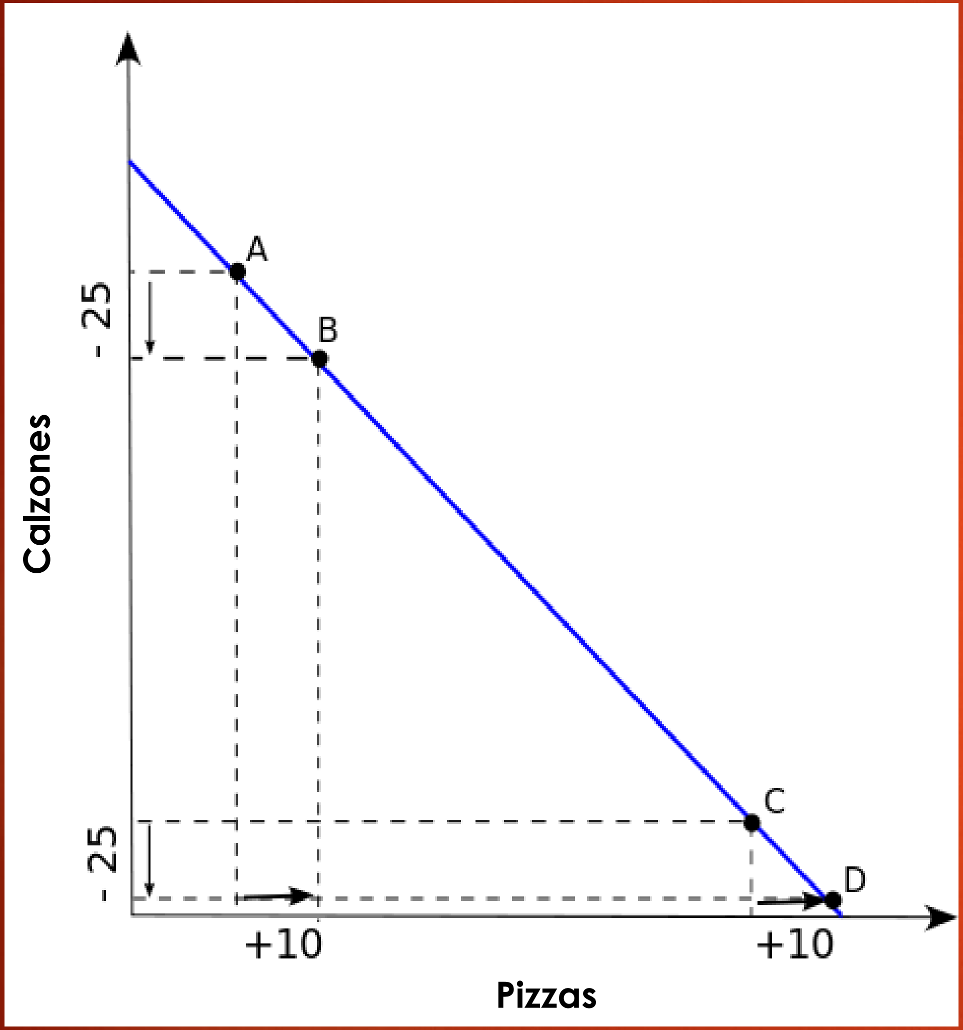
KEY QUESTIONS

1. What does the production possibilities model illustrate?
2. Where on the graph do you see efficient levels of production? Inefficient production?
3. Why do investments in capital and human capital push the production curve outward?

PPC CURVE

- A **production possibilities curve** is an economic model used by economists to illustrate all possible combinations of efficient production available to an individual, firm, or country given the resources available to produce the two goods or services shown on the graph.





Constant Cost Curve

- You must give up 25 Calzones for every 10 Pizzas produced.

