

Fundamental of Economics



Based on
the image,
what
resources
are scarce
on the
island?

Key Terms (SSEF1a, SSEF4c)

- **Economics:** a social science studying the **allocation** of **scarce** resources and goods.
- **Allocate:** to distribute according to some plan or system.
- **Scarcity:** limited productive resources versus unlimited wants.

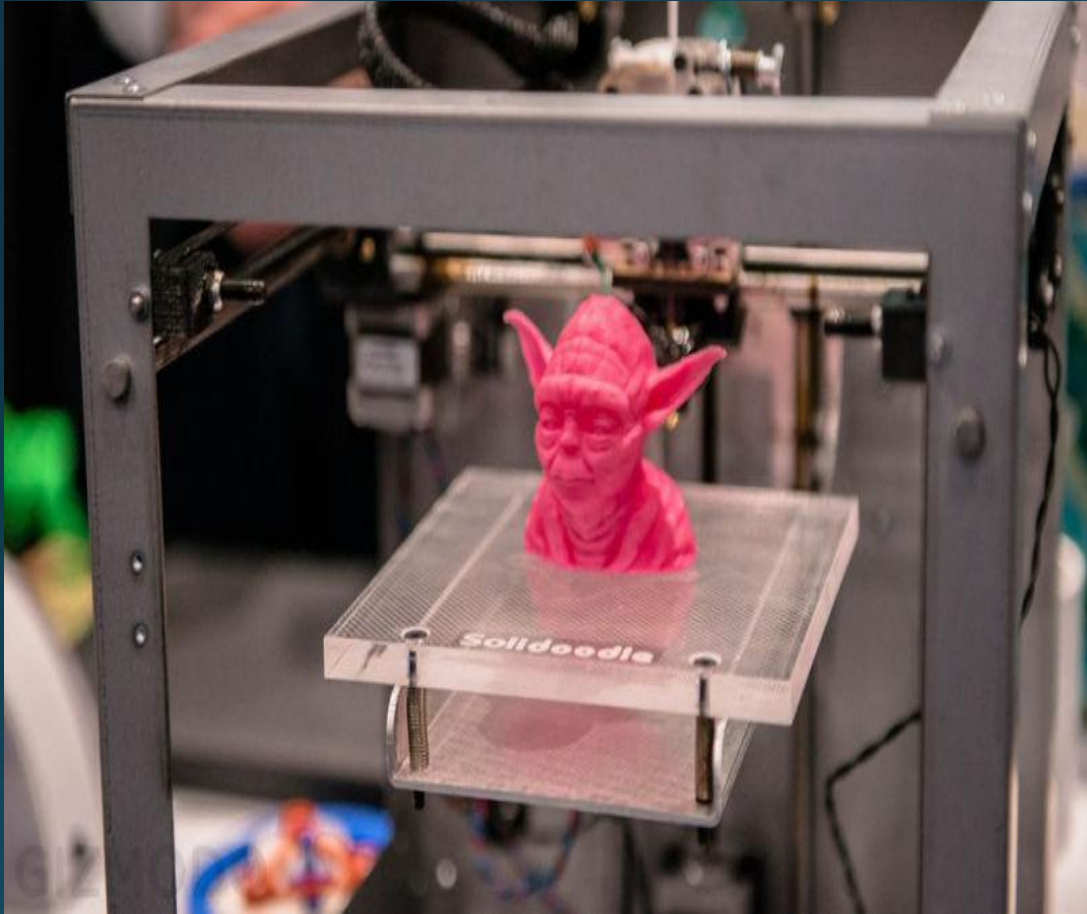
Why are the following images considered land resources?



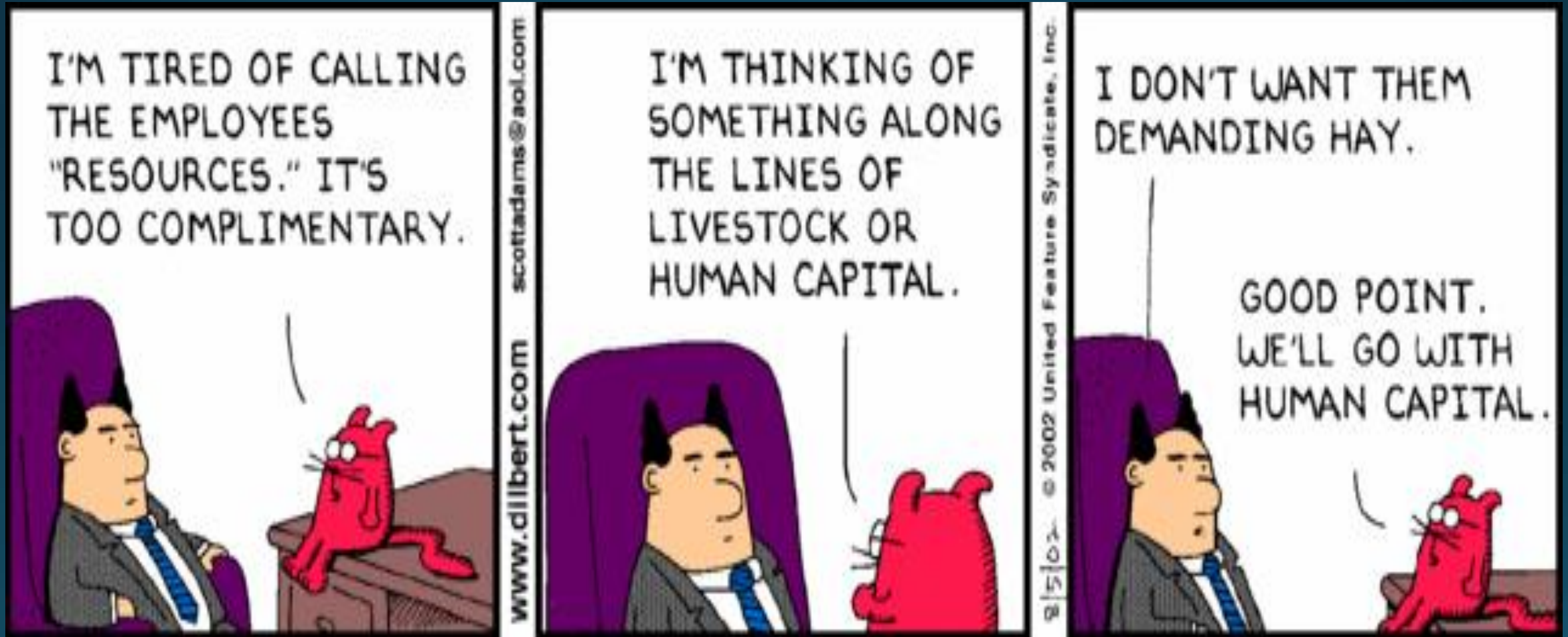
Why are the following images considered labor resources?



Why are the following images considered capital resources?



Based on the cartoon, what is human capital?

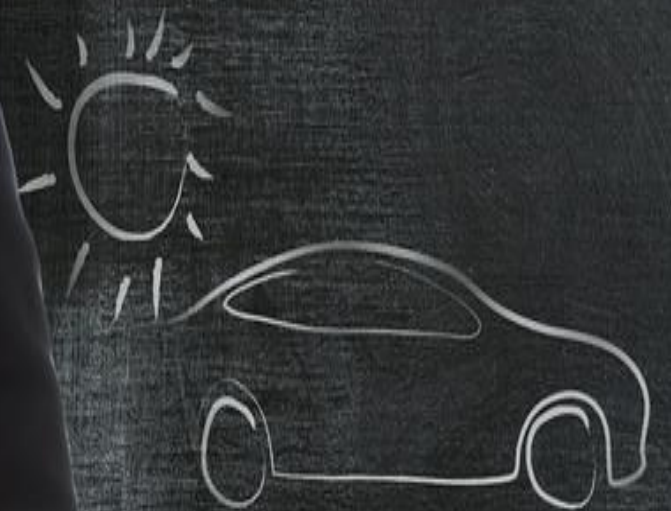


Based on the image, what type of resource would you consider Elon Musk to be?



2017 TO DO LIST

1. Integrate SolarCity and Tesla
2. Nail the Model 3 launch
3. Keep tweaking Autopilot
4. Run SpaceX too



Four Factors of Production (SSEF_{1b})

1. **Land (natural):** Example: Cows, minerals, trees
2. **Labor (human):** Janitor, Teacher, Plumber
3. **Capital (physical and human):** Example: Physical-tools and equipment, Human-skills, technical college
4. **Entrepreneurship:** Steve Jobs, Elon Musk

Productive Resources (SSEF1b)

- **Natural resources**, also known as **land resources**, are the gifts of nature we use to produce goods and services.
- **Human resources** are the people involved in the production of goods and services. People offer their time to production as well as their physical abilities, knowledge, and skills.
- The abilities each person brings to the production process is known as their **human capital**.

