



Uncle Sam wants you to do better in economics.

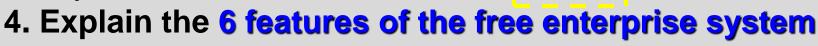
#### Chapter 1 and 2 Regular Economics

## **Definition of Economics**

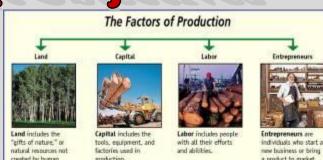
## **Basic Economic Concept Objectives**

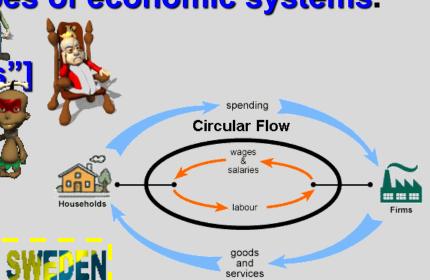
#### **Chapter Objectives**

- 1. What are the **4 factors of production**? [land, labor, capital, & entrepreneurial ability]
- 2. What are the 3 basic questions that determine economic systems? [What, How, and For Whom]
- 3. Compare and contrast the 4 types of economic systems.
  - A. Market ["individuals rule"]
  - B. Command ["government rules"]
  - C. Traditional ["customs rule"]
  - D. Mixed
    - 1.) Capitalism 🚪
    - 2.) Communism
    - 3.) Democratic Socialism



- 5. Know the eight goals of our economy.
- 6. Explain the Circular Flow & Production Possibilities Curve Models.





## The Hot Major For Undergrads is Econo

WSJ 2005

Universities awarded 16,141 economics degrees last year at 272 colleges & universities which is up 40% in five years. There has been a clear explosion of economics as a major, particularly at the top colleges.



- At New York University, the economics major has doubled in 10 years. At 800, it is now the most popular major. Economics is also the number one major at Harvard (964 students), Columbia (up 67% in 5 years), Stanford, Penn, Princeton, Chicago (24% of graduating class), & 2<sup>nd</sup> at Brown, Yale, and University of California at Berkeley.
- > The increase in the numbers is the result of many students seeing
- economics as the best vehicle promising good pay & security
   Students realize that understanding economics has become a fundamental necessity of life. Economics rising popularity is even global. Econ majors in Poland have doubled in 6 years.
- In Russia, econ majors have jumped from 18% of students to 31%. The chairman of the economics department at London School of Economics says economics popularity is at an all high.

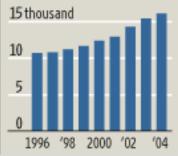
Supply Side

"Econ, Econ,

I want to major

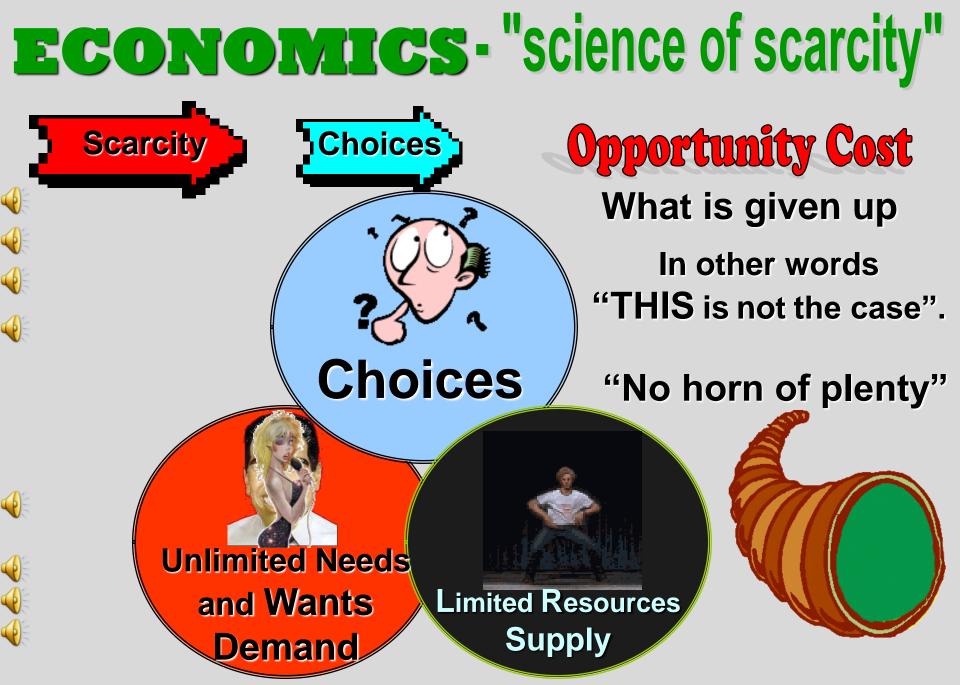
in Econ."

Number of bachelor's degrees in economics awarded at 272 U.S. colleges:





What Are The Most Important Factors In College Admission Here's a look at the weight placed on four major college admission factors. Only "class rank" has shown a steady decline. They would rather see a "C" in AP Econ than an "A" in regular econ. They then know you can do college work. Grades in college-prep courses 82% 80 76% 60% 60 SAT or ACT scores 46% 40 Cl ss rank 42% 28% 20 23% onal essay P Only about 43% of all entering college freshmen ever graduate. '93 '94 '95 '96 '97 '98 '99 '00 '01 '02 '03 '04 '05 '06



Or, "the study of how people make choices to get what they want"

# ECONOMICS - "science of scarcity" -the study of the choices people make in an effort to satisfy their unlimited needs and wants from limited resources. The science of "Scarcity"





#### **Economics is "common sense made as difficult as possible".**

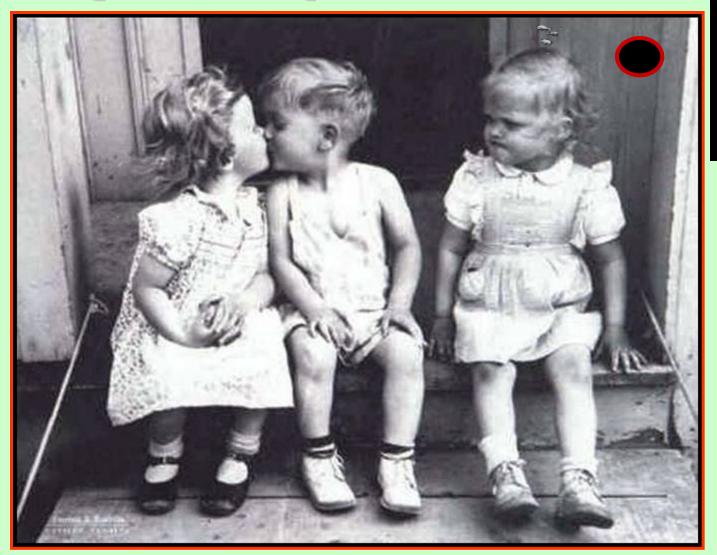
Physicists explore the physical world. Economics as a social science looks at the **behavior of people** in the marketplace.

> Economics is not an "exact science" but it gives "likely results".

> > The economist's lab is the real world. They don't conduct controlled laboratory experiments. They are predicting human behavior.

Economics is the academic discipline most discussed by the general public. It is also one of the least understood. ["Language of graphs"]

## **Dealing With Scarcity - When There Is Not Enough For Everyone - Someone Suffers**







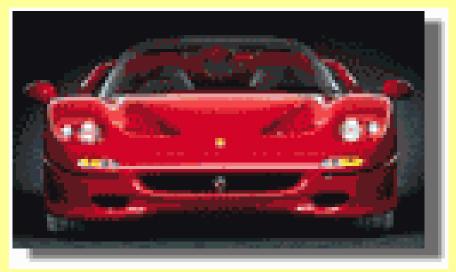






## **THE FOUNDATION OF ECONOMICS** SOCIETY HAS VIRTUALLY UNLIMITED WANTS...











Clothing

#### Gump Household



Shelter





4

4

## Scarcity Problem

#### Food, clothing, shelter,

Chrysler 300, mansion, Nintendo DSI, jewelry, iPod, projector, digital camera, good health, children, camcorder, laptop warmth, indoor plumbing, rollerblades, a sense of personal worth, Plasma TV, literacy, higher economics grade, iPhone 3GS, Flip video, Wii iPad

#### **Unlimited Human Wants**

"Need" those first three to survive.

Land, Labor, Capital, Entrepreneur Rent, Wages, Interest, Profits

imited Resource



What, how, & for whom.

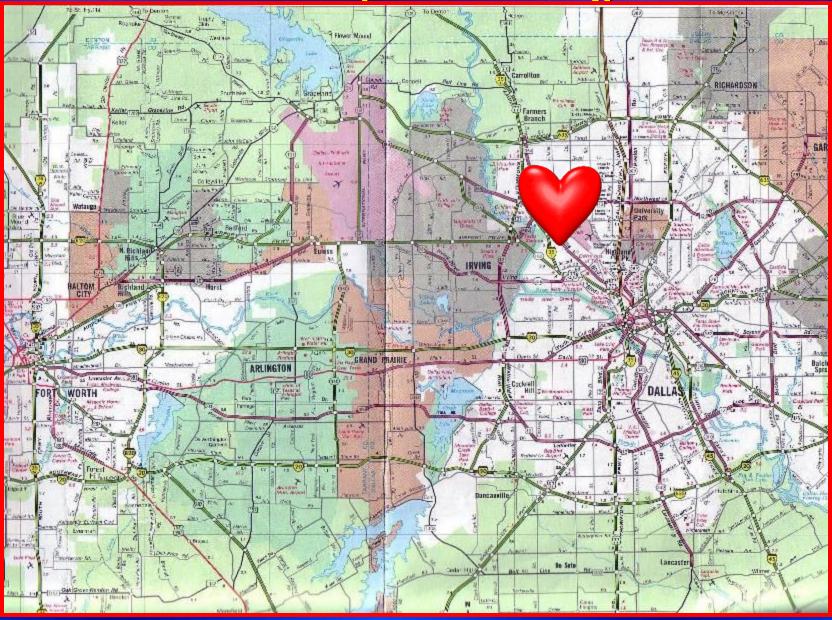
Scarcity Imposes Basic Economic Choices What to produce How to produce Who receives

#### Answers Determine The Type of Economic System

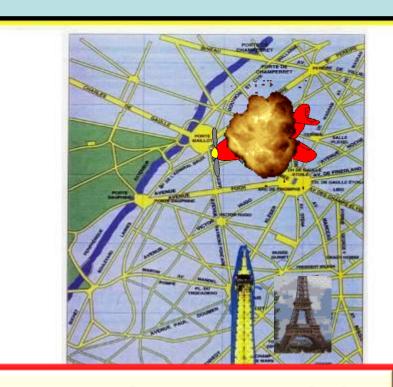


Market ( Traditional Command

# What Do You Not See On This D-FW Map That You Would See From An Airplane Landing At Love Field?



## **ABSTRACTION** – ignoring most details in order to focus on the most important ones.



The map of **Paris is a model** because it is an **abstraction**. from the actual beauty of the city. A key assumption is that one can rationally interpret this model. [**99%** is removed]



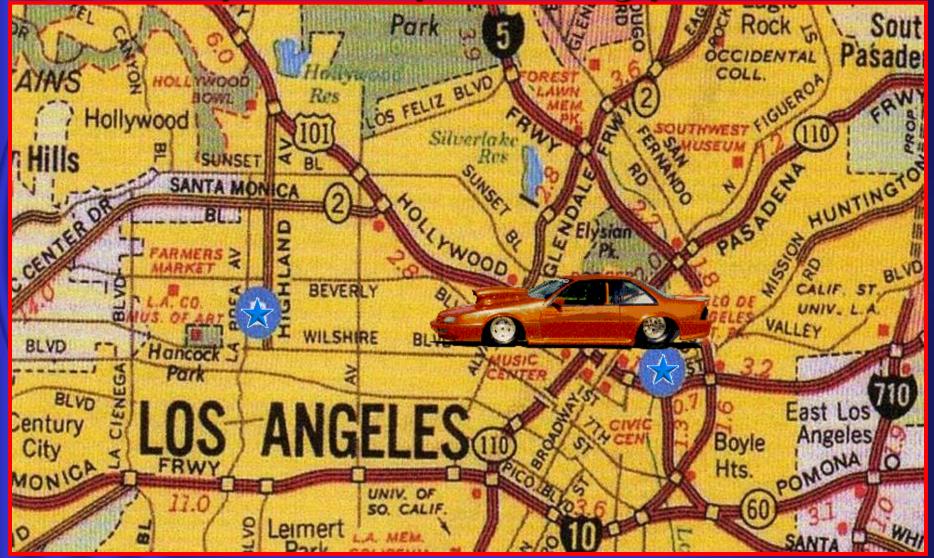
When President Bush saw the Eiffel Tower, he said, "That is a heck of an oil derrick you have there."