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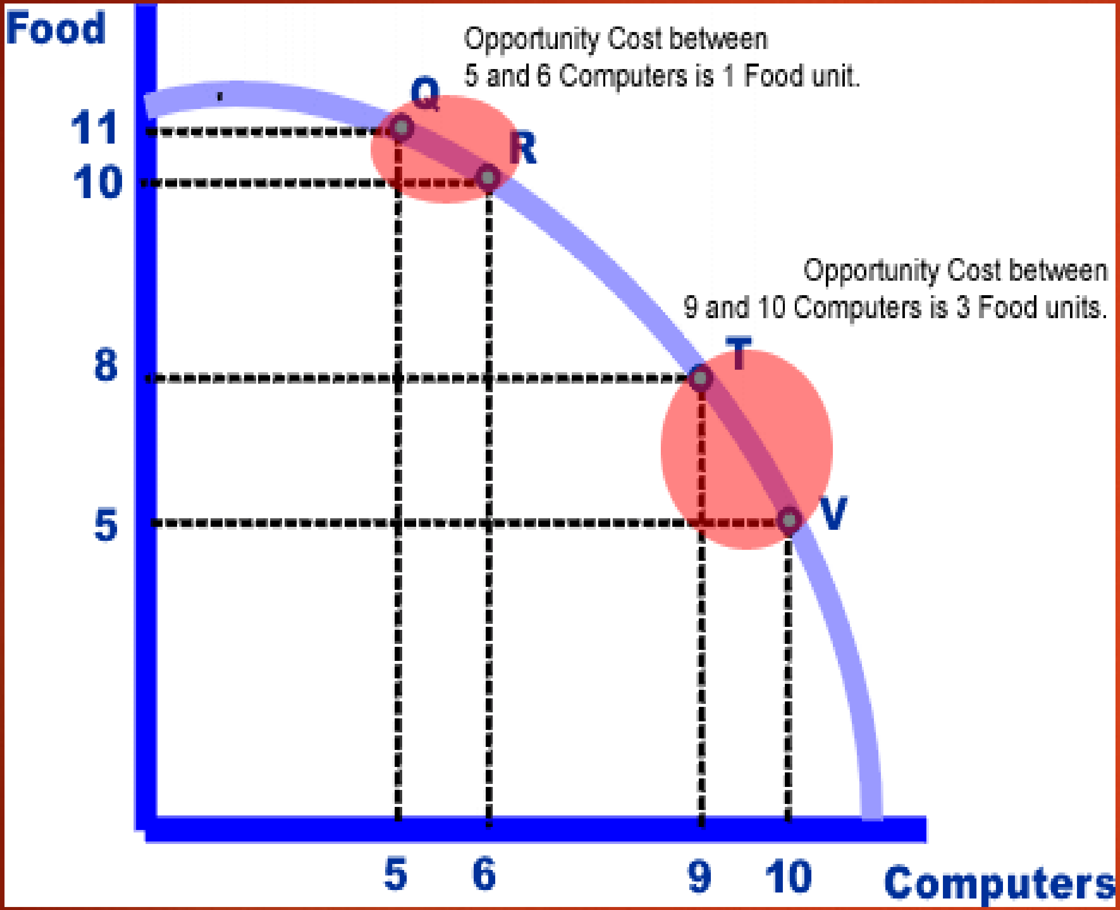

Increasing Cost Curve

- The number of units of food given up increases for each additional computer produced.