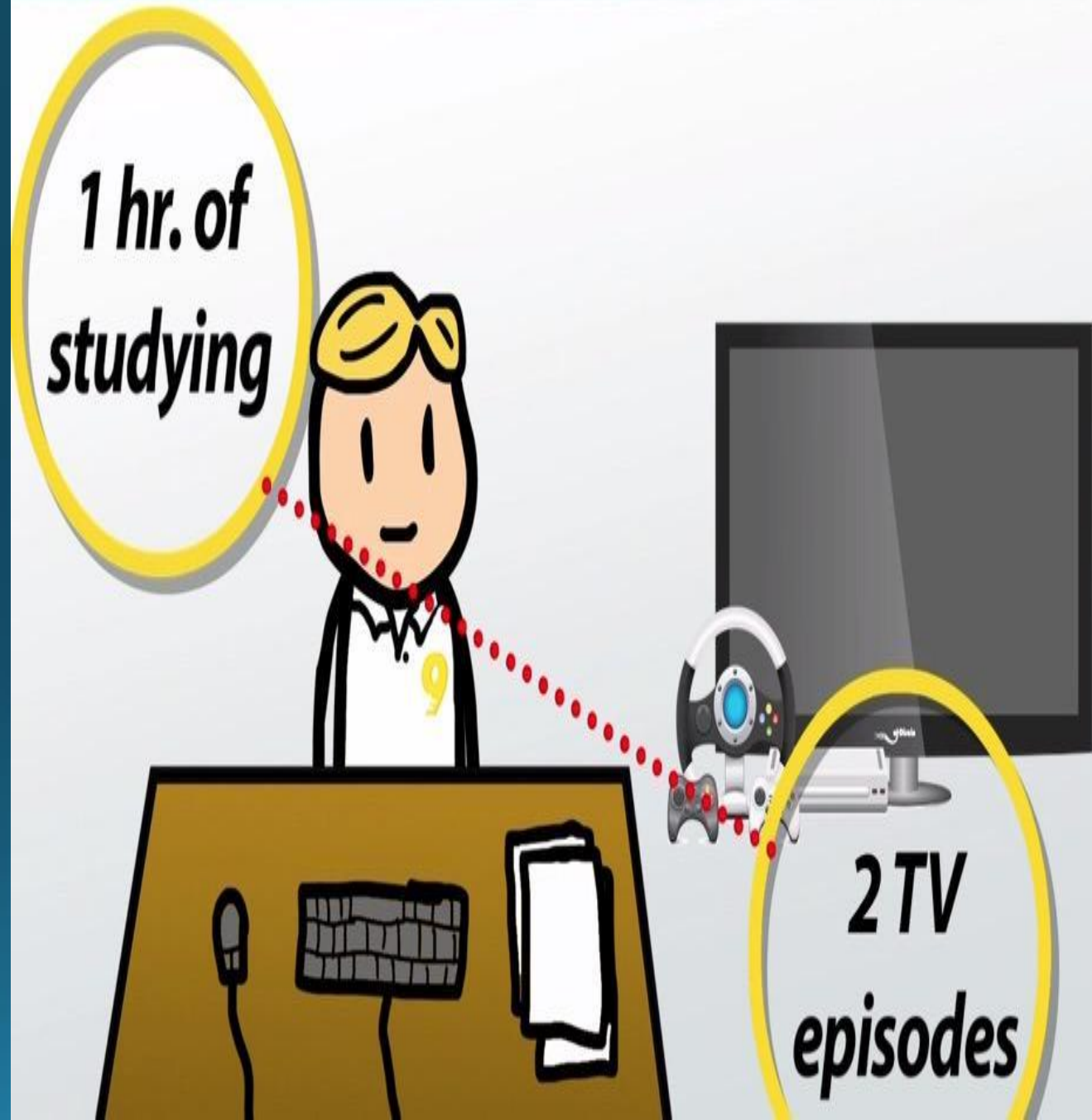
Productive Resources (SSEF1b)

- **Physical capital** refers to tools, machines, and structures used over and over again in the production of goods and services.
- **Entrepreneurs** take risks by using their own financial resources to create new products or start new businesses.
- **Standard of living:** refers to the material well-being people in an economy enjoy.
- Investments in human capital can lead to a higher standard of living (computer classes, high school diploma)

Review Questions

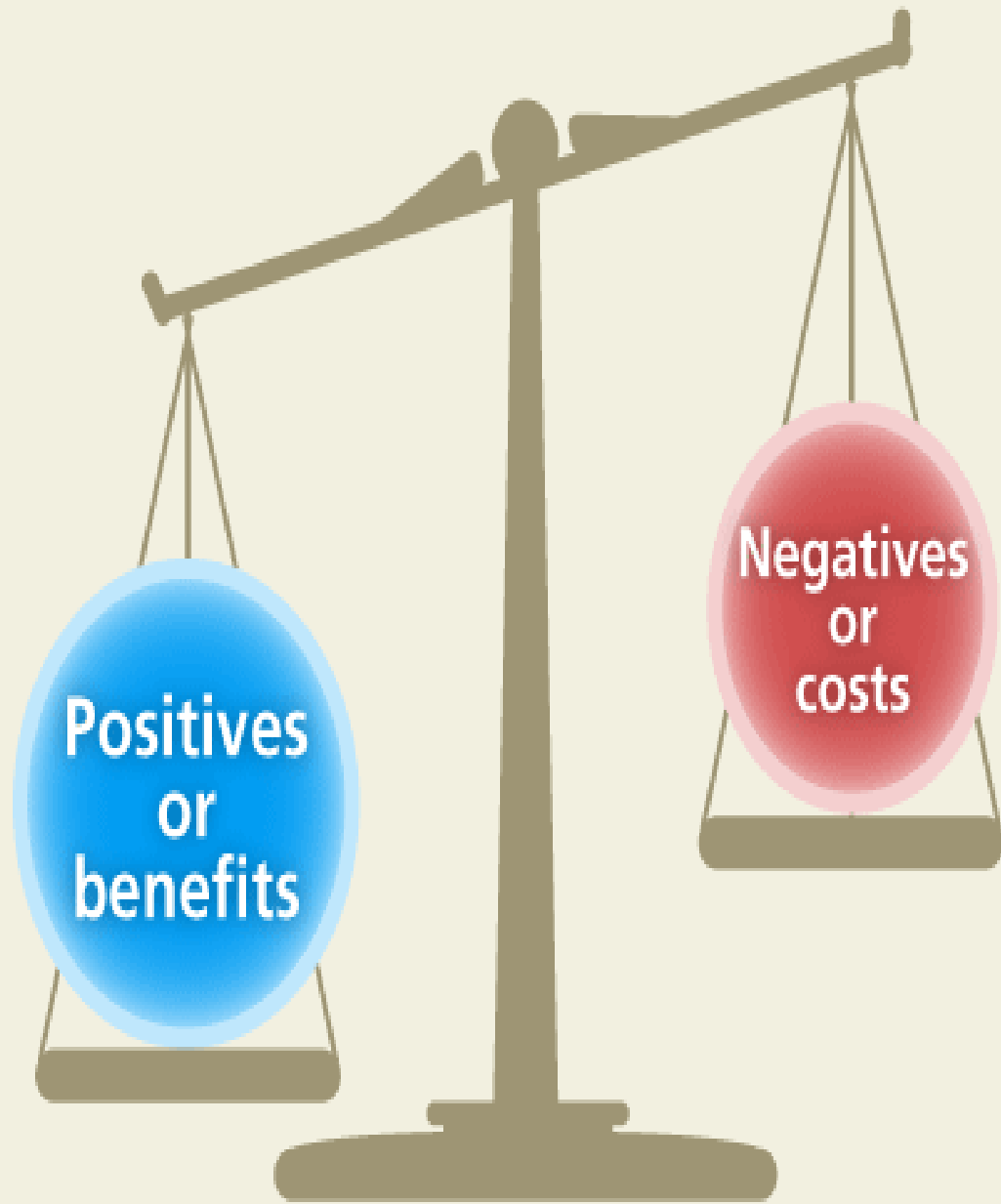
- Define scarcity (BL)
- Define allocation (BL)
- Identify rational decision making (BL)
- Give examples of the four types of productive resources (BL)
 - Land:
 - Labor:
 - Capital:
 - Human:
 - Physical:
 - Entrepreneurship
- Give examples of investment in equipment and technology (PL)
- Give examples of investment in education (PL)
- Define Standard of Living

Based on the image, what is the opportunity cost of 1 hr. of studying?



Productive Resources(SSEF1d)

- Those outputs, which are often finished products such as hamburgers and cars, are called goods.
- The decision to produce one good instead of another often relates to **choice** and **opportunity cost**.
- **Opportunity cost** is the value of one's next best alternative given up when a choice is made is called opportunity cost. (SSEF1d)
- **Scarcity** leads to opportunity costs and tradeoffs



What is the following image trying to summarize?

Incentives (SSEF2c)

- In economics, an incentive motivates individuals, businesses, and/or governments to undertake an action or avoid an action.
- **Positive incentives** are when individuals, businesses, and/ or governments choose an option associated with a perceived benefit or gain.
- For example, an income tax credit for purchasing a home will most likely lead to more people buying homes so they can take advantage of the tax credit.

Incentives (SSEF2c)

- Incentives are negative, sometimes called disincentives, when individuals, businesses, and/or governments avoid a particular option because they associate it with a cost that is too high.
- Fines and penalties for breaking laws are **negative incentives** or disincentives.

Incentives (SSEF2c)

- People are less likely to break a law if they know it might cost them financially.
- Traditionally, economists believe individuals, businesses, and governments will respond predictably to positive and negative incentives.



What is the cost and benefit of both fiscal policy plans?

Based on the cartoon, was the cost of his wife greater than or less than the benefit of his wife?



"I had my accounting department run a cost-benefit analysis on you and I have some bad news."

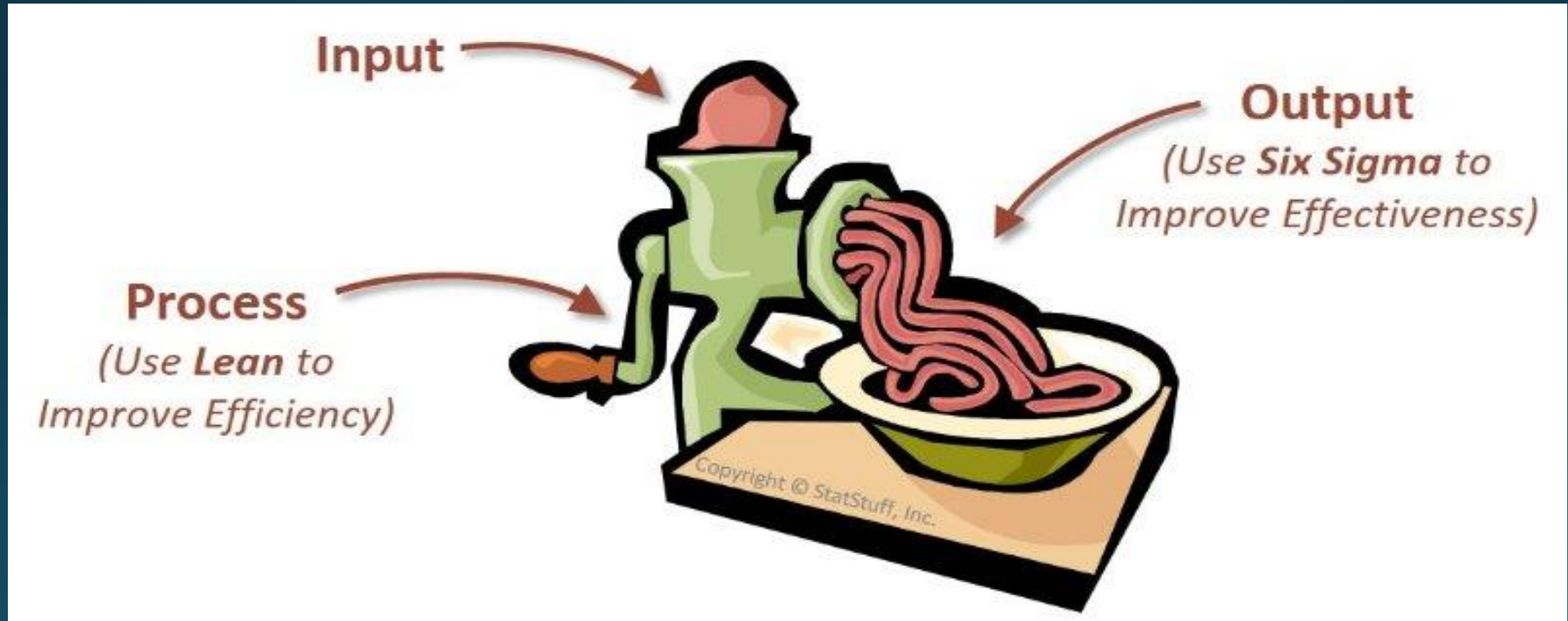
Marginal Cost and Marginal Benefit (SSEF2a)