# Going from L.A. Museum of Arts (B) to the L.A. Civic Center (A) [omits minor details]



#### Map B shows only the major freeways A map is a simplified "big picture."



## When you pick Mr. or Ms. Right, you have 3.5 billion to pick from. What characteristics are you not going to want (abstract) in picking Mr. or Ms. Right.

"There is the woman I want. She doesn't even have to like sports."

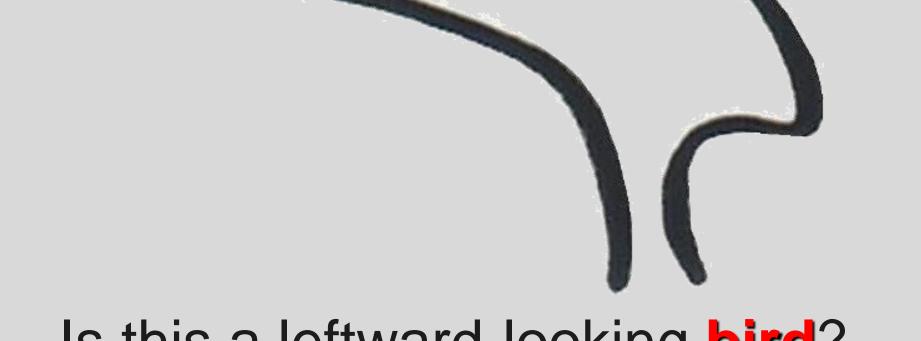
"We're looking for the perfect man."

## **Subjectivity** - personal perception



## As we become econ gurus we must look at economic issues objectively - not subjectively.



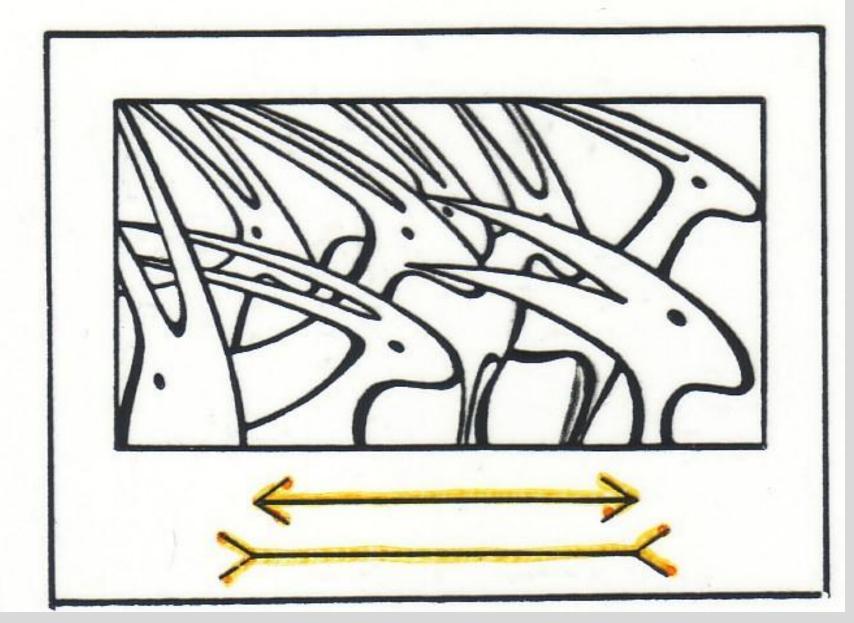


## Is this a leftward-looking **bird**? rightward-looking **antelope**? Or a **rabbit**?

## **Do You Change Your Mind?**



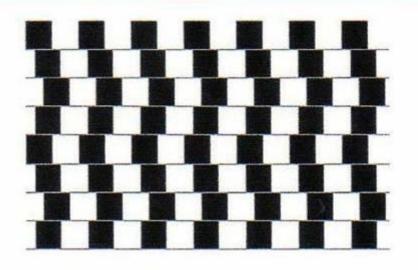
#### **Do You Change Your Mind Again?**



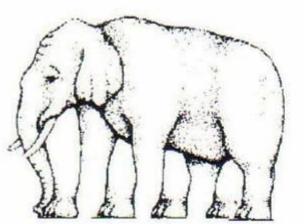
#### Do you see an "old lady" or "young girl"?



Hint: The old woman's nose is the young girl's chin.



Are the **horizontal lines parallel** or do they **slope**.



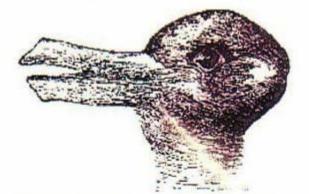
How many legs does this elephant have?



#### Man Playing Horn...

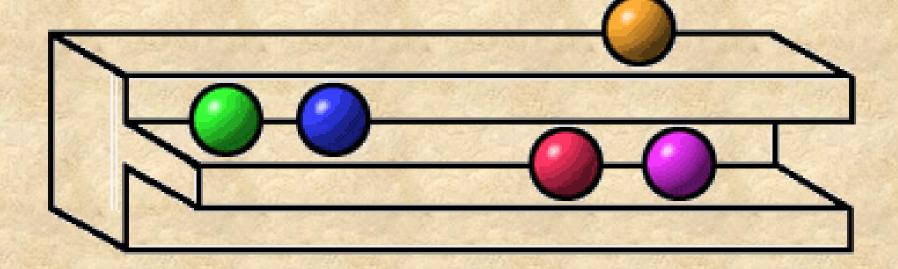
#### Woman silhouette?

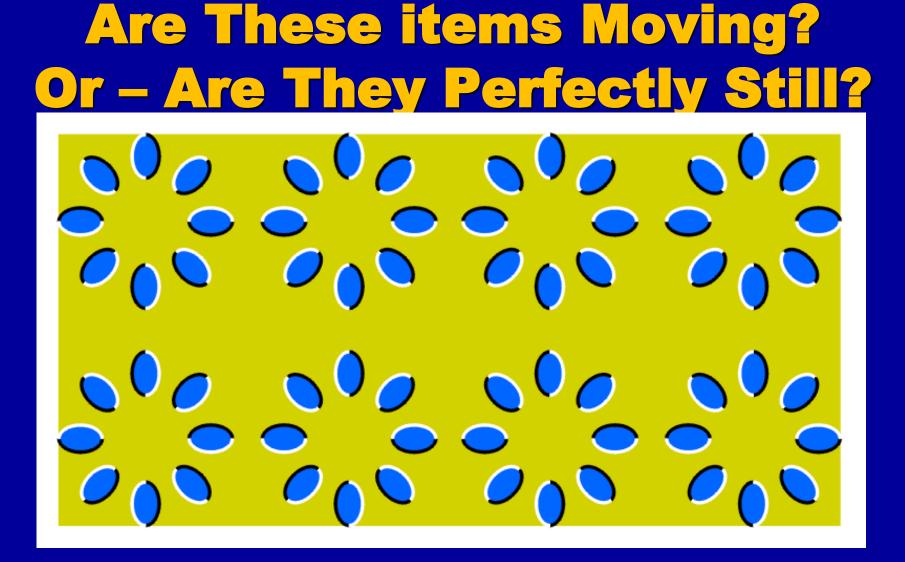
(Hint: woman's right eye is the black speck in front of horn handle)



A **Rabbit**... or a **Duck**? (Hint: the duck is looking left, the rabbit is looking right.) **Optical Illusion.** Stare at the picture & see if it doesn't look like you are looking at a giraffe - and yet there is really no giraffe. Oh!

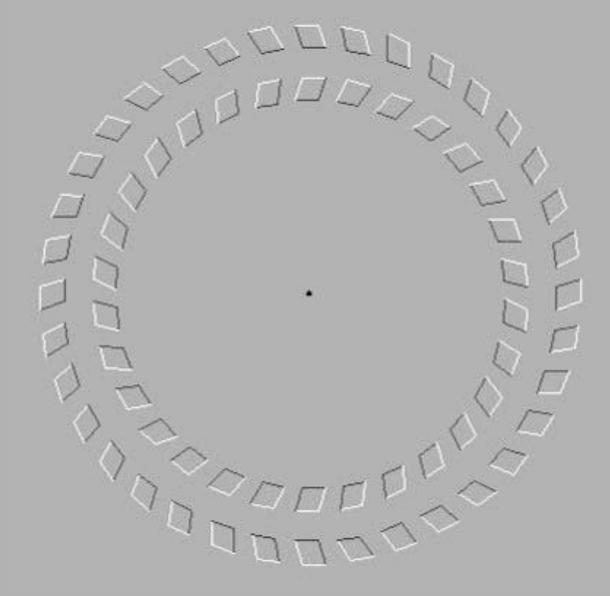
## **Are There One or Two Shelves?**





The pictures are used to test the level of stress a person can handle. The slower the pictures move, the better your ability of handling stress. **Alleged criminals** that were tested see them **spinning around madly**; however, **senior citizens** and kids see them **standing still**. None of these images are animated - they are perfectly still.

# Focus on the Dot in the center & move your head backward and forwards.



**1.** Follow the moving **pink dot** and notice it doesn't change color.

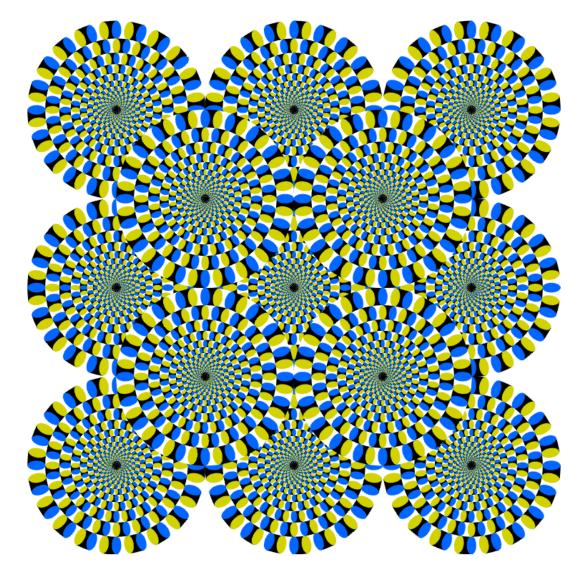
2. Concentrate on the cross in the middle, after a while you will notice that this moving pink dot will turn green!

3. Look at the cross a bit longer and you'll notice that all dots except the green one will disappear.

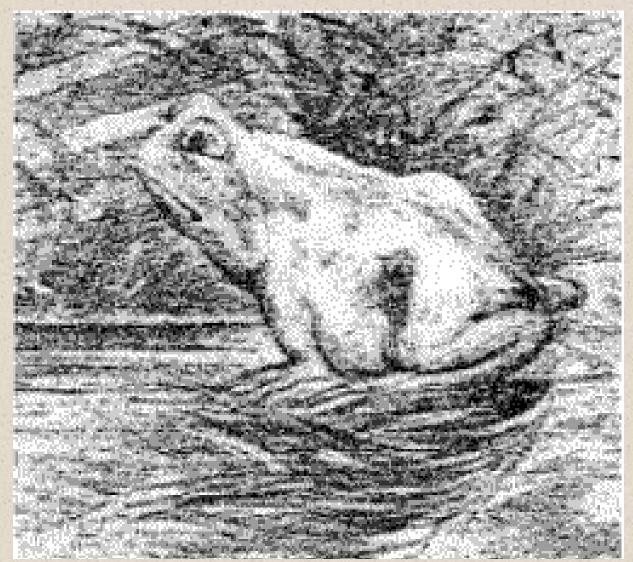
#### **Rotating Snakes**

#### Concentrate on the dot in the middle of the picture.

If you see any rotation in the others, you are going to be a criminal.



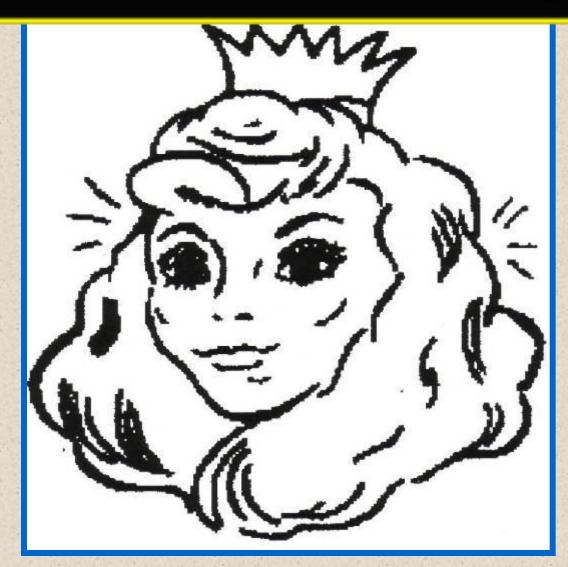
## Is this a Frog or a Horse?