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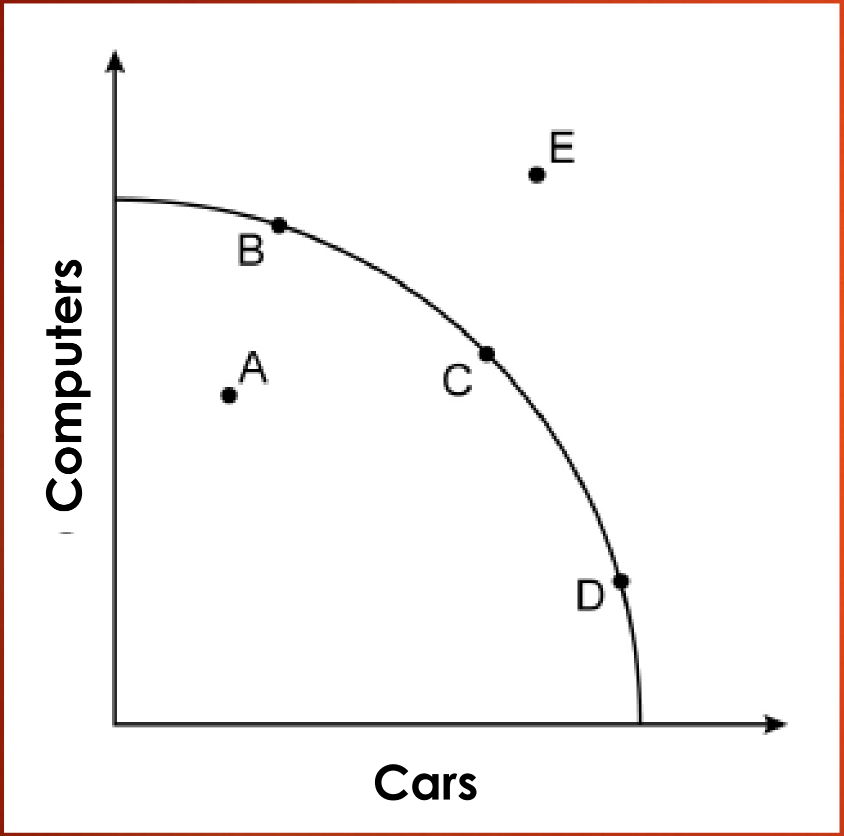
Microeconomic Labels

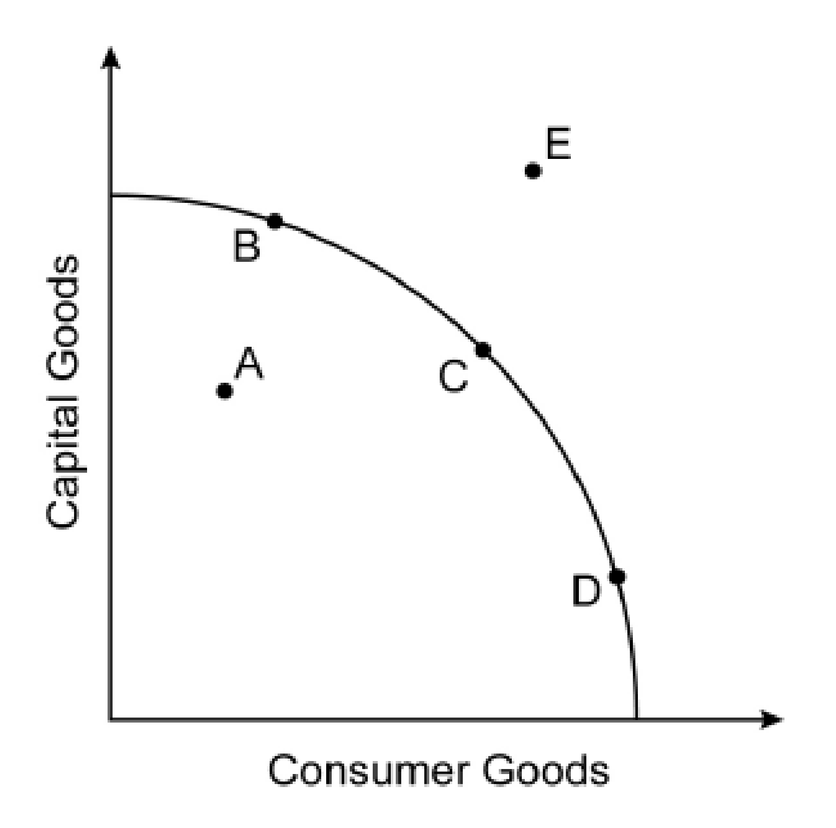


Point A- Inefficient Production, But Attainable

Points B, C, & D- Efficient Use of Productive Resources, All Resources Have Been Utilized

Point E- Unattainable in the Long Run Without Additonal Resources or a New Technology