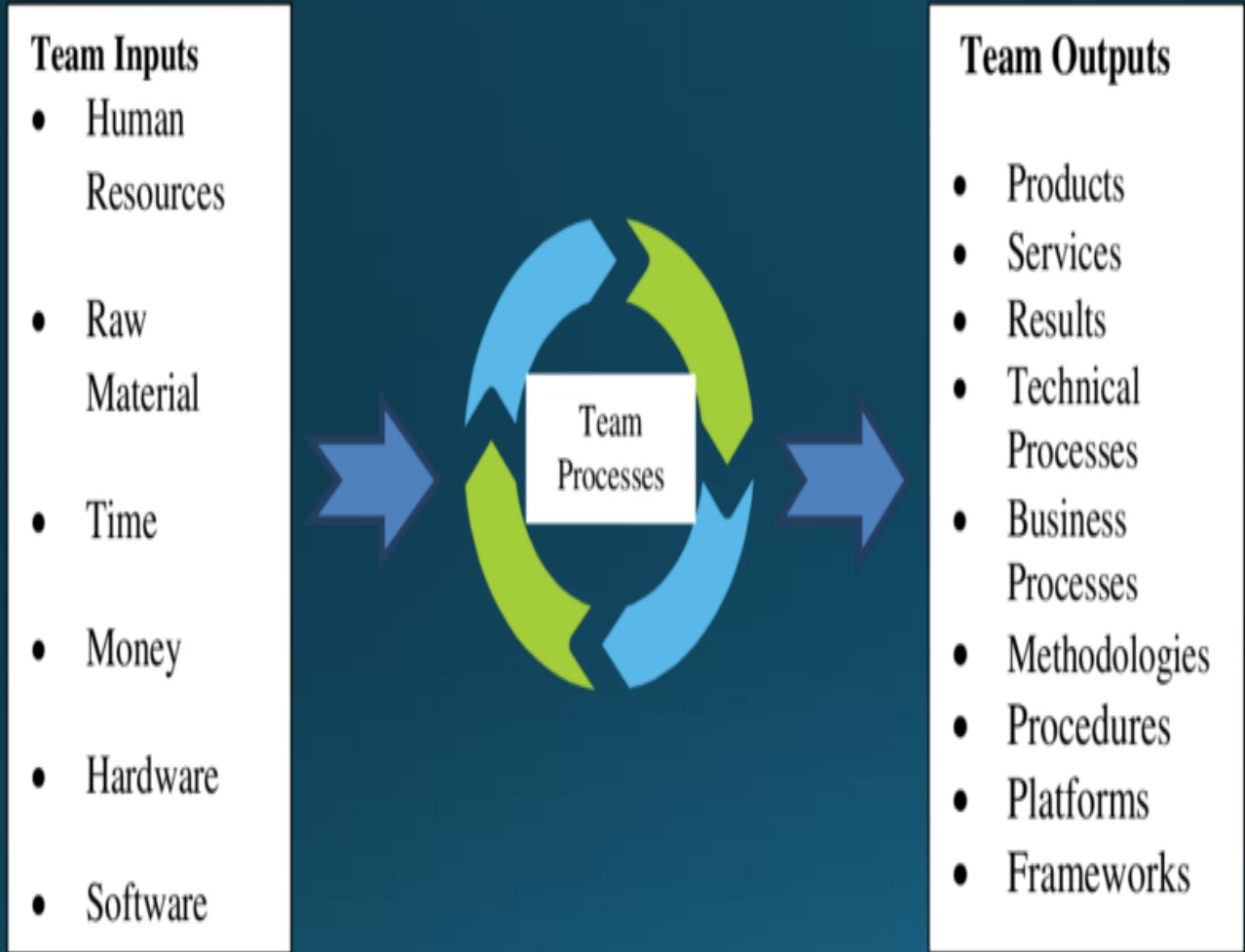
- Most economic situations can be discussed using the concepts of scarcity and opportunity cost. It doesn't matter if the subject is a nation or a person.
- Basic economic decision-making processes center on deciding how best to allocate the scarce resources at hand.

Marginal Cost and Marginal Benefit (SSEF2a)

- Every day, consumers and producers everywhere compare **marginal benefits** to **marginal costs** in order to make economic decision.
- **Marginal cost:** the cost of procuring one more item. **Marginal benefit:** the benefit associated with that one additional item.

Based on the image, what is the difference between input and output?





Productivity (SSEF6a)

- Productivity looks at the relationship between inputs and outputs.
- An **input** is something that goes into making a good.
- An **output** is the amount of a good or service produce.

- Define opportunity cost (BL)
- Analyze how _____ leads to opportunity costs and tradeoffs (DiL)
- Give examples of positive and negative incentives (BL)
 - Positive incentive:
 - Negative incentive:
- What is the incentive for entrepreneurs to take business risks? (PL)
- Define marginal cost (BL)
- Define marginal benefit (BL)
- When are rational decisions made? marginal benefits exceeds marginal cost or marginal costs exceeds the marginal benefit (DiL)
- Define productivity (BL)
 - Inputs:
 - Outputs:

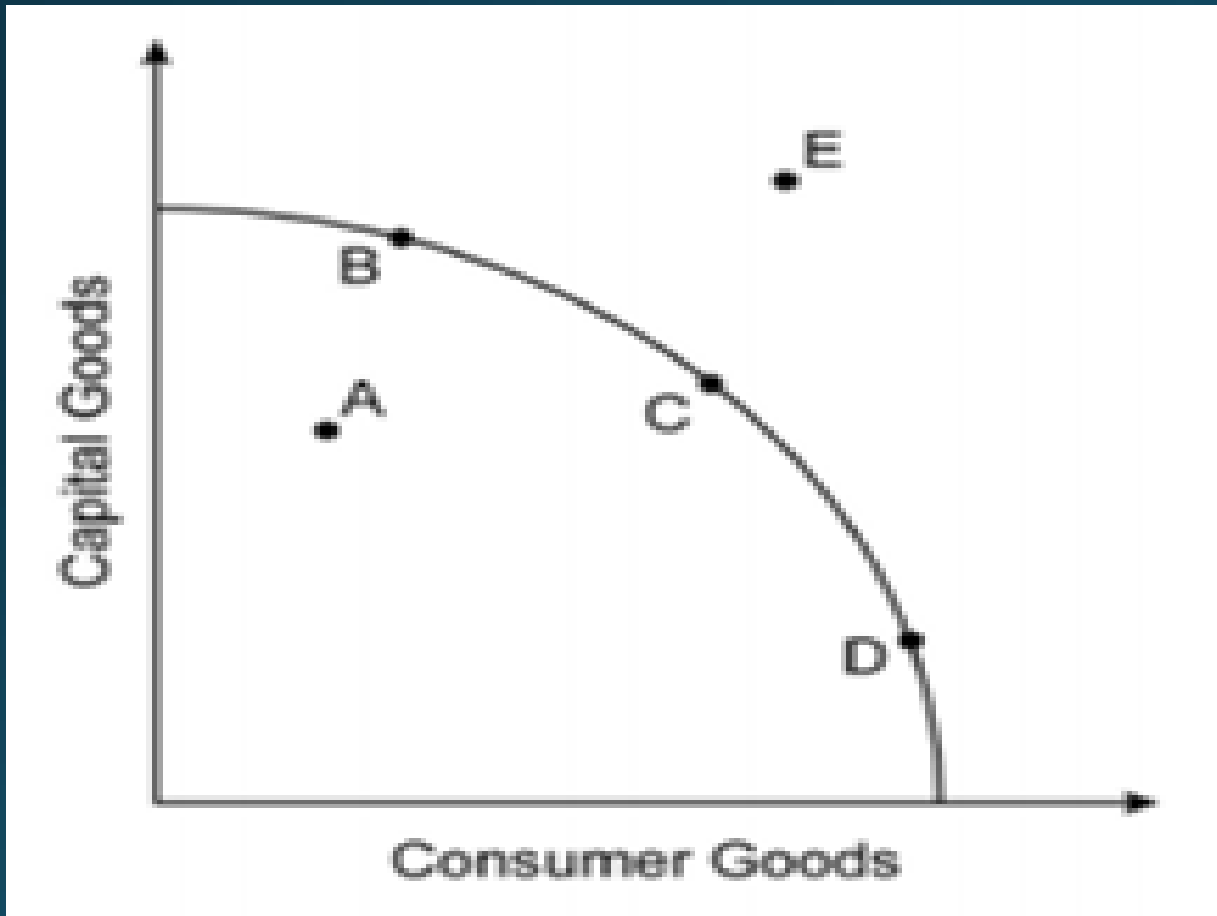
Review Questions

Production Possibilities Curve (PPC) (SSEF6d)

- A production possibilities curve is used to show the maximum combination of goods and services that can be produced from a fixed amount of resources.