#### **AFTER 6 BEERS**

#### Friends don't let friends drink & take home ugly women.



<b>So Why Did I Show You All Of This?</b>
Economics is a little like optical illusions.
Some times the economic concepts presented are easy to see & understand.
Other times the concepts presented take more time to reveal themselves.
Just like the illusions, you must be persistent and not
give up until the concept "appears" to you.
Then and only then will you become an econ guru, and
look like one of these! Econ Gurus
So, this is your goal, look like one of these!

1 Economics – the study of the <u>choices people make</u> in an effort to satisfy their unlimited <u>needs & wants</u> from <u>limited</u> (scarce) resources.



[These are activities, not items – lawyer or doctor servic

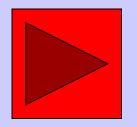


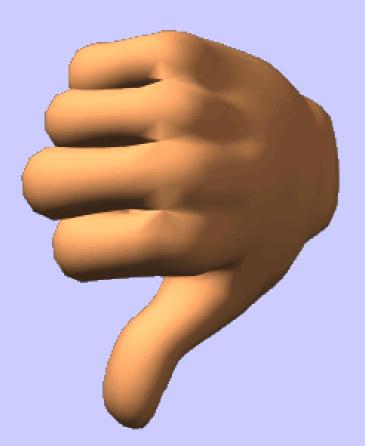
#### Mechanic giving car a tune-up

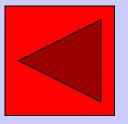














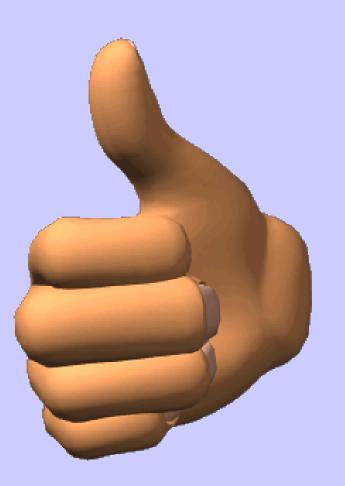


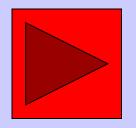
#### Watch



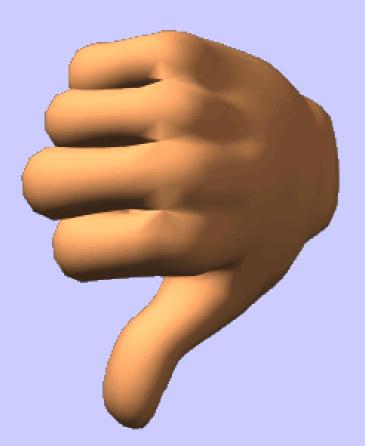


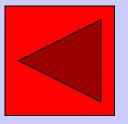








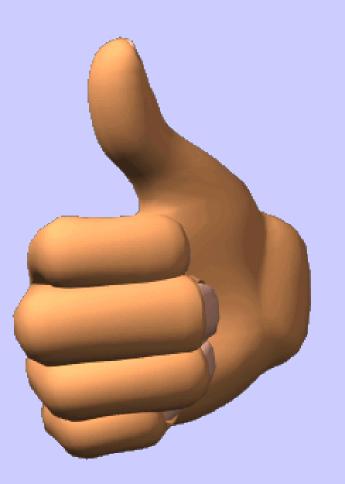


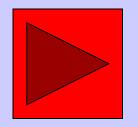




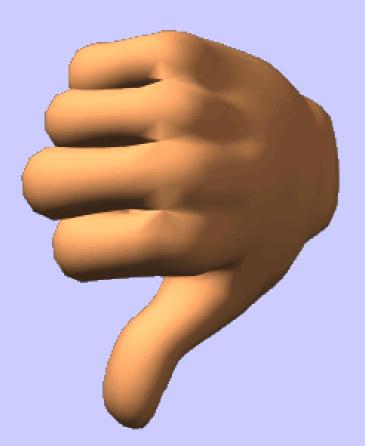


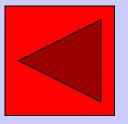
## Watch Repair Good Service













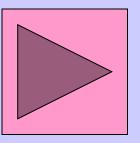


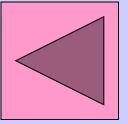
#### Hamburger

Service











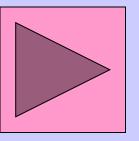


## Basketball

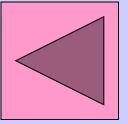








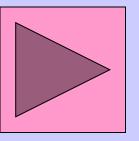




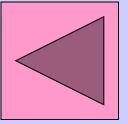


## Bicycle Good Service





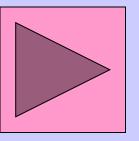




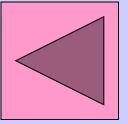


# Hair Cut **Service** Good











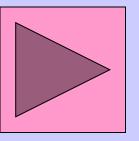
Waste Management

#### Garbage Pickup

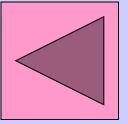




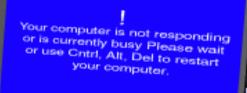










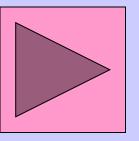


#### Laptop Computer

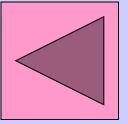
## Good













Needs – necessities for survival.



[food, 👞 clothing, 🧥 and shelter Wants – simply something we want but not necessary for survival. [car, soccer ball )

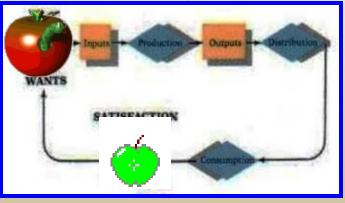
Scarcity – when resources do not satisfy wants and needs. [Wants are greater than resources.] [Scarcity makes decisions necessary & opportunity costs unavoidable.]

**Resources** – anything used to satisfy wants or needs. [inputs]

Factors of production – building blocks (resources/inputs) used to produce products.

They are inputs used when something is going to be made. There are thousands of inputs or factors of production, all of which can be

grouped under land, labor, or capital.









"The first lesson of economics is **scarcity**: There is never enough of anything to satisfy all those who want it.

The first lesson of politics is to disregard the first lesson of economics". --Thomas Sowell

#### **Resources or "Factors of Production"** Land – Natural Resources

Acreage, rivers, lakes, ports, (oil, precious metals, minerals) Labor – Human Resources

Physical and mental talents that produce goods and services

#### Capital - "stuff used to make other stuff"

All manufactured goods & services used in producing consumer goods. Examples: Tools, machinery, equipment, trucks to carry goods, airplanes, etc. Entrepreneurship – the "boss"



1. Someone who takes the initiative in using or

combining land, labor & capital to produce a good or service.

2. Someone who is innovative, a risk taker, and makes basic business decisions.

#### **Remember** -- ALL THESE RESOURCES ARE IN LIMITED SUPPLY. They are scarce!!!



#### **The Four Factors of Production** Resources beget production, which beget income, which beget wealth. 1. <u>9</u> Land [natural resources] – <u>Nature's items</u> ["gifts of nature"] A. In the earth - coal, oil, fossil fuels, etc. B. On the earth – vegetation and water C. In the atmosphere – sun, wind, and rain [Land is the starting point for all production." "Stuff" from which everything is made.



Water



Sun







**Fossil fuels** 



#### Scarcity - "Spare A Square"

#### **A Square of Toilet Paper or even "one ply"**

#### Scarcity - "Elaine's Revenge"



2.10 Labor [human resources] {"effort"} anyone who works ["paid work"] [Labor is the "brain-power" and "muscle-power" of human beings] A. Physical – pro athletes & lumberjacks B. Intellectual – ministers, doctors & lawyers

\*Most important resource – 70% of input cost



#### Real Capital v. Financial Capital REAL [Economic] CAPITAL [tools, machinery, & factories]

Can produce something directly with these





#### **FINANCIAL CAPITAL** [stocks, bonds, and money]

Can't produce anything directly with these



When people "invest" in assets [stocks] hoping to receive a "financial" gain

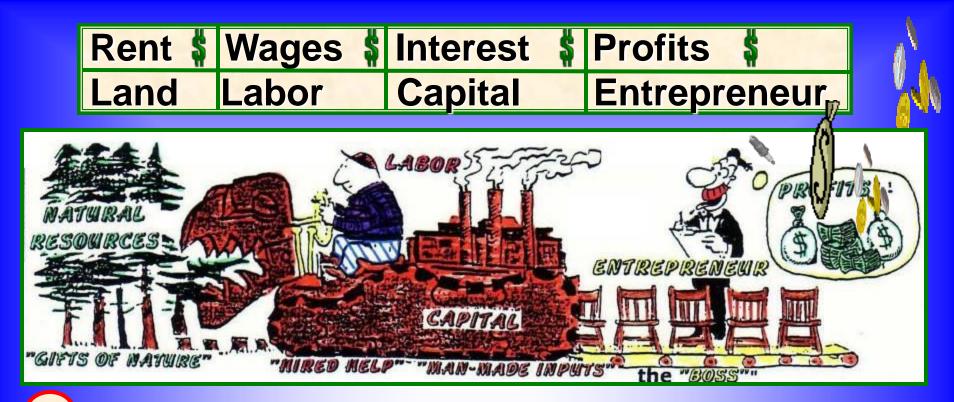




- 3.(11) Capital Resources all <u>"man-made inputs</u>" used in the production process (tools, machinery, and physical plants).
  - A. Capital goods produced goods [machinery, buildings, & tools] used to produce other goods. [crane, Ford plant, hammer] [products meant for "future consumption"]
- B. Consumer goods products meant for "<u>immediate consumption</u>". A product can be both a consumer good and a capital good –depends on use.
  - Ex: Jet aircraft used by a movie star [like Jim Carey] to visit friends (consumer good).
    - The same aircraft used by a business manager to serve customers [capital good].
  - Ex: F150 pick-up to deliver produce [capital good] or take family to church [consumer good]

"man-made inputs"





Entrepreneurship – starting a <u>new business</u> or bringing a <u>new</u> product to market. "Sparkplugs" who introduce the product or start the new business. He combines land, labor, and capital to produce products.

Resource payments. The resource owners receive rent [for the use of their land; wages [for their labor]; interest [payment for financial capital], and profits [for their entrepreneurial ability].



# **Opportunity Cost is the Opportunity Lost**

Trade-offs [Choices]

Top Two Choices [Opportunity Set] Final Choice [Opportunity Benefit]

2<sup>nd</sup> Choice [Opportunity Cost]

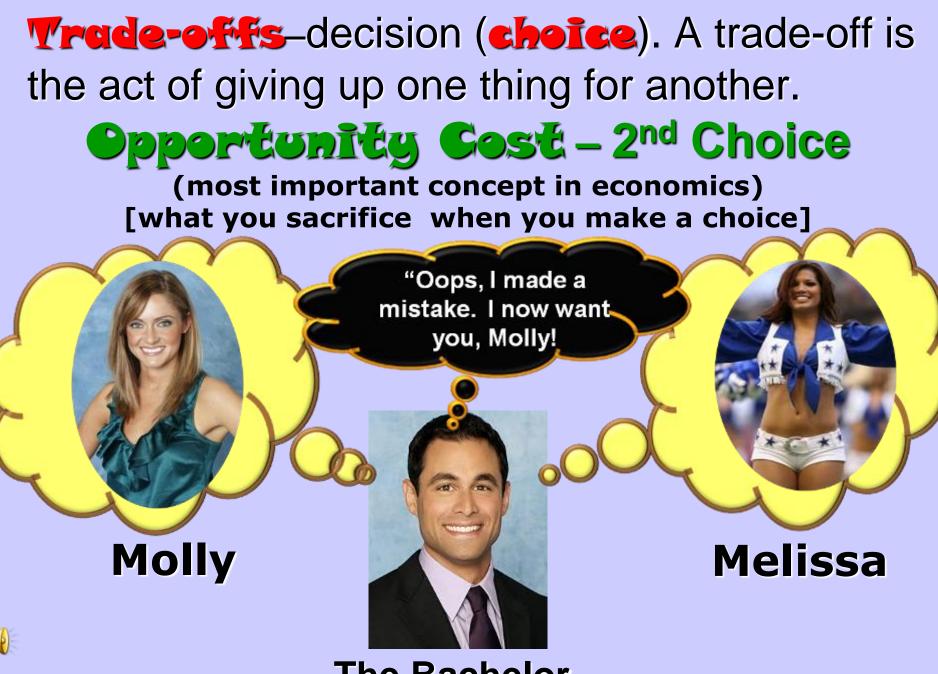
# The Opportunity Cost is the "Opportunity Lost" Opportunity Cost Opportunity Benefit Opportunity Set

["what is possible for \$10,000"]

чоны







The Bachelor

#### **And - As 40 Million Watched**, Joe Millionaire chose Zora [right] over Sarah [left] And Why Didn't Joe Pick Sarah? This Is The Reason He Gave Her.