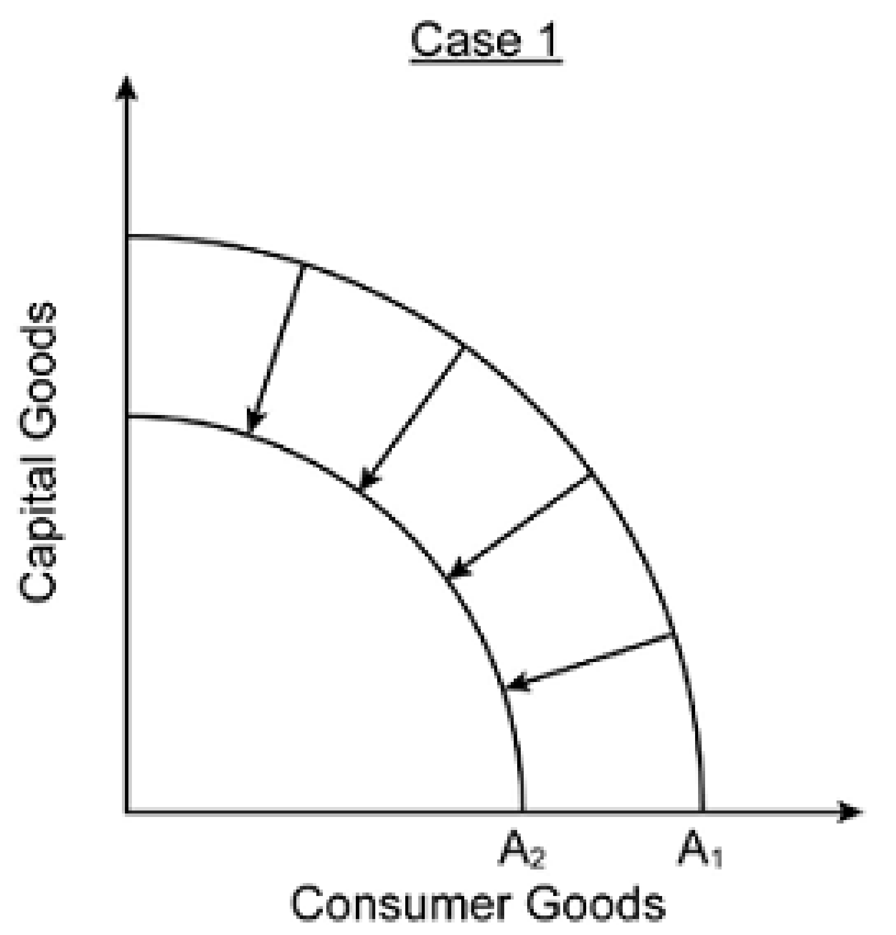
Macroeconomic Labels



Point A- An Economy in a Recession, Unemployed Resources (Land,Labor,Capital)