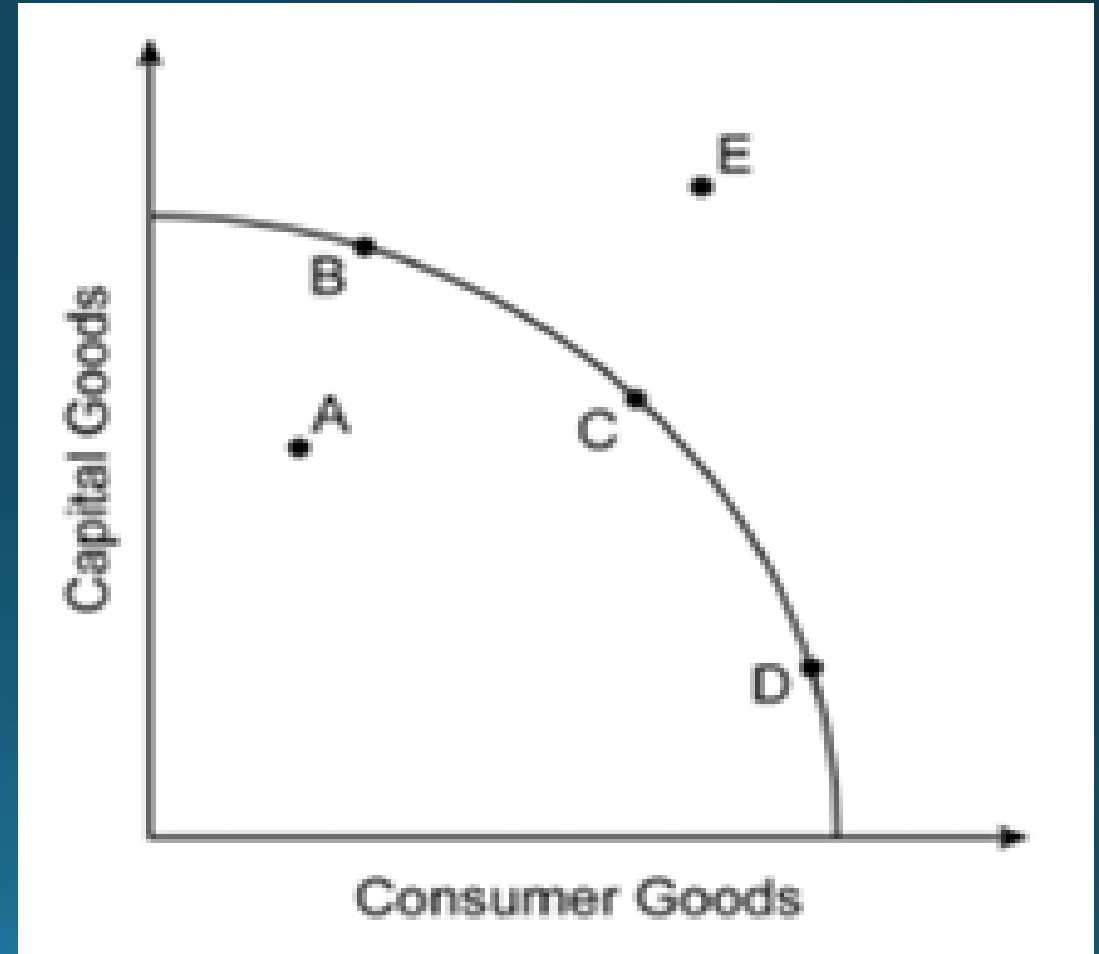
Production Possibilities Curve (PPC) (SSEF6d)



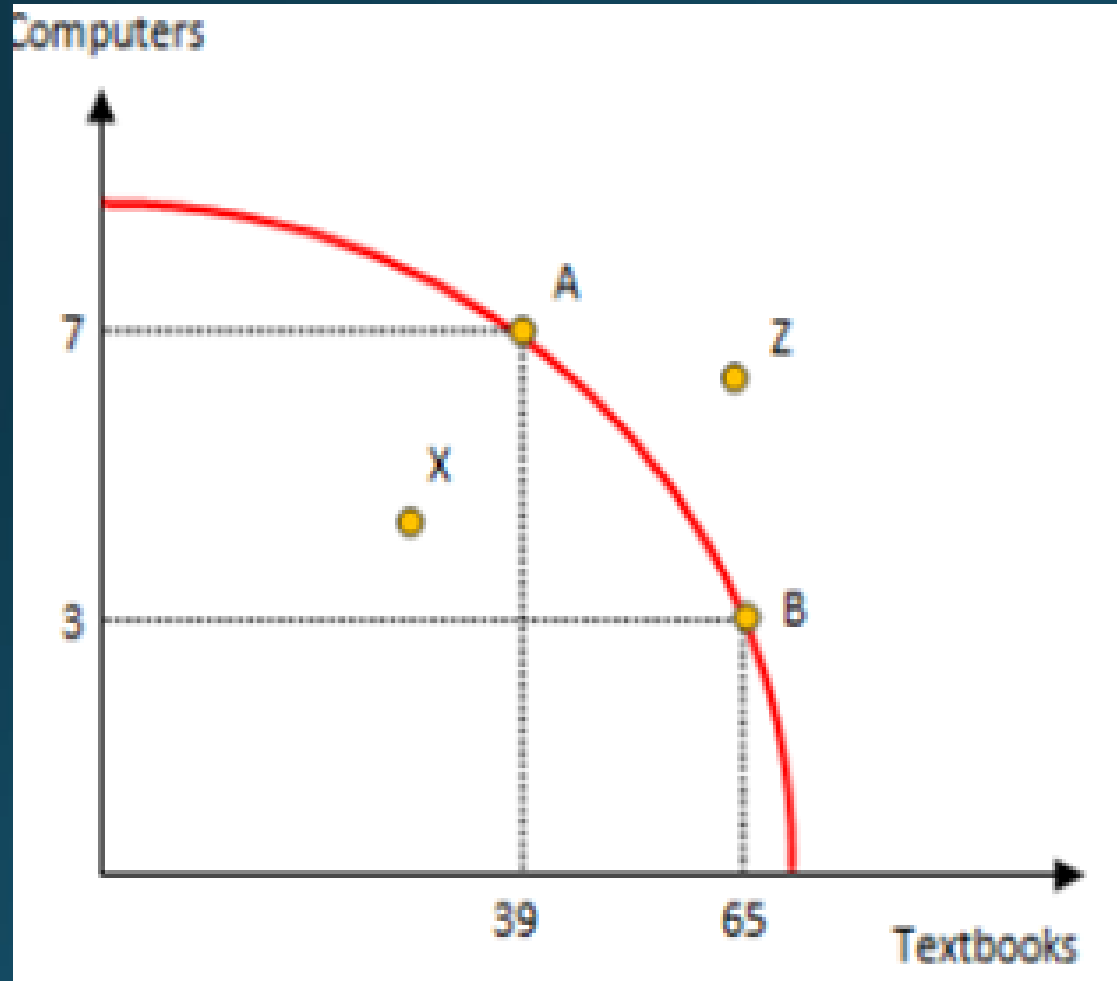
- The production possibilities curve can show trade-offs.
- **Trade-offs** are what was exchanged for the use of something else.
- On the Production Possibilities Curve below: B, C, and D are all Trade-offs

Production Possibilities Curve (SSEF6d)

- On the PPC below: A represents inefficient use of resources
- On the PPC below: B, C, and D represent efficient use of resources
- On the PPC below: E represents unattainable use of resources



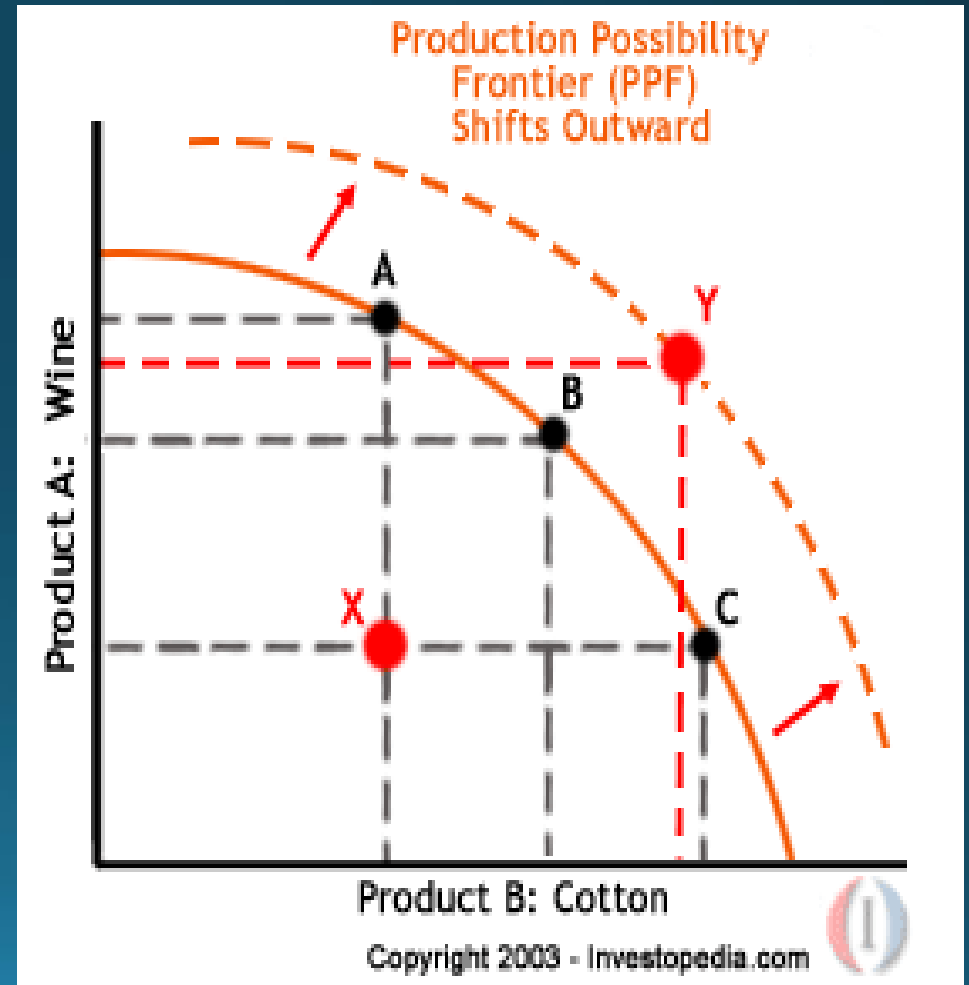
Production Possibilities Curve (SSEF6d)



- The production possibilities curve shows the opportunity cost of any trade-offs made.
- On the production possibilities curve below: The measure between Points A and B will be your opportunity cost based on your choice.