Fox gave them \$1 million but they didn't stay together & split the money. It was later discovered that Sarah had appeared in 50 "bondage" videos.

# Economic Way of Thinking Do the Benefits outweigh the cost? Scales of Economics

#### **Expected marginal benefits**

**Expected** marginal costs

Choices are primarily marginal – not all or nothing.

### "High 5" cost \$261 m

Non-economic Way Of Thinking That was an expensive highway project and nothing less of anything else.

Cost twice as much as any other state transportation project. [500,000 cars daily]

AH HAHAMMAN MANA

A look at one of the tallest of the High 5 support structures

2 mil. Lbs

of concrete,

200,000 lbs

of reinforcing

21feet by 21feet,

500,000-pound

Ground level

9 support shafts,

54" diameter

concrete base

steel

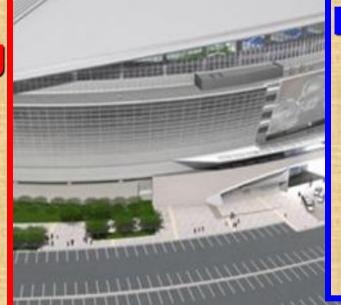
84'

30

## **Cowboys Stadium costs \$1.15 billion**

#### Non-economic Way Of Thinking There is one more stadium project and nothing less of anything else.

Cost more than any other Sports venue in history.



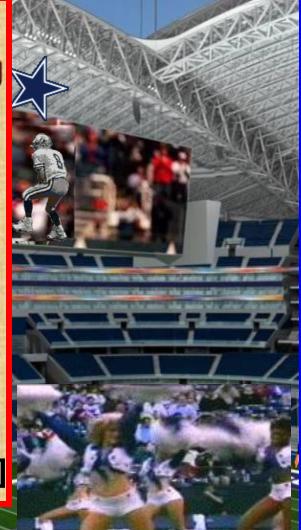
#### Economic Way Of Thinking There is one more construction project and a lot less of many other things.

#### ADDAY

### Cowboys Scoreboard costs \$40 million [60 yards long and 71 feet tall – weighs 1.2 mil. Ibs]

**Non-economic Way Of Thinking** There is one very expensive \$40 M scoreboard and nothing less of anything else. [90 feet up from 20 to 20]

[The scoreboard cost more than the original TX Stadium which cost \$35 million]



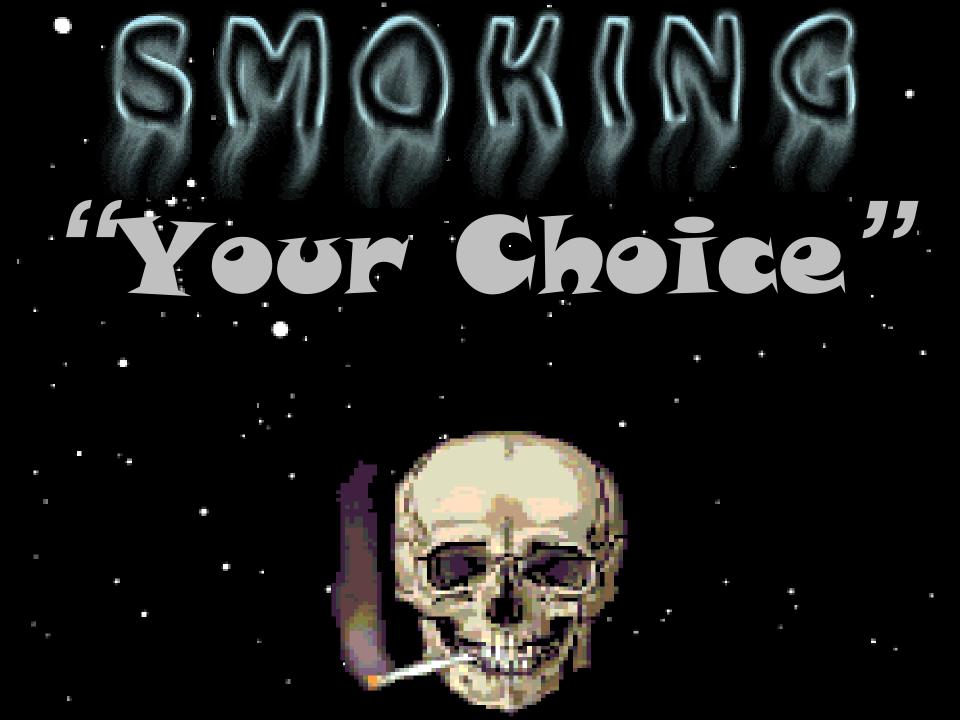
**Economic Way Of Thinking** There is one more scoreboard and a lot higher ticket prices for the fans. It would take 1,230 52-nch flat-screen TVs to equal the size of the screens. Weighing 600 tons it has 30 million light bulbs in the displays.

# DRORIONINY Cost of SVCDANG

# Your

**()** [

Choice











### Who Smokes?

	<u>Group</u>	<u>Men</u>	<u>Women</u>
•	Overall	21.0	19.5
•	White	21.3	19.2
٠	Black	25.5	18.3
٠	Hispanic	22.1	10.3
•	American Indian	42.0	37.3
٠	Asian-American	17.5	6.5
•	18-24	26.3	21.5
٠	25-44	28.4	22.8
٠	45-64	23.9	19.2
٠	65+	10.1	8.3
٠	Didn't finish H.S.	32.4	21.2
٠	H.S. graduate	29.2	22.1
•	College graduate	13.6	11.0
•	Graduate degree	8.1	6.7

### What Killed Americans in 2007 Tobacco use 450,000

### 2<sup>nd</sup> hand smoke



### 450,000 40,000

**Alcohol-related** 108,000 44,757 Auto accidents Suicide 31,484 AIDS 30,000 **Homicides** 17,732 **Drunk Driving** 17,000 Radon (lung cancer) 13,600 **Drug overdose** 11,000 **Food poisoning** 9,000 Falls in the home 7,100 6,335 Drowning Motor cycle accidents 3,676 **Fires in home** 3,200 Choking on object 3,004 X-rays 3,000 Falling down stairs 1,588 **Choking on food** 875 **Bicycle accidents** 762 Falling out of bed 594

4

4

4

Pool drowning	515
Falling off a ladder	365
Bathtub drowning	332
Hunting Accidents	140
Scuba diving	105
Slipping on ice/snow	103
Tornadoes	82
Bee/wasp sting	66
Snowmobiling	60
Lighting strike	47
Skiing	41
Water skiing	47
Dog attack	<b>32</b>
Sky diving	<mark>22</mark>
<b>Commercial airline accidents</b>	<b>22</b>
Football	13
Hang gliding	8
Playground equipment accident	3
Marine-animal attack	1

# Other Killers of Americans in 2007 Chronic Killers

Of the 2.4 million Americans who died in 2007, 7 in 10 died from one of these chronic diseases, many brought on by smoking.

2,448,017 Number of Deaths 6.6% Heart disease (652,091) and a property of the state of 22.8% Cancer (559,312) Stroke (143,579) 5.4% Chronic respiratory disease (130,933) 69.5% 5 Diabetes (75.119) 2.9% Alzheimer's (71,599) Inflammatory kidney disease (43,901) Hypertension (24,902)\* S .....



Bryan Lee Curtis, age 31, diagnosed w. lung & liver cancer from smoking.



Bryan, 6 weeks later, after chemo. http://projects.washingtonpost.com/fallen/



**6,025** have been killed since 2003 fighting terrorism in the last 8 yrs. Dollars spent: \$3 trillion

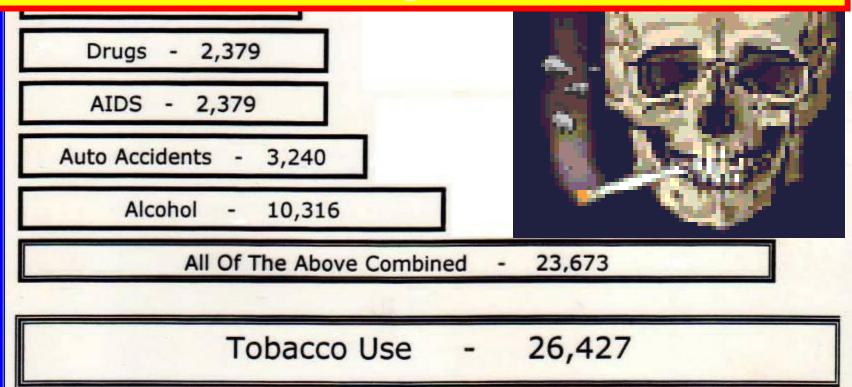


**4 million** have died from smoking in 8 years in the U.S. Dollars spent: \$0

### **Texas Yearly Preventable Deaths**

**France**, with a population of 61 million, **loses 66,000** residents a year to **smoking related diseases**. [25% smoke]

China, with a population of 1.3 billion, loses 1 million of its 320 mil. smokers to smoking related diseases. [53% smoke]



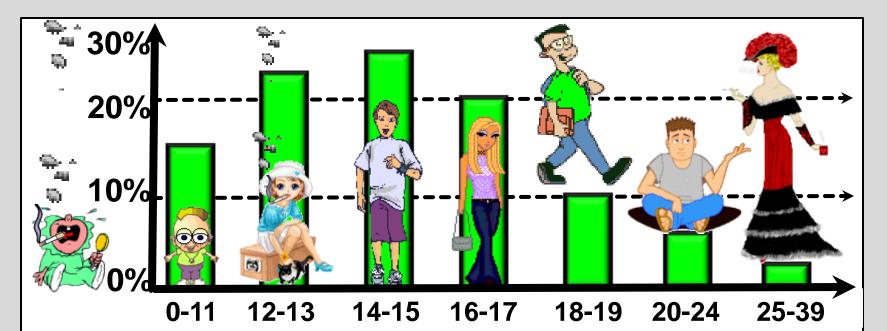


"The good news is that over 1,000 smokers will quit smoking today." "The bad news is that those over 1,000 ex-smokers will be buried."



### **When Smokers Start**

Nearly every smoker began as a teenager. 4 out of 5 make it thru high school without becoming smokers.



#### **Characteristics of Teen Smokers**

- 1. Low socioeconomic status
- 2. Poor school achievement
- 3. Excessive rebelliousness and risk taking
- 4. Low self-esteem

5. Dropping out of school/not planning on college

#### **Janet Sackman on Smoking**

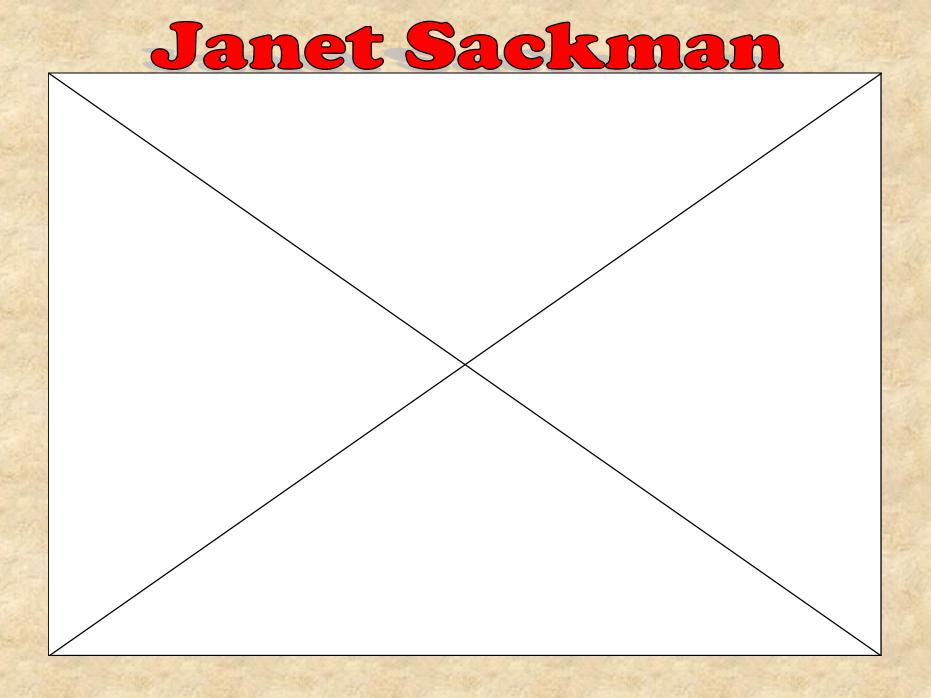
Janet, at age 17, was a successful model doing soap, swimsuit, and cigarette ads. She was on the cover of Look and Life. An executive for "Lucky Strike told her, "It would be a good idea for you to learn how to smoke. You'll look more authentic."