Points B, C, & D- An Economy at Full Employment, All Resources Fully Employed

Point E- Overproduction that is Not Sustainable in the Long Run, Inflationary

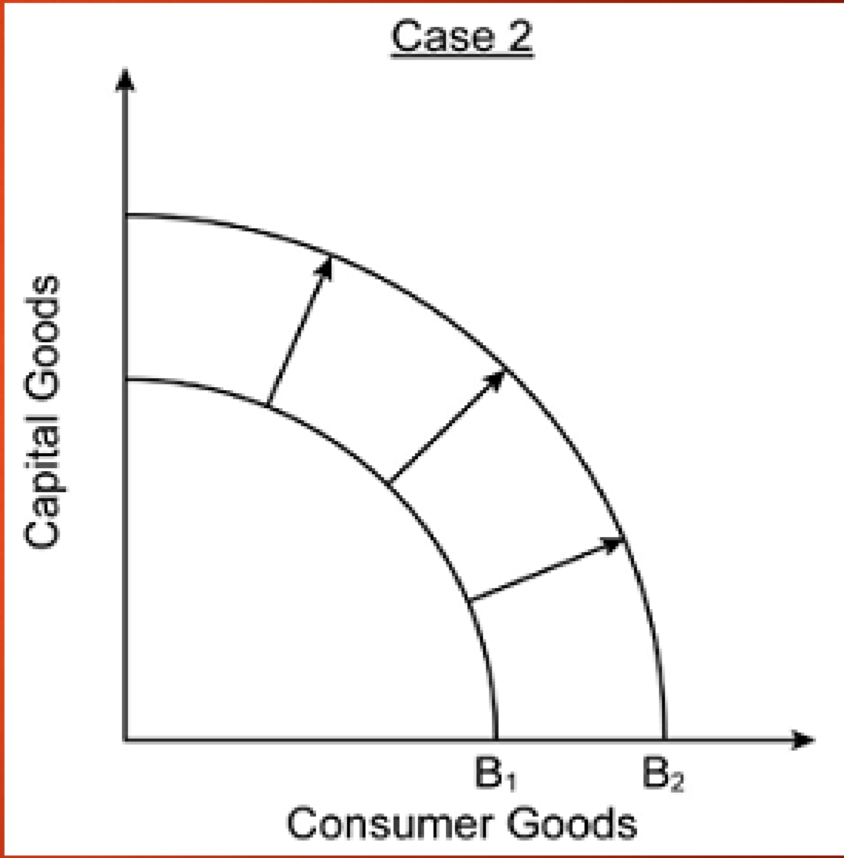


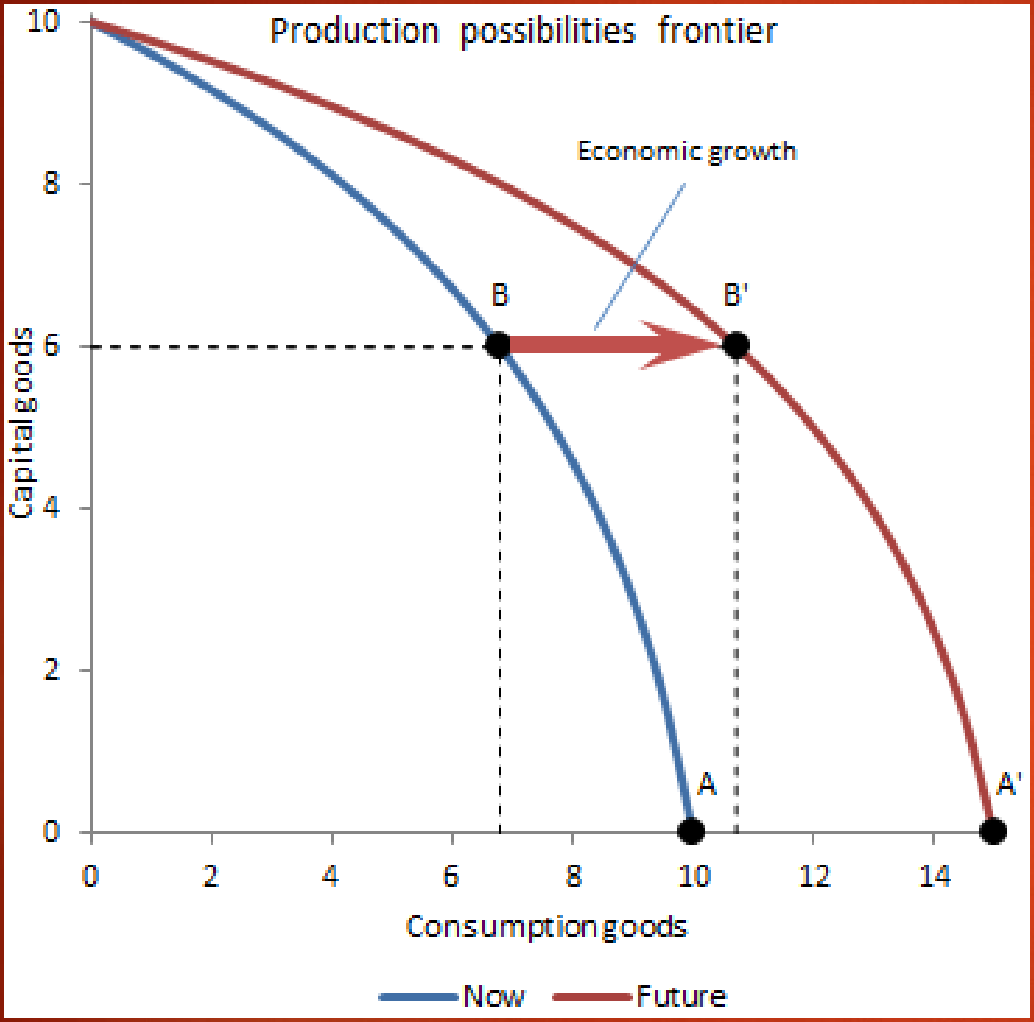
Decreased production

- Loss of Productive Resources (Long-run)