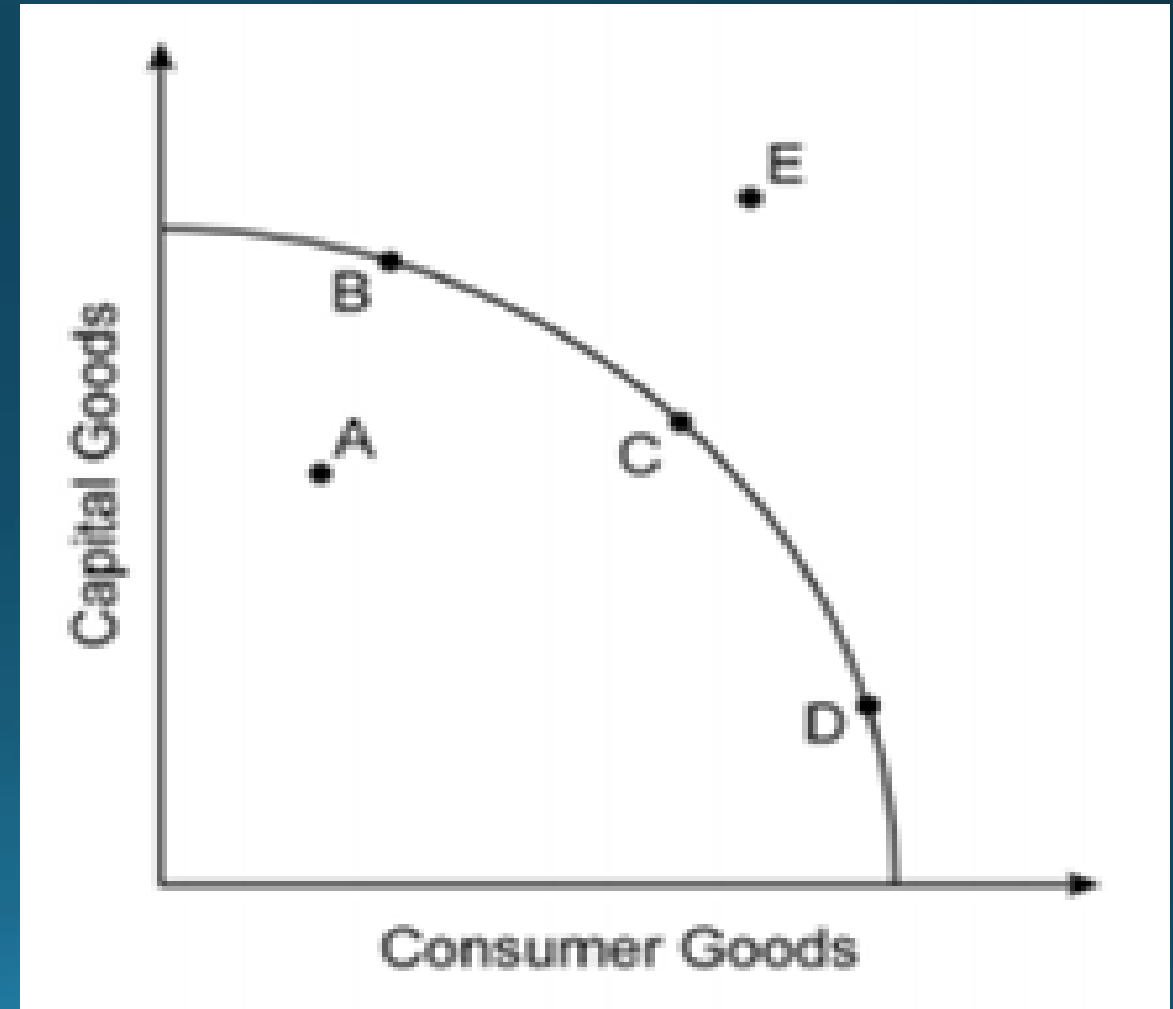
Economic Growth (SSEF6)

- **Economic Growth** is increasing production of goods and services over time.
- Economic growth can be shown by an outward shift of the production possibilities curve.
- **Economic efficiency** has to do with how well factors of production are allocated to uses desired by consumers and how they are used in production to keep costs low.



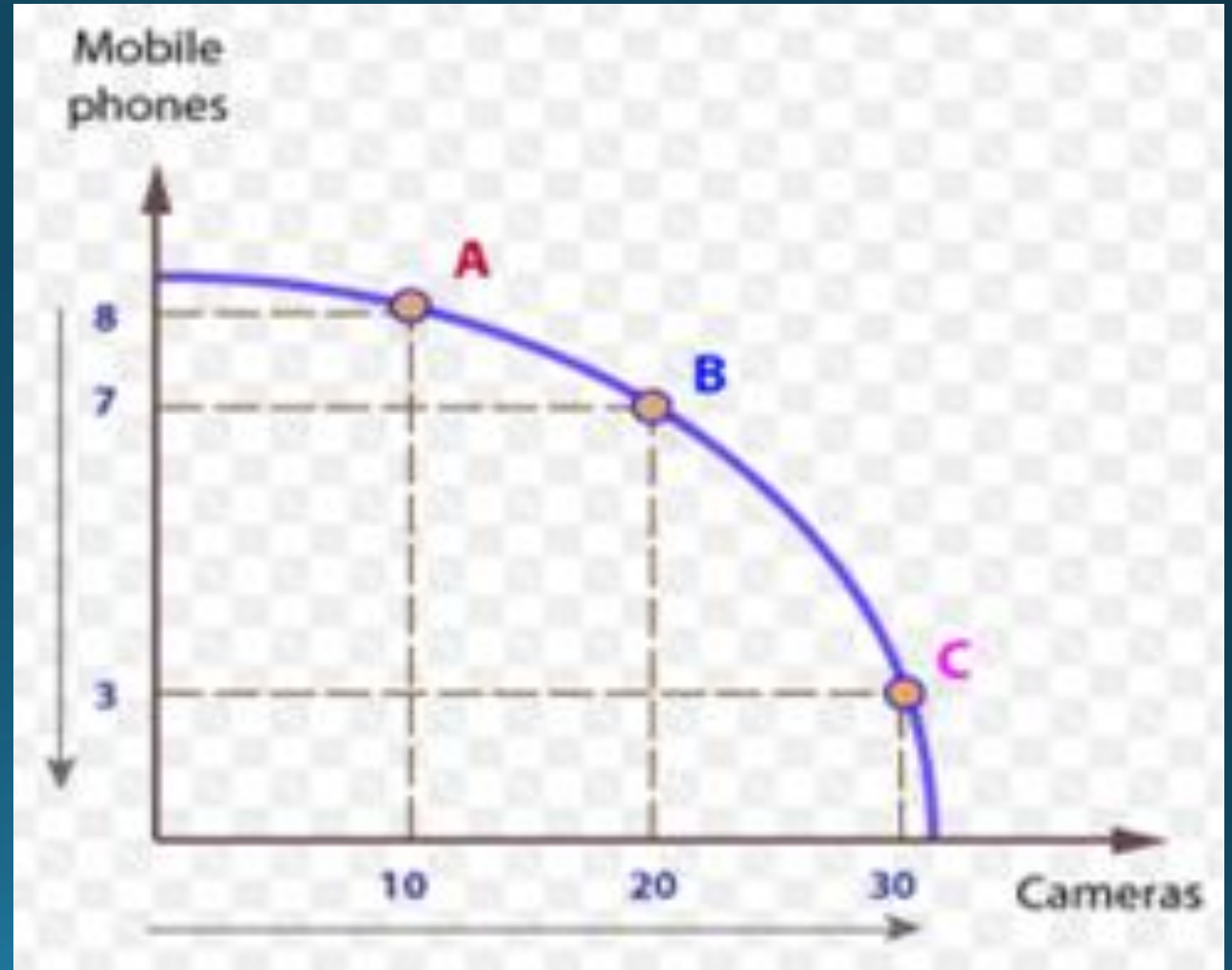
Review Questions (Part 1)

- Label a production possibilities curve (DL)
 - Trade-offs:
 - Inefficient use of resources:
 - Efficient use of resources:
 - Unattainable use of resources:



Review Questions (Part 2)

- Identify the opportunity cost: what is the opportunity cost between picking letter C instead of letter B?
- Identify the opportunity cost: what is the opportunity cost between picking letter A instead of letter C?



Review Questions (Part 3)

- Define economic growth (BL)
- How can economic growth be shown on the Production Possibility Curve?(PL)
- What kinds of investments can lead to economic growth? (DiL)



Based on the cartoon, which of the following is the most rational decision for the consumer?

Rational Decision Making Model (SSEPF_{1a})

- A **rational decision making model** is a multistep process for choosing between two or more alternatives.
- Some steps of the rational decision making model include: identifying the decision, establishing criteria for making the decision, identifying and evaluating alternatives, predicting outcomes, and concluding with implementation and evaluation of the option selected.

Based on the cartoon, what is specialization?



"Everybody is specializing these days."



How are the following Smurfs participating in specialization?