As she began smoking and **became addicted**, she later had to have her **larynx removed** and then had **part of a lung removed**. She still looks great, but she doesn't sound so good. Her voice box gone, she had to learn to talk all over again, **burping air through a hole in her esophagus** just above the collarbone. It took her **six months to say her first word**; & now she teaches other the technique.

"I COUGH through the hole, I SNEEZE through the hole, and I talk through the hole," she says in a mechanical croak. "I can't make any sound when I laugh or cry. I can't be sarcastic, and I can't tell a joke. I have the same monotone speech all the time."

"And I'm one of the fortunate ones, because I'm alive. I wish I had realized how important my life was when I was 17. The single most important thing to do for your looks and life is not to smoke."



### Pam Laffin – dead at 31



Pam started smoking when she was 11, got emphysema & had a lung transplant at age 24. Was influenced by the movie, grease, when Olivia Newton John [Sandy] smoked.

Overnight, she looked like this because of the medicine she had to take for the rest of her life [fat face and hump on her back]. Pam died at age 31 while awaiting a 2<sup>nd</sup> lung transplant. She died in her driveway holding the hands of her two young daughters, Amanda and Krystell.



**Tobacco Odor** 

Stroke

Discolored Fingers & Nails

Heart Attack

Kidney Cancer – Pancreas Cancer –

Clogged Blood Vessels (Arteriosclerosis)

> Swelling of Veins ~ (Phlebitis)

> > 2

10

Anatomy

Mouth Cancer Bad Breath Yellow Teeth

Wrinkles

Throat Cancer Hoarse Voice

Chronic Cough Lung Cancer Hard to Breathe (Emphysema)

Early Menopause Miscarriages Cervical Cancer Bladder Cancer

Weak Bones (Osteoporosis) Oman Smoker

### **Anatomy of a Pregnant Woman Smoker**

Wrinkles -

Stroke

Throat Cancer Hoarse Voice

Breast Milk will have Cigarette Chemicals

Higher Risk for Baby Dying Before or After Birth

> Swelling of Veins (Phlebitis)

Clogged Blood Vessels (Arteriosclerosis) **Tobacco Odor** 

Mouth Cancer Bad Breath Yellow Teeth

**Heart Attack** 

Chronic Cough Lung Cancer Hard to Breathe (Emphysema)

Birth Defects are ★ more Common

Weak Bones (Osteoporosis)

Discolored Fingers & Toes

#### When It comes to Smoking, Don't Let Your Peers Knock You Down To Their Level



Don't smoke, Don't smoke.

### **Bring Your Peers Up To Your Level**



# 2<sup>nd</sup> Hand Smoke

#### How Many Cigarettes Have You Smoked Today Without Knowing It

ou don't always see it or smell it, but even if you're a nonsmoker you probably inhale a significant amount of cigarette smoke every day. And it's not only nicotine you're breathing; just one cigarette emits about 4,000

chemicals, some of which are known to cause cancer.

How much are you inhaling? We asked Katharine Hammond, Ph.D., associate professor of environmental health sciences at the University of California, Berkeley, School of Public Health and one of the world's foremost authorities on measuring secondhand smoke. Hammond has taken thousands of samples of air in homes, offices, bars, casinos, and trains. She measured smoke levels in various locations for just one of the most dangerous chemicals in cigarette smoke–N-nitrosodimethylamine (NDMA)–to determine how much a nonsmoker might inhale. Here are her findings:

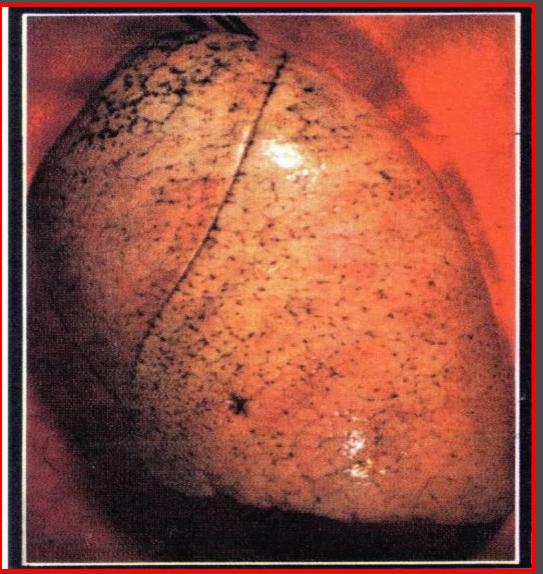
\*Cigarette equivalencies are approximate; the amount of secondhand smoke inhaled could be half or three times as much, depending on the number of smokers present, proximity to an active smoker, number of cigarettes smoked, size of space, and ventilation.

IF YOU'RE IN THIS LOCATION	FOR THIS LONG	IT'S AS IF YOU'VE SMOKED THIS MANY CIGARETTES*
Smoky bar	2 hours	
Restaurant (typical non- smoking section)	2 hours	]0
Office (that allows smoking)	8 hours	
Pack-a-day smoker's home	24 hours	
Fenway Park, Boston (sitting behind someone who is smoking)	3 hours	Į
Car (when someone's smoking and the windows are closed)	1 hour	

### This Is What We Are Born With. [nice, smokeless lungs; not barbecued yet]



### **Smoking** can eat your lungs alive. [This is a healthy lung]





### **Good Lungs**



#### Like a new sponge that can absorb easily



# **Smoker's Lungs** [This is a **barbecued lung**]

This is a choice you make

Like a sponge that has rotted away & can't absorb any more.

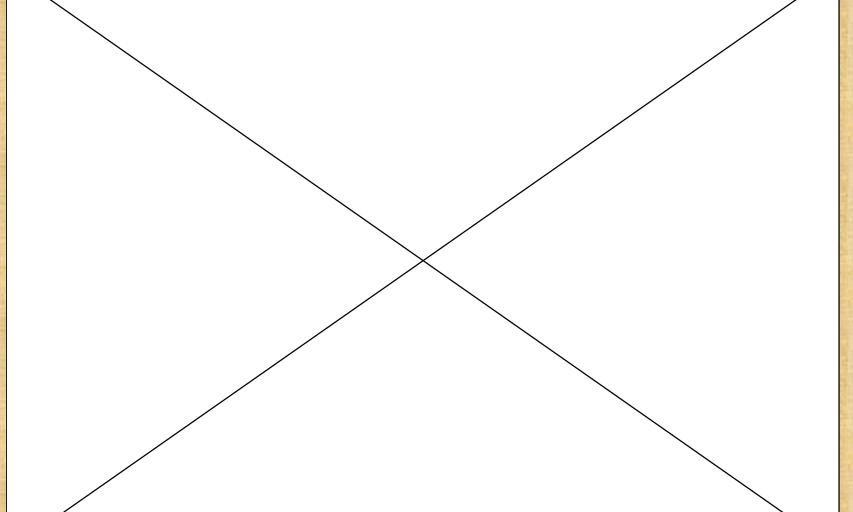
Rotting Inside Out



### Smoker's lung v. Non-smoker's Lung



### **Smoking and Emphysema**



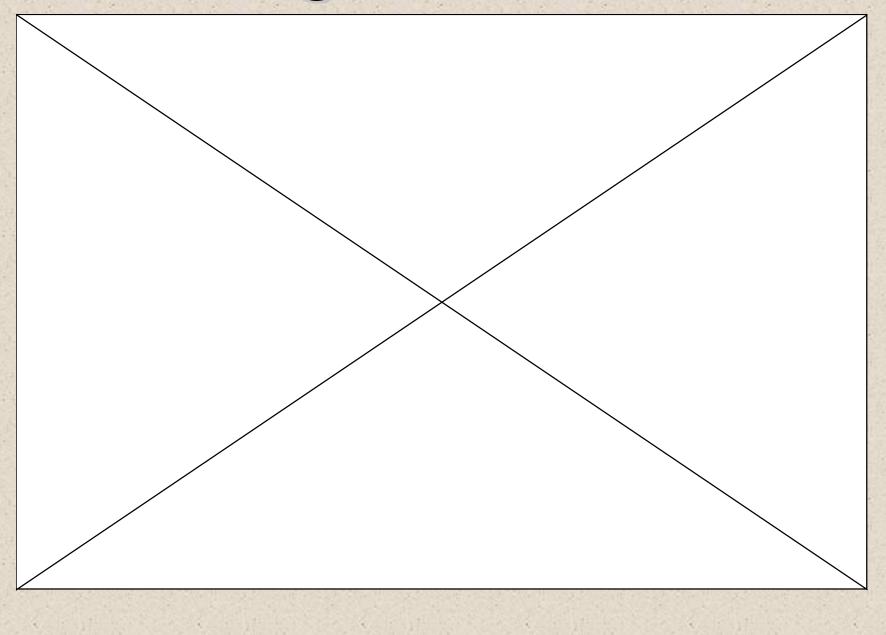


### Six Months To Learn To Talk Again



<

### **Smoking From The Neck**







Benefits of Smoking?	
Sr age uicker because dam to the skin. You get to be iddle age as a teen.	Cancer-causing tars are deposited in your mouth, throat, and lungs. Your blood picks up the poisons from your lungs and transports them throughout your body.
Smoker's heart doubles in size.	Cigs kill more than the combined
Smoking kills one person every 10 sec.	deaths from homicides, suicide, car
Impotency-50% more likely [1/2	accidents, AIDS, alcohol & drug abuse.
of all men over 40 are impotent	You do lose weight because you
caused by smoking or diabetes.]	cough up part of your lungs.
4,000 chemicals and 200	The last two "Marlboro Men"
poisons that cause cancer	died of lung and brain cancer,
[Three times more likely to go blind]	the last at age 51.
poisons that cause cancer	The last two "Marlboro Men" died of lung and brain cancer,
poisons that cause cancer	The last two "Marlboro Men"
[Three times more likely to go blind]	died of lung and brain cancer,
RJR Executive: [when asked why	the last at age 51.
RJR executives don't smoke cigs.]	Quadruples breast cancer



Warning: Cigar smoking may lead to cancer, heart attacks, and impeachment.





### **These Shar-Pei dogs started life as a normal-skinned dogs.**

I wish my owner had not smoked. Now, when he picks me up by holding me behind the neck, I'm still on the ground.



Aging - before our time!!! Thanks to our smoking owner.

# Darn our owner. We are 6 months old but we have the skin of 14 year olds.









### No, this is not a bath towel.

## Let's Take A Look At What Cigarettes Did to the Dog Owner's Teeth







### **Do Cigarettes Really Cause Premature Aging?** [This 18 year old female was 13 when she started smoking]







### **And – Now Let's Look At the Smoker at 20** [Remember - 90% have serious dental problems]



# And - Now Let's Look At the Smoker at 22





### Now Let's Look At The Same Smoker at 28 At Her 10-Year High School Reunion

Yes, these girls are only 28.