Increased Production of both Capital and Consumer Goods

- Increased Productivity/Technology
- Investment in Human and/or Physical Capital
- Discovery of New Resources





More Resources Available or Increased Productivity for Consumption Goods Only

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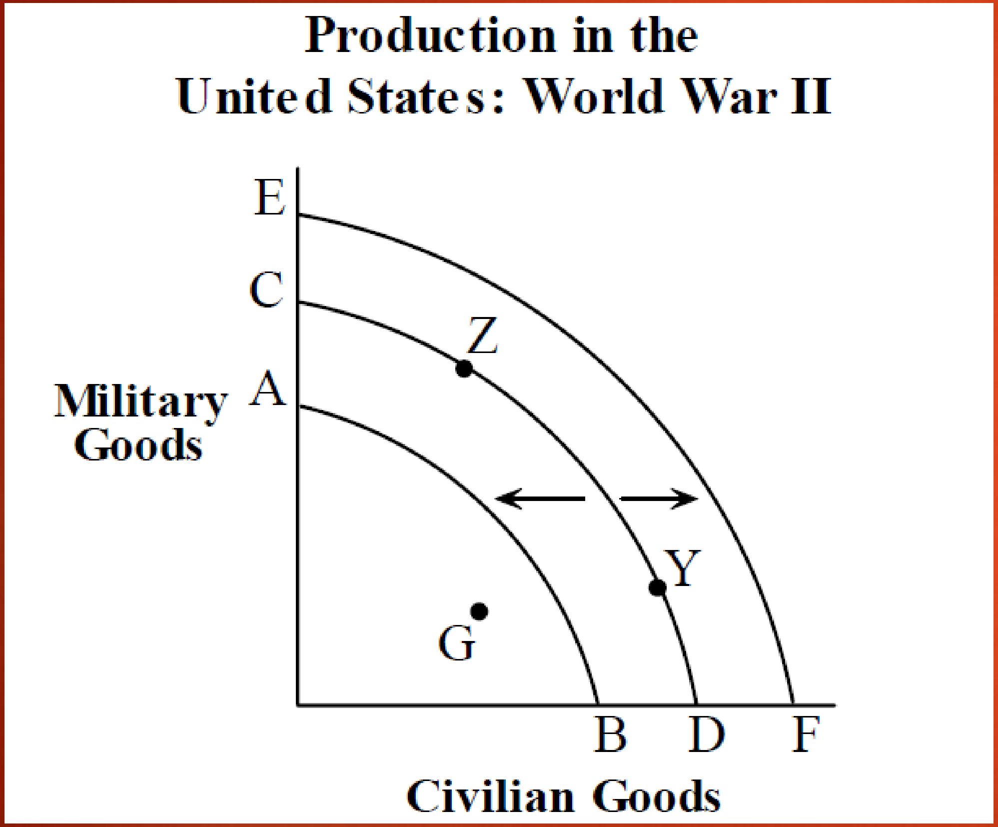
Production Possibilities Practice



- Cause of a movement from curve CD to curve AB?
- Cause of a movement from curve CD to curve EF?
- Production points Z and Y?
- Production point G?

What will be on the test?

- Scarcity
  - definition
  - examples
- Opportunity cost
  - definition
  - examples
- Production Possibilities Curve
  - What do they show?
  - interpret points (below, above, moving from one point to another)
  - DRAW ONE!!!!
- Factors of production
  - Define them
  - Pick them from an example
- Productivity/Growth
  - What causes it
  - How do we measure it
- Rational Decision Making/Marginal Analysis
  - What is marginal
  - When do stop/start doing something
- Economic Systems
- Allocation Strategies