Specialization (SSEF3a)

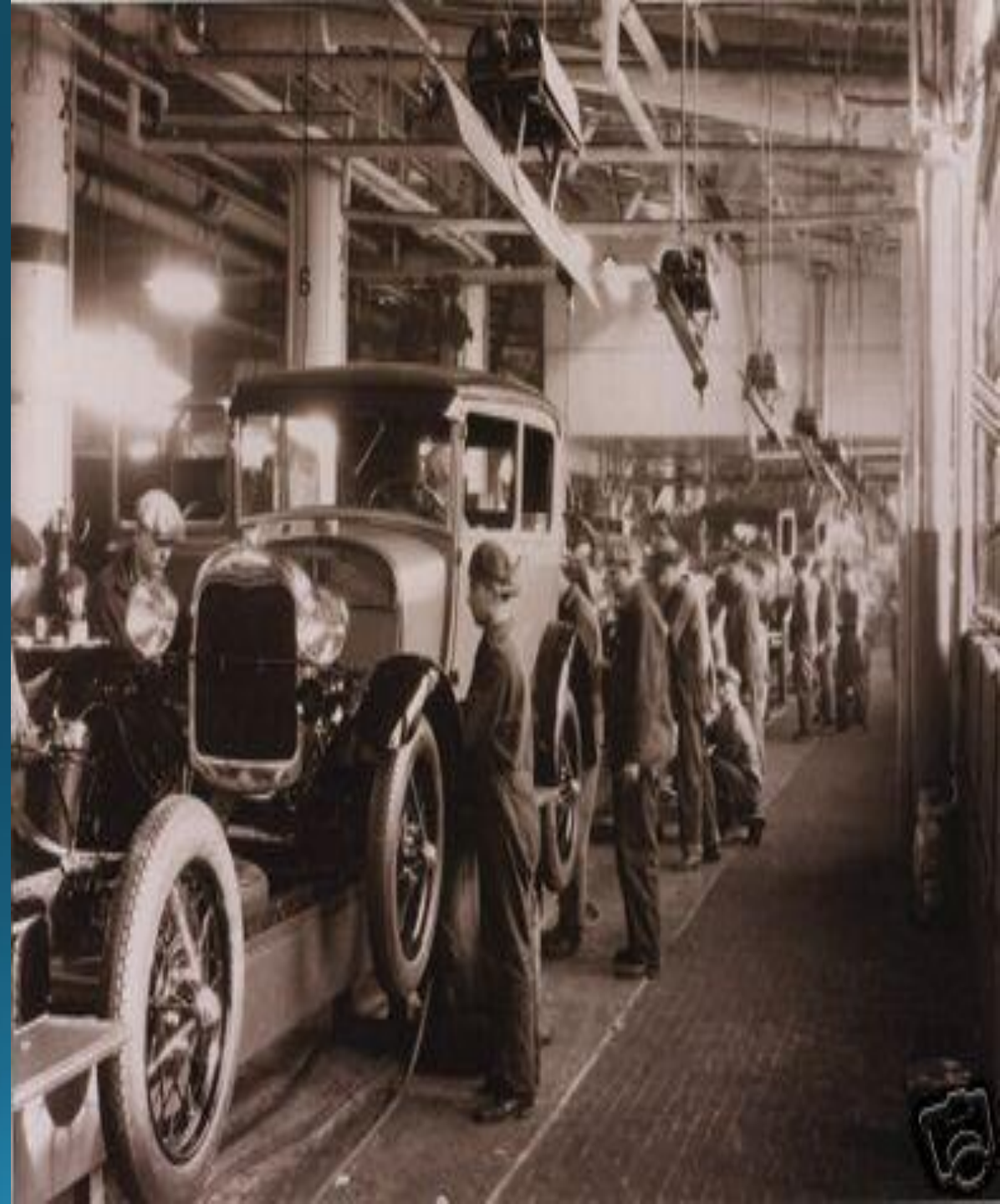
- **Specialization** allows people to concentrate on a single activity or area of expertise.
- For an entire society, specialization helps boost overall productivity and leads to an efficient use of resources.
- People gain knowledge and skills in a certain area, which allows them to do that job better than other non-specialists.
- This specialized knowledge might allow them to build a product faster, increasing output.
- It could also allow them to complete something that others could not even attempt.

Specialization (SSEF3a)

- Either way, specialization expands the efficiency of a society and usually helps boost overall production ability.
- Furthermore, this “skilled labor” can charge more for their services, which allows individual wealth to increase.

Specialization (SSEF_{3a})

- An assembly line utilizes the benefits of specialization by allowing individual workers to concentrate on a certain task.
- As each of these workers gains experience in one particular part of the production process, the entire factory is able to produce more without increasing the number of workers it employs or the time each employee spends on the job.
- This is also known as **division of labor**.



Based on the cartoon, what is voluntary exchange?





Based on the image, is the following exchange fraudulent or non-fraudulent?

Voluntary Exchange and Non-Fraudulent Exchange(SSEF_{3b})

- Voluntary exchange occurs when two economic actors willingly trade one item for another because the value of the item they are receiving is greater at the time than the item they are giving up to receive it.
- Both parties benefit from voluntary exchange, that is non-fraudulent.

Review Questions

- Identify rational decision making (BL)
- Define specialization (BL)
- Identify how an individual or business specializes (DL)
- Define division of labor (BL)
- Define voluntary exchange (BL)
- Define voluntary non-fraudulent exchange (BL)
- Who gains from voluntary non-fraudulent exchange (DiL)

Types of Economic Systems (SSEF4a, b)

- The United States is primarily a **market-based system**, but this is not the only economic system being used in the world today.
- All economies must answer the **THREE ECONOMIC QUESTIONS**:
 - what to produce
 - how to produce
 - for whom to produce.
- The following provides a brief description of four major economic systems.



How are the following economies going to solve the three basic economic questions?

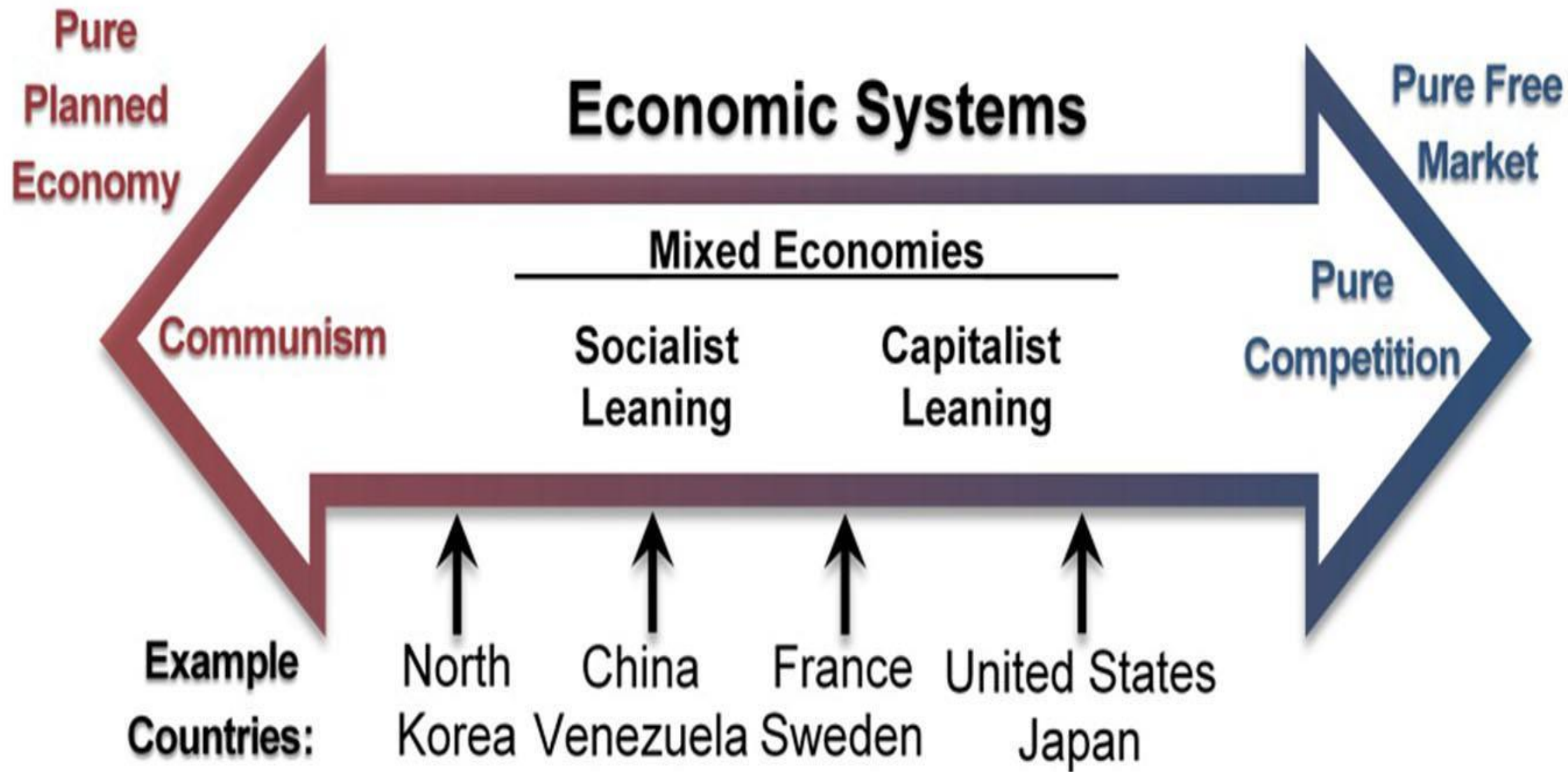
What to produce?
How to produce?
For whom to produce?

Market Economies

Command Economies

Mixed Economies

Traditional Economies



ECONOMICS ESSENTIALS

FIGURE 2.3 Fundamentals of a Market Economy



Four Major Economic Systems (SSEF₄a, b)

- **Market Economy**

- This is also called a **capitalistic** or **free-market** system.
- In a market system, private individuals and firms control all resources, and the price and quantity of all goods are determined by the interaction of demand and supply in unrestricted, open markets.
- Ownership of property and goods is determined in the private sector, and the government does nothing to interfere with any market.
- Instead, this system relies on the belief that a market system naturally leads to efficient results (called the “**invisible hand**”) that theoretically correct any inequalities in resource allocation.

Four Major Economic Systems (SSEF4a, b)

- **Market Economy**

- The United States is very market oriented, but it is not a purely capitalistic system. In a market system, it is easy to open a new business.
- Customer tastes drive which goods and services will be produced.
- There is a high level of competition in a market system. Competition incentivizes firms to lower prices, increase quality, and/or use resources more efficiently.