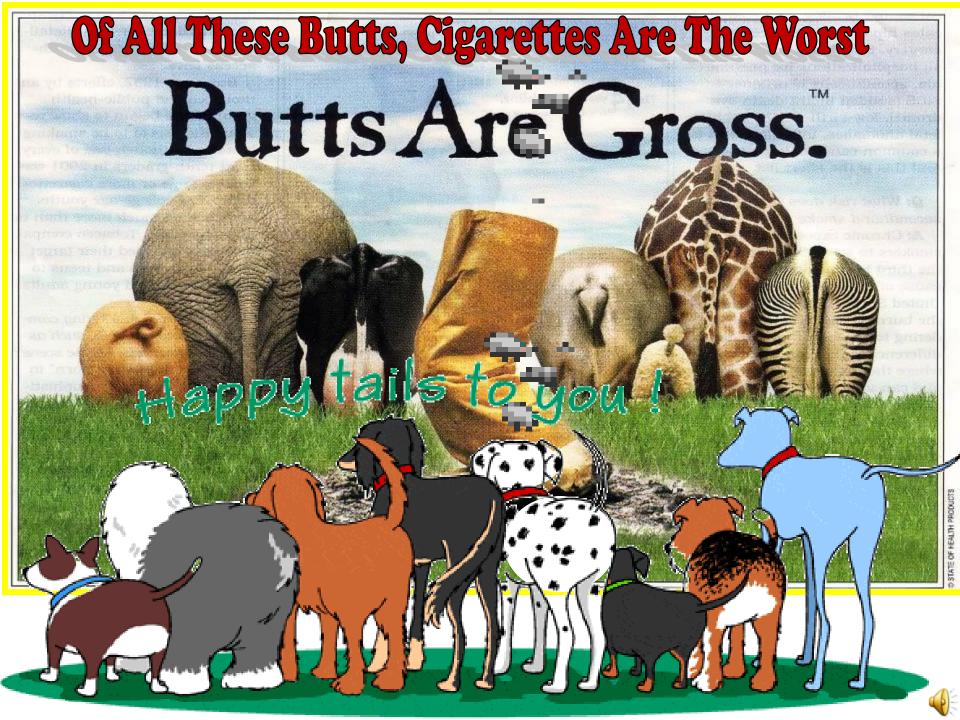






### **Can You Pick The Smoking Twin?**





Some Contents Of Cigarettes

Cigarette smoke has **4,000 chemicals** and **200 poisons**. **50 of the poisons cause cancer**.

They include:

- 1. Ammonia the toilet bowl cleaner
- 2. Carbon monoxide in car exhaust fumes
- 3. Arsenic and cyanide favored poisons of murder mysteries
- 4. Acetone in nail polish remover
- 5. Methane swamp gas
- 6. Formaldehyde -- the dead body preservative

The Five Leading Causes of Lung Cancer Are: **1. Smoking**In the past 3 years, more people have **2. Smoking**died from smoking than all the soldiers **3. Smoking**who died in the Revolutionary War, **4. Smoking**Civil War, W.W.I, W.W.II, Vietnam War,
and the Gulf War COMBINED.

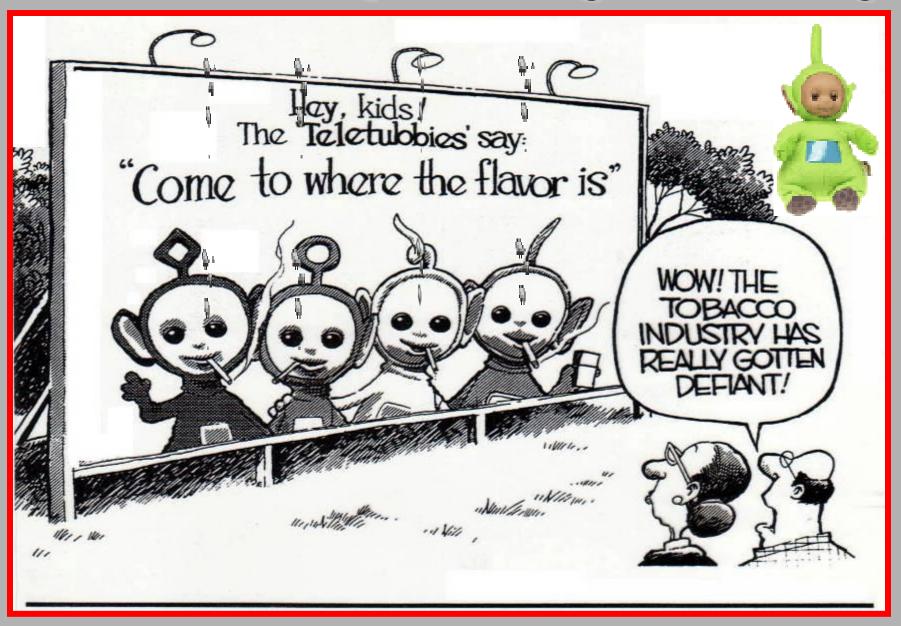
## "And – What Has Happened To Joe Camel? He Has Become?



# Does A Smoking Mother Affect the Baby?



# Do Tobacco Companies Target The Young





- Abdominal aortic aneurysms
- Acute myeloid leukemia
- Cancer of the bladder, cervix, esophagus, kidney, larynx, lung, mouth, pancreas, stomach
- Cataracts
- Chronic bronchitis
- Chronic cardiovascular disease
- Chronic heart disease
- Chronic lung disease
- Osteoporosis, peptic ulcers, periodontitis, pneumonia, and reproductive problems

### **Buying Cancer Sticks in Canada**



#### **CIGARETTES ARE HIGHLY ADDICTIVE**

Studies have shown that tobacco can be harder to quit than heroin or cocaine.

Heath Canada



#### DON'T POISON US

WARNING: Second-hand smoke contains carbon monoxide, ammonia, formaldehyde, benzo(a)pyrene and nitrosamines. These chemicals can harm your children.

Health Canada

Estimated Deaths in Canada, 1996 Murders - 510

Alcohol - 1,900

Car accidents - 2,900 Suicides - 3,900

WARNING EACH YEAR, THE EQUIVALENT **OF A SMALL CITY DIES** FROM TOBACCO USE

Tobacco - 45,000





WHERE

THERE'S

CYANIDE

HYDROGEN

#### CIGARETTES CAUSE LUNG CANCER

Every cigarette you smoke increases your chance of getting lung cancer.

inalth Canada



#### CHILDREN SEE CHILDREN DO

Your children are twice as likely to smoke if you do. Half of all premature deaths among life-long smokers result from tobacco use.

Health Canada

#### **CIGARETTES HURT** BABIES

Tobacco use during pregnancy reduces the growth of babies during pregnancy. These smaller babies may not catch up in growth after birth and the risks of infant illness, disability and death are increased.

Health Canada

WARNING

### CIGARETTES CAUSE STROKES

Tobacco smoke can cause the arteries in your brain to clog. This can block the blood vessels and cause a stroke. A stroke can cause disability and death.

Health Canada



Smoke from a lit cigarette contains toxic substances like hydrogen cyanide, formaldehyde and benzene. Second-hand smoke can cause death from lung cancer and other diseases.

Health Canada



Tobacco use causes crippling, often fatal lung diseases such as emphysema.

#### Health Canada

#### THERE'S SMOKE Tobacco smoke contains hydrogen cyamide. It can cause headaches, dizzinits, weakness, nausea, vertigo and stomach aches in smokers and non-smokers.

Health Canada



#### WARNING CIGARETTES **CAUSE MOUTH ISEASES**

Cigarette smoke causes eral cancer, gum diseases and tooth loss,

#### WARNING **TOBACCO USE** CAN MAKE YOU IMPOTENT

Cigarettes may cause sexual impotence due to decreased blood flow to the penis. This can prevent you from having an erection.

Health Canada.

#### WARNING CIGARETTES CAUSE LUNG CANCER

85% of lung cancers are caused by smoking. 80% of lung cancer victims die within 3 years.

Health Canada

### YOU'RE NOT THE ONLY ONE SMOKING THIS CIGARETTE

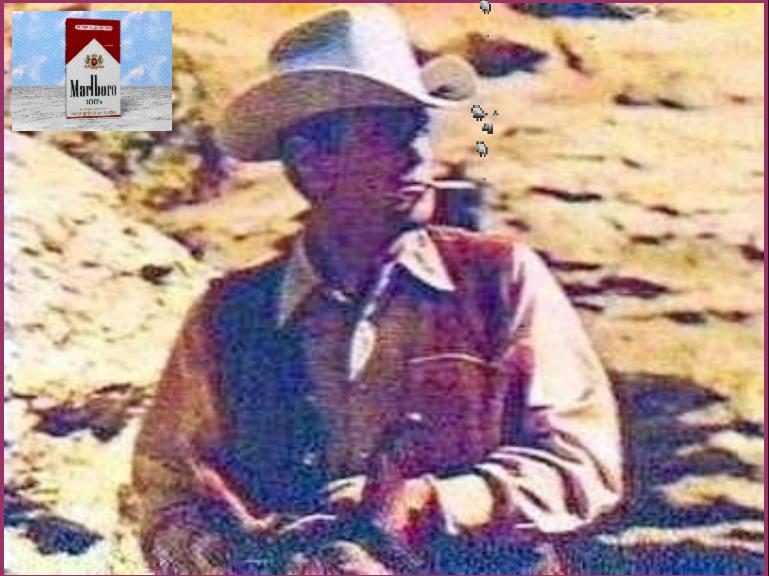
The smoke from a cigarette is not just inhaled by the smoker. It becomes second-hand smoke, which contains more than 50 cancer-causing agents.

#### Health Canada





# The last Marlboro Man, Wayne McLaren, who died of lung and brain cancer





### THE MARLBORO MAN ON HIS DEATHBED

And it is on to "Horse
Heaven" in the skies

This is the reason you don't see any more Marlboro Men.

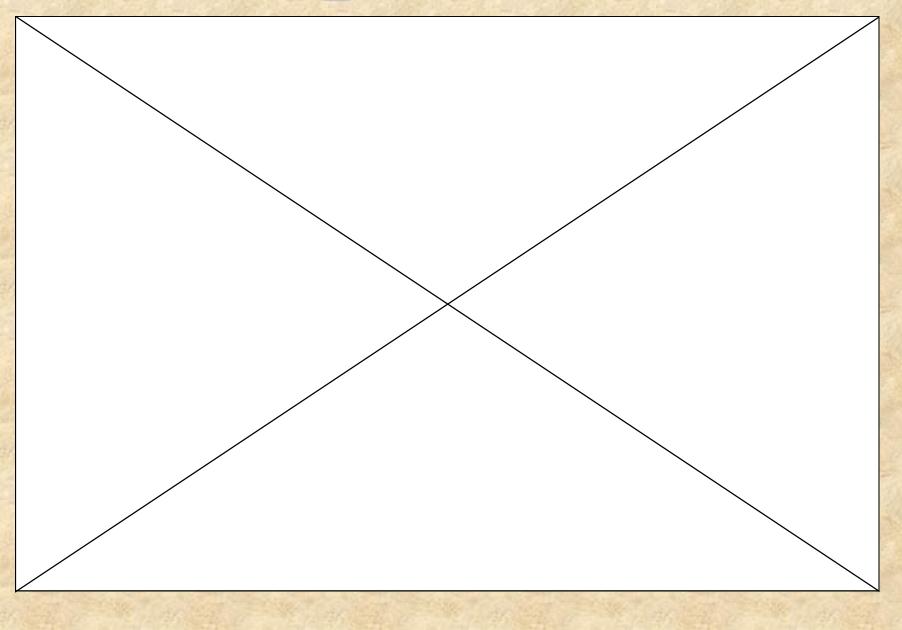


And due to this 2<sup>nd</sup> hand smoke here are the last seconds of life for the Marlboro Man's horse.

5 of the last 6 Marlboro Men died of smoking related cancers. And a few months later, their horses died of 2<sup>nd</sup> hand smoke, oh!

His last words, after spending his last month in an incubator: "Tobacco will kill you. I'm dying proof of it."

### **Smoking Commercials**



# Here Is What Is Left Of The Marlboro Man

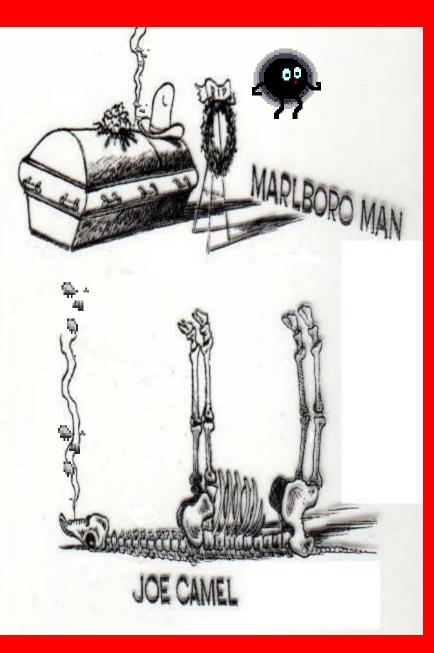
**Opportunity cost** – the last Marlboro Man [died at age 51] gained cigarettes but gave up about 30 years of his life.



Given prevailing trends, more than a billion people around the world will die of smoking-related illnesses in the 21<sup>st</sup> century.

**5 million** on this planet will die this year from smoking.





### Smoke But No Fire

### Warning: Smoking causes impotence.

### **Celebrities Who Died From Smoking**

Clark Gable 59 Errol Flynn 50 Nat King Cole 45 Steve McQueen 50 Roger Maris 51 Babe Ruth 53





Betty Grable 56







Humphrey Bogart 57 Jerry Garcia 53 Michael Landon 56 Edward R. Murrow 57

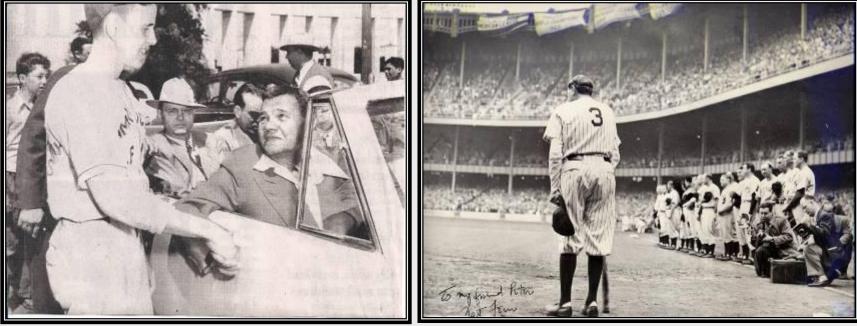
DAVIS, JR. Gary Cooper 61 Peter Jennings 66 Geoorge Harrison 58 Johnny Carson Sammy Davis

Yul Brenner 59 Duke Ellington John Wayne 🖤esi Arnaz 59 🔧 ucille Ball

Walt Disney 65

# Yul Brenner's Anti-Smoking Commercial

A year before lung cancer took the Babe, he visited Dallas in 1947 to promote American Legion baseball. Here he greets fans near Dealy Plaza.



- Here is the Dallas Morning News description of the **Babe in 1947**. It isn't easy for Babe Ruth to get around the country and see his boys. He is tired and the long fight to live left **sad marks** on **Mr. Baseball**.
- The eyes that once picked out home run pitches are deep pools.
- The bull shoulders that rocketed 714 home runs out of major league parks are bent and sloped. The massive frame is slender and stooped and the hair is grey. The voice is raspy and the coughs are frequent.

### **But the heart!**



### **Bigger than ever**



# **Quitting smoking Is Hard; Not Quitting Is Harder**

### So - We Must Know What We Are Doing Before We Jump Into Things





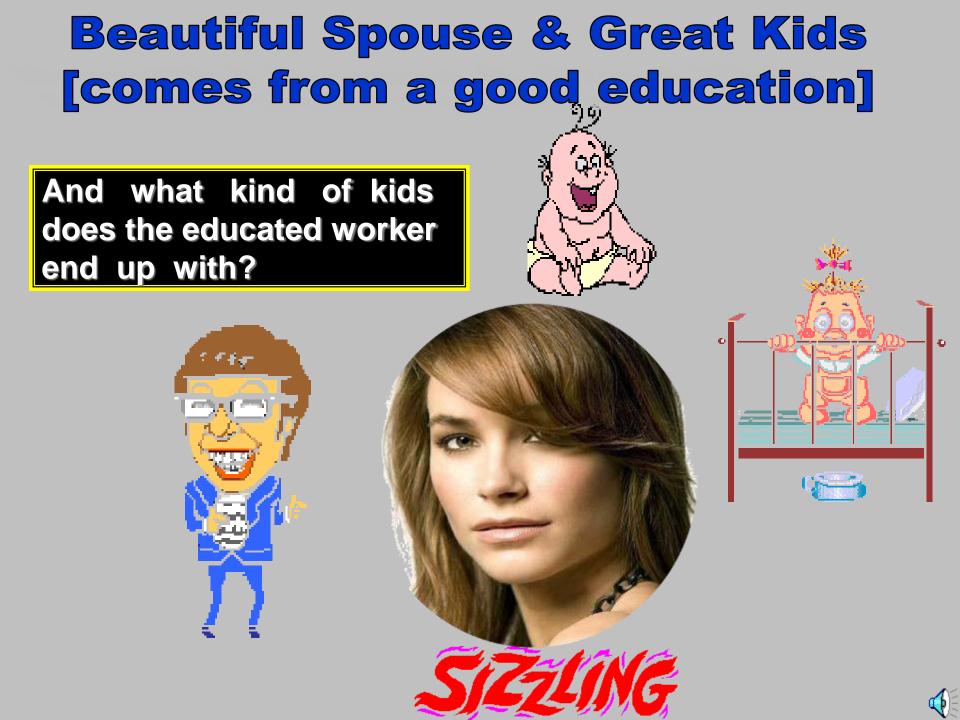
### Or, to look at it another way...



### Or, maybe another way...

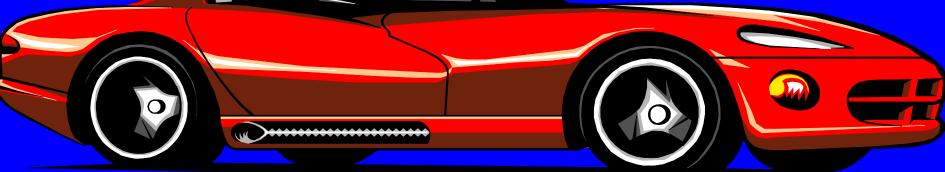






# What Kind Of A Sports Car Do You Drive [because of a good education] Your Choice





# **Opportunity Cost of NOT Doing Your Best**

### [Poor self-esteem]

He will have a difficult path

More problems at home





Report Card F Econ F English F Calculus F Journalism



#### You don't do your best

"No, I will not go to the prom with you. You are a loser."

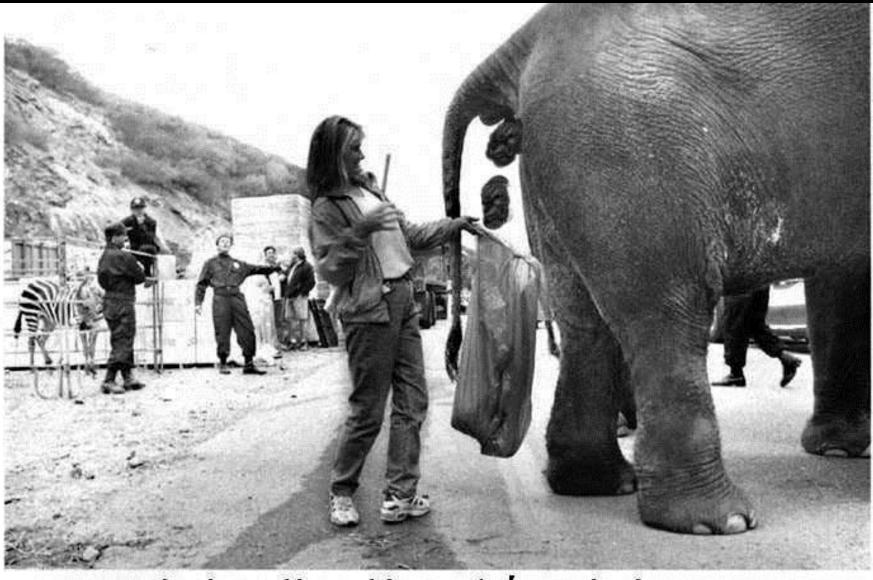


# Opportunity Cost [of NOT doing your best in school]

Worse Job

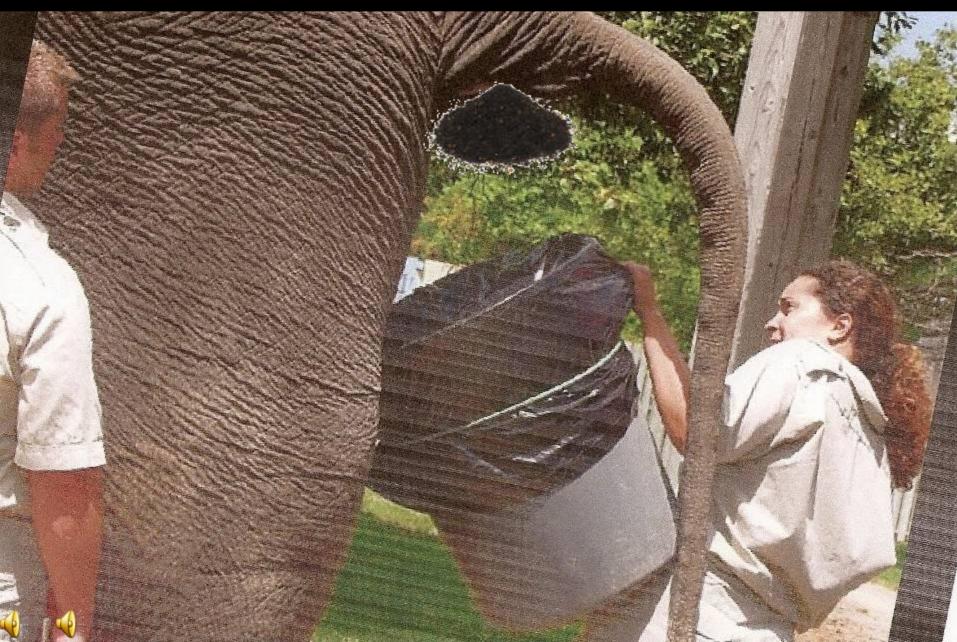
"Paper or Plastic?" "Do You want fries with that?"

# **But You Could Have Had This Job!!**



#### And you thought your job sucked

## Look out below!!!!





#### [due to a bad education]





Men have these 4 choices





Women also have 4 choices.

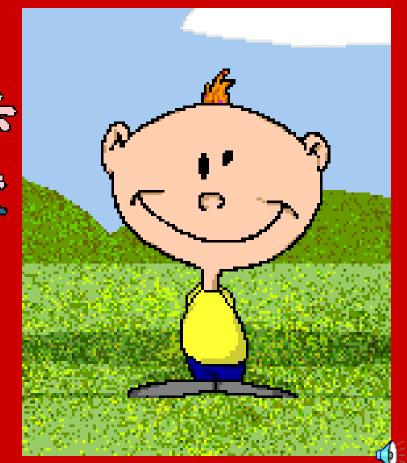




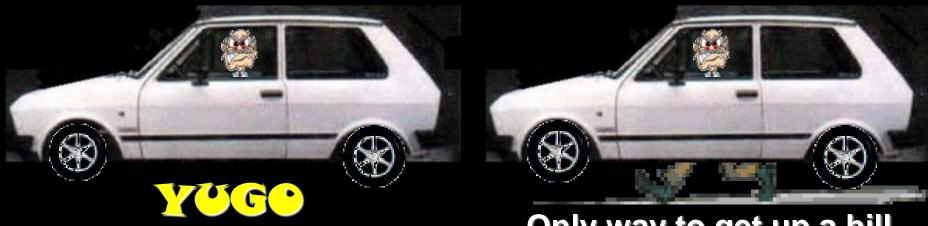


## And Your Kids "Sorry" – because of a bad education





## And finally – the real opportunity cost of a bad education is that you have to drive a ?



Only way to get up a hill

Which would begin to rust while still in the show room,

Would shake when it hit 35 mph,

Would break in half going over RR tracks,

And would never be stolen even if you left the keys in it with the motor running.

Would go from 0 - 60 in  $4 \frac{1}{2}$  months.





## The Yugo on the inside or under the hood



Anytime you filled the Yugo with gas, you doubled its value. Putting seats in tripled the value of the car.



# So, go to school determined to get a good education.





## **THE MARKET SYSTEM AT WORK** 20. The Three Basic Questions... <u>What</u>, <u>how</u>, & <u>for whom</u> 1. What will be produced?







## **THE MARKET SYSTEM AT WORK** The Three Basic Questions... **1. What will be produced?**







2. How will the goods be produced?

#### **THE MARKET SYSTEM AT WORK** The Three Basic Questions...

- 1. What will be produced?
- 2. How will the goods be produced?
- 3. Who [For whom?] will get the goods & services?







## **Competition and the Invisible hand**

Smith is saying that participants in the economy are motivated by self-interest & that the "invisible hand" of the marketplace guides this self-interest into promoting general economic well-being.