Market vs. Command Economies

Market

What To Produce

Determined by consumers' preferences

How To Produce

Determined by producers seeking profits

For Whom To Produce

Determined by purchasing power

Command

What To Produce

How To Produce

For Whom To Produce

Determined by Government

Four Major Economic Systems (SSEF₄a, b)

- **Command Economies**

- A command economy is the opposite of a market economy.
- In this case, the government commands all markets, determining what to produce, how to produce, and for whom to produce.
- Centralized planning committees take into account all the resources a nation has to offer (labor, land, and capital) and then set up an economic system to produce this predetermined mixture of goods and services.
- Since the government is in charge of everything, citizens should all receive equal amounts of basic goods and services.

Four Major Economic Systems (SSEF4a, b)

- **Command Economies**

- In theory, this means that there should be no problems with high unemployment or poverty. In a command economy, the government is meant to provide for the welfare of its citizens.
- Because the government makes all economic decisions, there is little opportunity or reward to pursue individual economic success.
- There is little to no competition among individual firms so there is little incentive to innovate, increase quality, or lower prices.

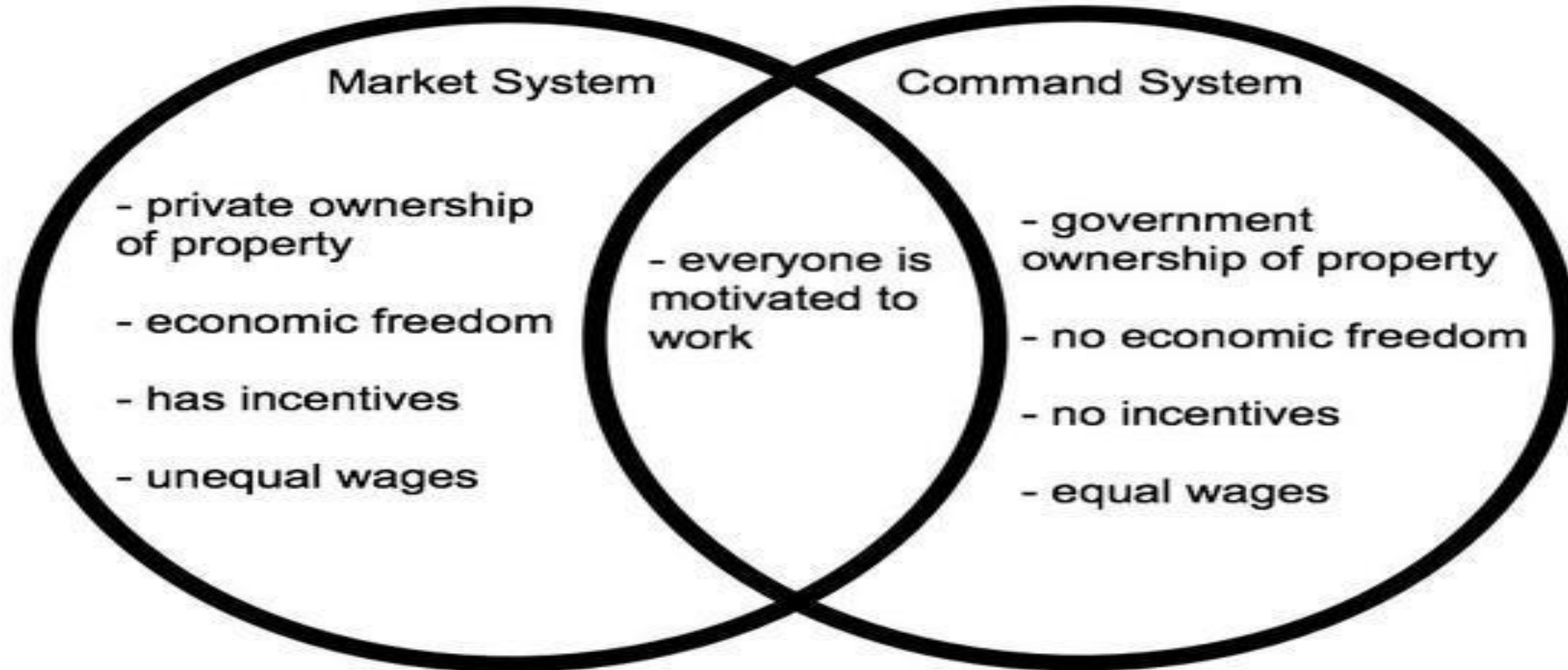
Four Major Economic Systems (SSEF4a, b)

- **Mixed Economies**

- While the command and market economy describe theoretical concepts of how an economy might function, in the real world most economies blend two or more systems together.
- For instance, while China is considered a command economy, it has rapidly begun to incorporate many aspects of a market structure into its economy.
- Likewise, while the United States is considered to have one of the most capitalistic economies in the world, the government still intervenes in some markets.
- Therefore, there is a third economic system known as a mixed economy.

Market vs. Command Economies

Market System vs. Command System



Four Major Economic Systems (SSEF4a, b)

- **Mixed Economies**

- Individuals, firms, and the government all have the right to own property.
- Laws determine how disputes about property are resolved.
- Entrepreneurs can freely start businesses. Businesses produce goods that consumers want.

Four Major Economic Systems (SSEF4a, b)

- **Mixed Economies**

- Competition is encouraged in a mixed economy, unless there is a compelling reason to allow a monopoly.
- Businesses have to follow laws set by the government and may be required to acquire licenses and to complete other government paperwork before opening.

What types of economies are the following images examples of?



Four Major Economic Systems (SSEF₄a, b)

- **Traditional Economies**

- In a traditional economy, economic decisions are made based on history and tradition.
- The goods and services provided by people are most likely the same goods and services their ancestors provided to people.
- Production and distribution of goods and services are based on how past generations made and distributed goods.
- The consumer will have little control in what is produced.

Four Major Economic Systems (SSEF4a, b)

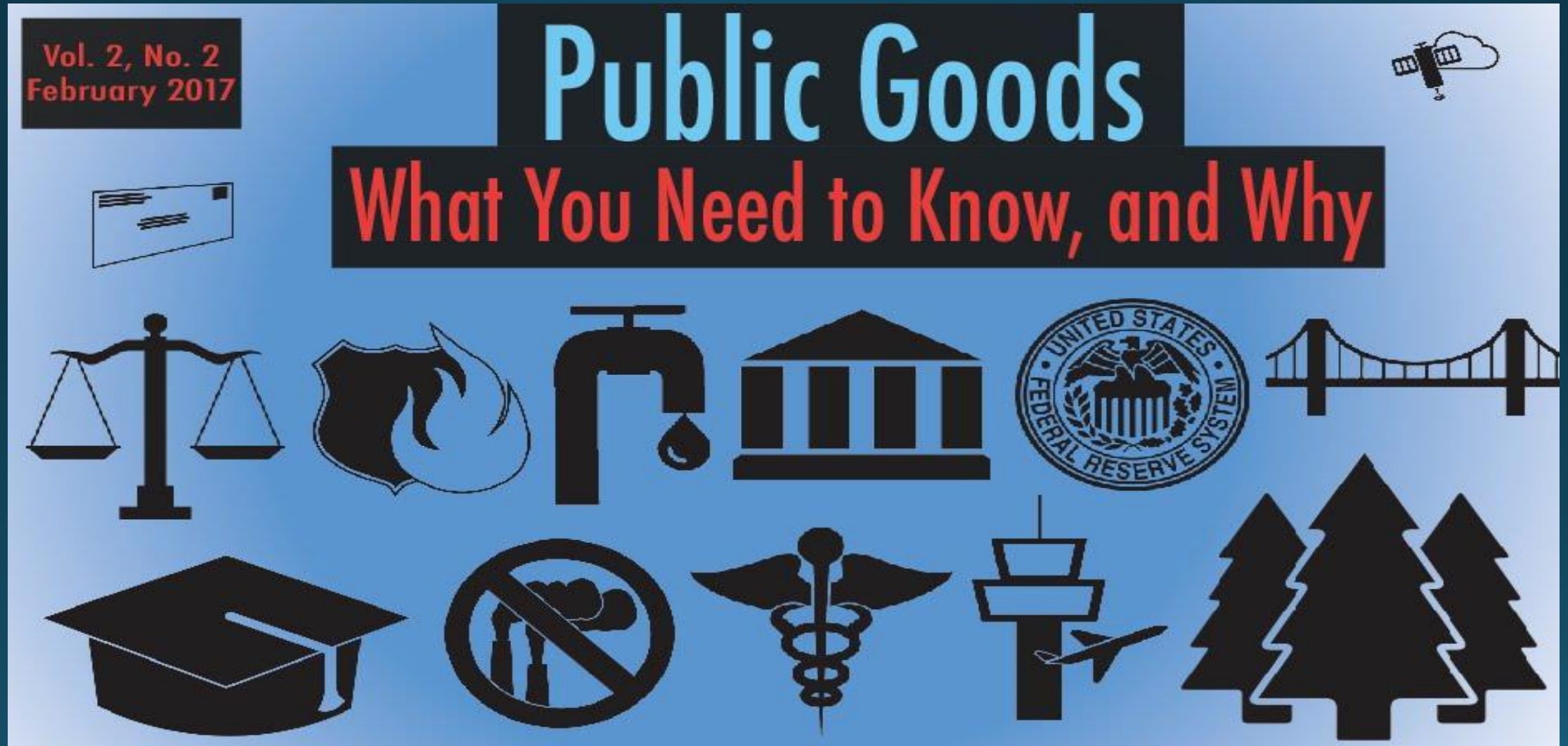
- **Traditional Economies**

- Even as consumer preferences change or as new producers enter the market, the economy will continue to operate in the same manner as it has in the past.
- Traditional leaders, like councils of elders or tribal chiefs, will most likely resolve business disputes between members of the community.
- Their decisions will be based on how these disputes were solved in the past.

Review Questions

- Identify the three basic economic questions (DL)
- Describe the four types of economic systems (PL)
 - Traditional:
 - Command:
 - Market:
 - Mixed:

Based on the image, what are public goods?
Why does government provide public goods?

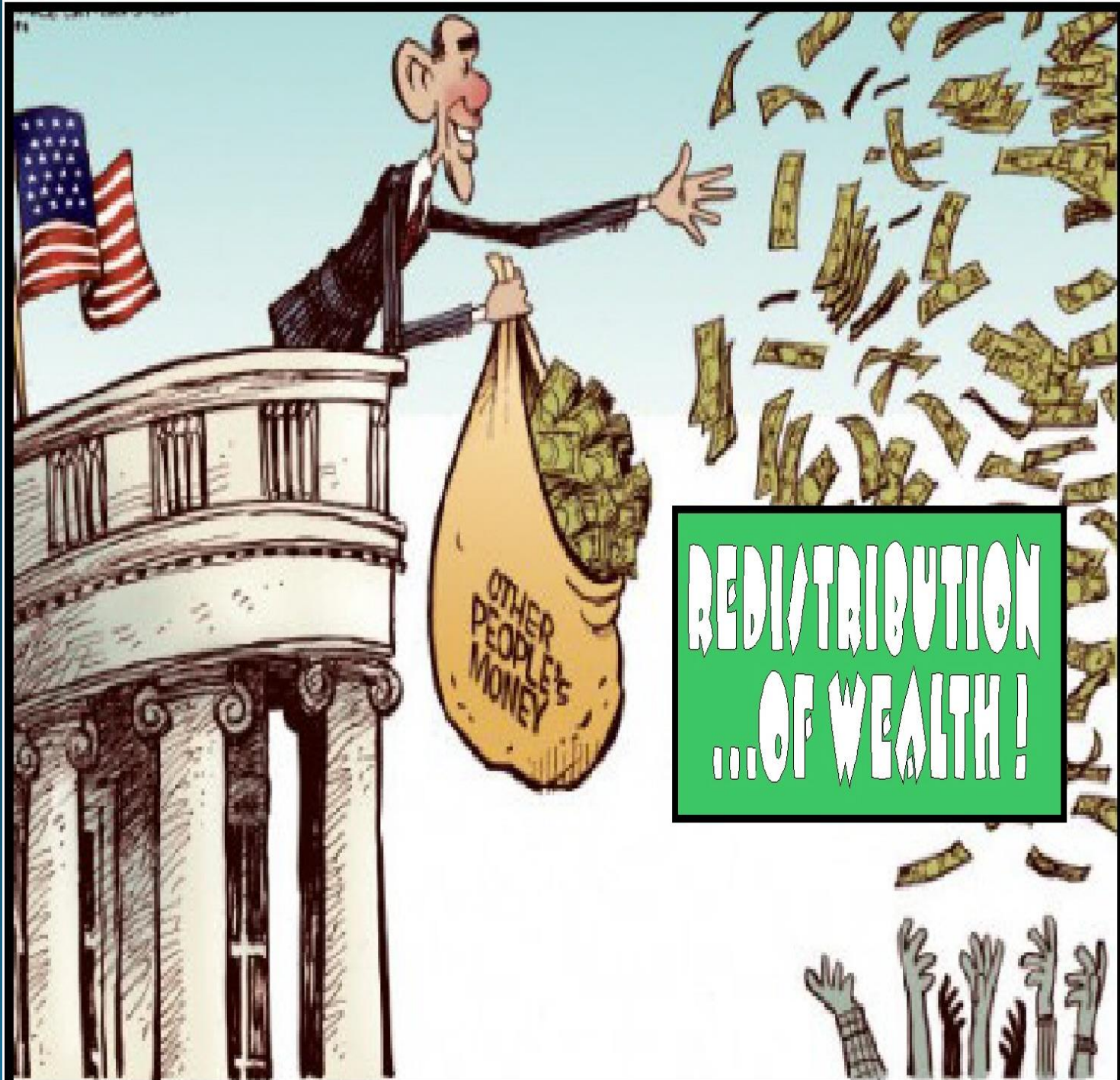


Four Roles of Government in the United States Economy (SSEF5a)

1. Public Goods and Services

- Governments in the United States provide **public goods and services** only when there is a reason that the private market is unable to provide that good or service at a level that would benefit society.
- Public goods and services are (GDP), which is the sum of all goods and services produced usually paid for through the collection of taxes.
- **Public goods** are “shared consumption” goods. This means that when one person uses the good it does not lessen the value of the good for another person.
- They also are **non-exclusionary**. This means that it is difficult to prevent someone from enjoying the benefit from that good even though they are unwilling to pay for that good. (SSEF5a)

Based on the cartoon, what is redistribution of Wealth (Income)?



Four Roles of Government in the United States Economy (SSEF5a)

2. Redistribution of Income

- Sometimes governments choose to **redistribute income**. This means using the tax money from one group and giving it to other groups.
- Social welfare payments and unemployment compensation are examples of the government redistributing income.



What American rights are the following signs protecting? Why does government protect these rights?

COPYRIGHT LAW PROTECTS



Literary Works



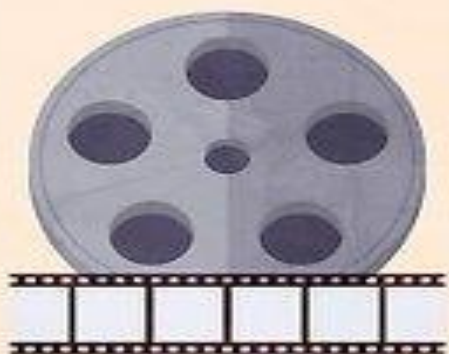
Paintings



Photographs



Drawings



Films



Music



Choreography

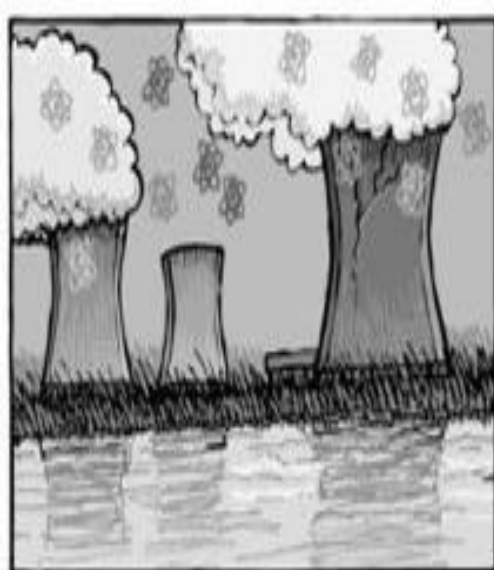


Sculpture

Four Roles of Government in the United States Economy (SSEF5a)

3. Private Property Rights

- The government is also responsible for the protection of **private property rights**.
- If consumers or businesses are uncertain that they will be able to hold on to their physical or intellectual property, they are less likely to purchase goods or invest in or expand their business.
- Private property rights are protected by intellectual property laws, such as patents and copyright laws.
- Deeds for property and titles for cars are examples of how physical property is protected by the government.



THREE MILE ISLAND



LOVE CANAL



HOUSING BUBBLE



ASIAN SWEATSHOPS



A.I.G.



FORD PINTO

Why does the government get involved with market failures?

Four Roles of Government in the United States Economy (SSEF5a)

4. Resolve Market Failures

- **Market failures** occur when the private market is unable to produce goods and services in a way that the marginal benefit to society from the production of the good is equal to or greater than the marginal cost to society for producing the good.
- **Externalities** are a type of market failure. They occur when a third party other than the consumer or producer of a good is hurt or benefits from the production or consumption of that good.

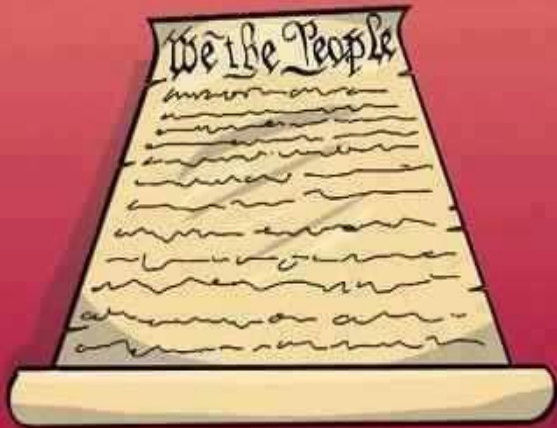
Four Roles of Government in the United States Economy (SSEF5a)

4. Resolve Market Failures

- Another type of market failure is market power.
- Market power refers to a market failure resulting from the formation of monopoly and oligopoly market structures.

Based on the images, what's the difference between government regulations and deregulations?

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**OUR RULES FOR
THE GOVERNMENT**



**GOVERNMENT'S
RULES FOR US**



Bennett Chattanooga Times Free Press

Government Regulations (SSEF5a)

Government Regulations

- **Government regulation** takes many forms. Some regulations protect citizens from corporate abuse. Other government regulations help businesses recover from external problems by offering money to help offset an unforeseen disaster
- **Deregulation** is the reduction or elimination of government power in an industry.
- Deregulation may help increase competition, which could improve business profits and reduce costs for consumers.

Review Questions

- Identify the five roles of government in the United States economy (BL)
- Give an example of a public good (DL)
- Define redistribution of income (BL)
- Give an example of property rights (DL)
- Give an example of government resolving a market failure (DL)
- Define and give example of a government regulation (DL)
- Define deregulation (BL)

Ways to Allocate Resources(SSEF4c)



- **Allocate:** to distribute according to some plan or system. There are many different ways economic systems can allocate scarce resources.
- The following describes some ways to allocate these resources:

9 Ways to Allocate Resources (SSEF4c)

1. **Price:** allows the forces of supply and demand to determine market price of goods, services, and factors of production.
2. **Majority rule:** occurs when a group of people who have control over a good, service, or factor of production vote to decide how the good, service, or factor of production will be distributed.
3. **Contests:** an allocation strategy where the “winner” gets the good, service, or factor of production.
4. **Force:** giving or taking away productive resources by using threats.

9 Ways to Allocate Resources (SSEF4c)

5. **Sharing:** the owner of the good, service, or factor of production determines who and how to distribute them.
6. **Lottery:** also known as random selection. A lottery gives everyone who wants a good, service, or factor of production equal odds of achieving it.
7. **Authority:** when the decisions about who gets to obtain a good, a service, or a factor of production are made by the person or group in power.

9 Ways to Allocate Resources (SSEF4c)

- 8. First-come-first-served:** an allocation strategy that allows people to receive a good, service, or factor of production if they get there first or are one of the people close enough to the front of the line to receive the good, service, or factor of production before they are all gone.
- 9. Personal characteristics:** an allocation strategy that allows resources to be distributed based on a need or merit. Ideally the person who gets the good, service, or factor of production will be the one who puts it to the best use.

Review Questions

- Identify nine strategies for allocating scarce resources (DL)