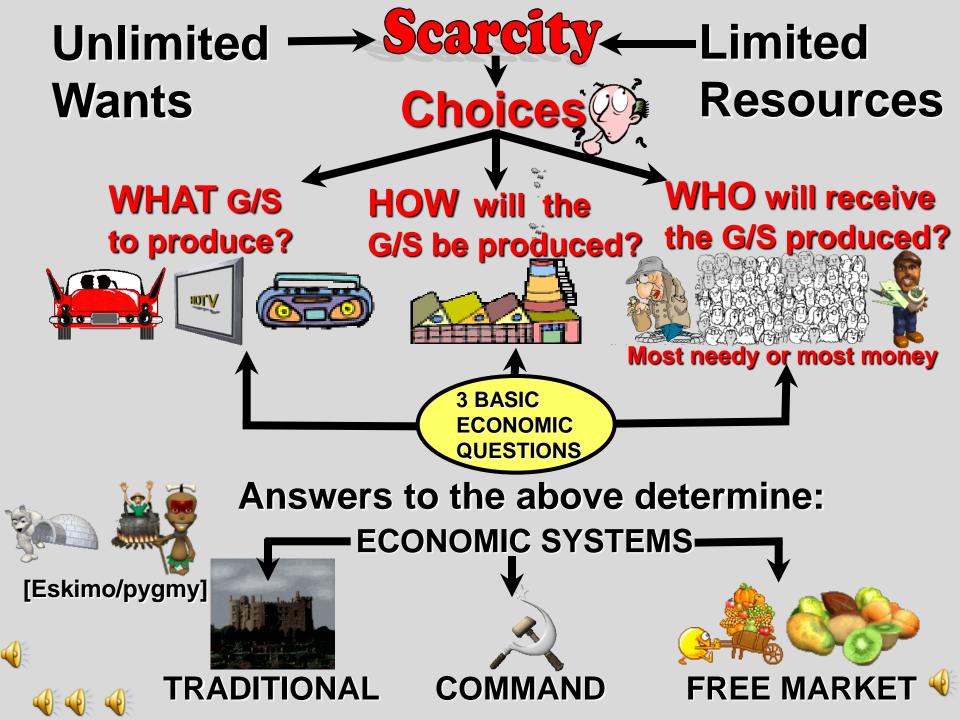
## The Case for the Market System

Adam Smith said the **"invisible hand"** determines what gets produced, how, & for whom. It is the invisible hand that **moves us along the PPC**. The invisible hand is now called the **market mechanism**. Its essential feature is the **price signal.** 









Economic Systems – how a society produces products

#### A. Traditional, B. Pure Command, C. Market, and D. Mixed

- 1). Capitalism[28. closest to pure market but has some pure command]
- 2). Democratic Socialism[29. Government owns some of resources]
- 3). Authoritarian Socialism [Communism]

The way the 3 basic questions are answered determine an economic system.

#### I. Traditional - [where "CUSTOM RULES"] 21. looks to past

A. What, how, and for whom are answered by tradition

- B. Change is resisted, no technology [clashes with tradition]
- C. Heredity and caste system limit the economic role of individuals.
- D. 35,000 Pygmies in the Ituri Forest are an example.
- E. Men hunt & women/children gather/prepare food.
- F. Wear loincloths from bark of fig trees ["PYGLER" or "PYBUGLE Boy"]
- G. Eat mushrooms, berries, roasted grasshoppers, monkeys, & plantain
- H. Eat bone marrow & everything else in an elephant.



## **1. Traditional Economy**

• Economic activity is based on ritual, habit and custom.

#### Strengths

- Everyone knows their role.
- Little uncertainty over what to produce or how to produce.
- The question of For Whom to produce is answered by custom.
- Life is generally stable, predictable, and continuous.

#### Weaknesses

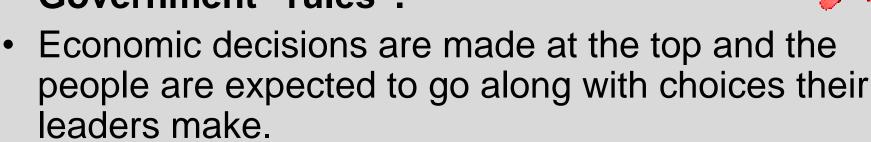
- Tends to discourage new ideas.
- Lack of progress leads to lower standard of living.





## **2. Command Economy**

Government "rules".



#### Strengths

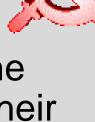
 Change direction drastically in a relatively short time (The USSR went from an agrarian to industrial nation in a very short time).

#### Weaknesses

- Not designed to meet the wants and needs of individuals.
- Lack of incentives to work hard leads to unexpected results.
- Large bureaucracy for economic planning.
- Not flexible in dealing with minor day to day problems.
- People with new or unique ideas are stifled.





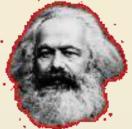






2. Pure Command – where the "Government Rules" 22. The government controls all resources. What, How, and For Whom answered by the government. 3. Pure Market - where "Individuals Rule" 23. Individuals and firms control all resources. The government has no say. WHAT, HOW and FOR WHOM are decided by individuals. Adam Smith

**30.** Authoritarian Socialism (<u>communism</u>)-closest to **pure command**. The G owns **most of** the factors of production. Communism was born in **Russia**. Father was Karl Marx. Marx called owners **bourgeoisie** and he called workers **proletariat**. Karl Marx



4. MIXED – all countries have mixed economic systems 27. Mixed combines elements of market & command. How are these words used in everyday life?

1. Traditional 2. Command 3. Market



## 3. Market Economy

- People and firms act in their own best interest to answer economic questions.
- Markets allow buyers and sellers to come together in order to exchange goods and services.

#### Strengths

- Markets can adjust over time.
- Freedom exists for everyone involved.
- Relatively small degree of governmental influence.
- Decision making is decentralized.
- Variety of goods and services are produced.
- High degree of consumer satisfaction.





"Invisible" hand

**Adam Smith** 

#### Weaknesses Of A Market Economy

- The primary weakness is deciding for whom to produce.
- The young, sick, old, and lazy would have difficulty in a pure market environment.
- Markets sometimes fail.
  - Competition (monopolies may develop)
  - Resource mobility (resources are sometimes hindered from moving about)
  - Availability of information (producers often have more information than do consumers, which gives them an advantage)



#### WEALTH OF NATIONS - 1776

[explained the free market concept]

(25) The "INVISIBLE HAND" - when individual consumers/ producers **compete** to achieve their own private **self-interest**. The "role of government" (26) ["LAISSEZ-FAIRE"-"HANDS OFF"] is limited to national defense, public education, maintaining the infrastructure, and enforcing contracts. Smith said the market system was best because it encouraged **specialization**, resulting in increased output & more economic growth.

Government was like an "INVISIBLE FOOT" - government action to benefit particular groups. Keynes will say the G can act as a pressure In loving memory gauge, letting off excess steam or building it up as needed. [active-not all inclusive role]

My name is mercantilism.



Smith's book was an



Wealth doesn't come from an accumulation of gold and silver but from **more productive people**. A nation is wealthier if its citizens Are more productive. It is the ability of people to **produce products** and trade in free markets that creates a nation's wealth.





of mercantilism





Smith said that we constantly try to make ourselves better off. It is self interest that makes us work hard, take risks, & in the end benefit others thru our activities. If people want to serve their own self interest, they had to serve others first.

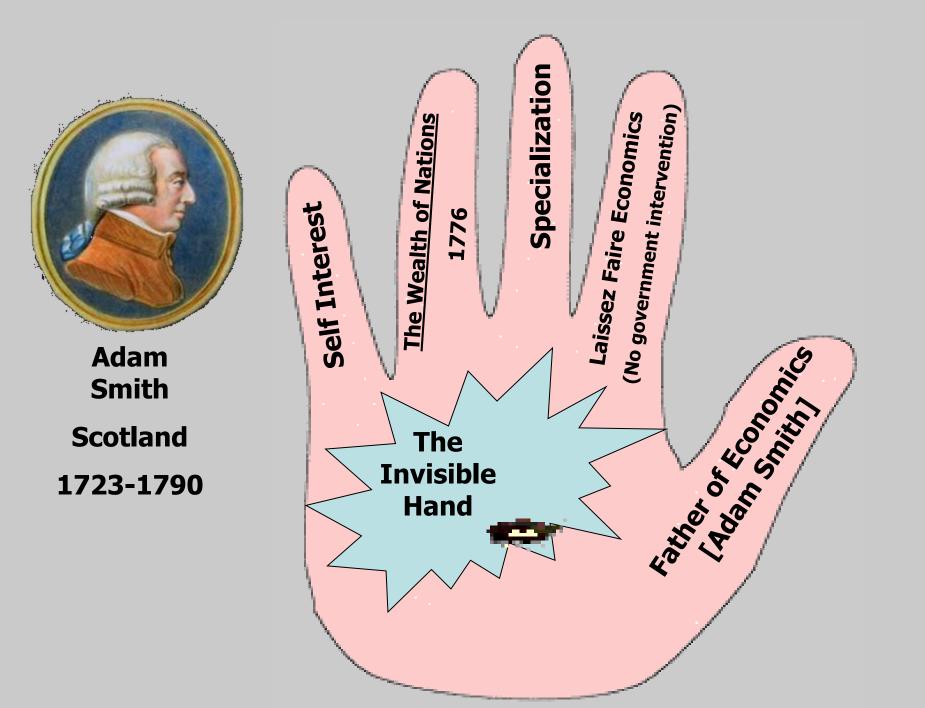
#### It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to our own interest.

In other words, the butcher, brewer, and baker do not give us our dinner because they love us or because they want to assist us. They give us our dinner because they cannot get what they want from us until they first give us what we want. Smith said we are led by an "invisible hand" to do good for others. In the most famous passage in The Wealth of Nations, he says:

Every individual...neither intends to promote the public interest, nor knows how much he is promoting it...he intends only his own gain, and he is in this, as in many other cases, led by an "invisible hand" to promote an end which was no part of his intention.



Of course, **Karl Marx** saw **self interest as hurting others**. He believed **capitalists exploited the workers** by paying them far less what they were worth.

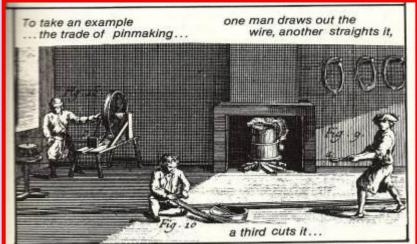


Adam Smith's Famous Pin Factory Exam

#### One man could do maybe **10 pin per day [1 man = 10 pins]** Now if there is **specialization**

- 1 man draws the wire out
- 1 man straightens the wire
- 1 man cuts the wire
- 1 man sharpens the point
- 1 man flattens the head

There are **18 distinct operations** - some perform 2 or 3 operations **10 people** do **48,000** pins per day **1 man = 4,800 pins per day** 



#### Three circumstances come from this specialization.

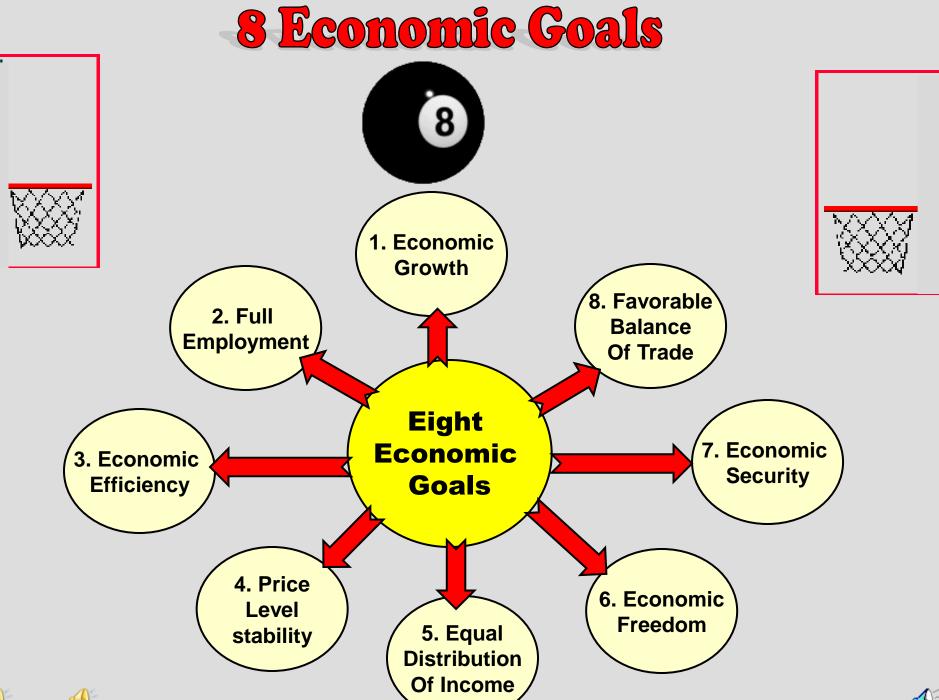
- 1. Increased **dexterity** (learning by doing)
- 2. Saving time (lose time when you move to different operations)
- 3. Invention of machines (fosters **inventiveness**)





#### Types of Economic Systems

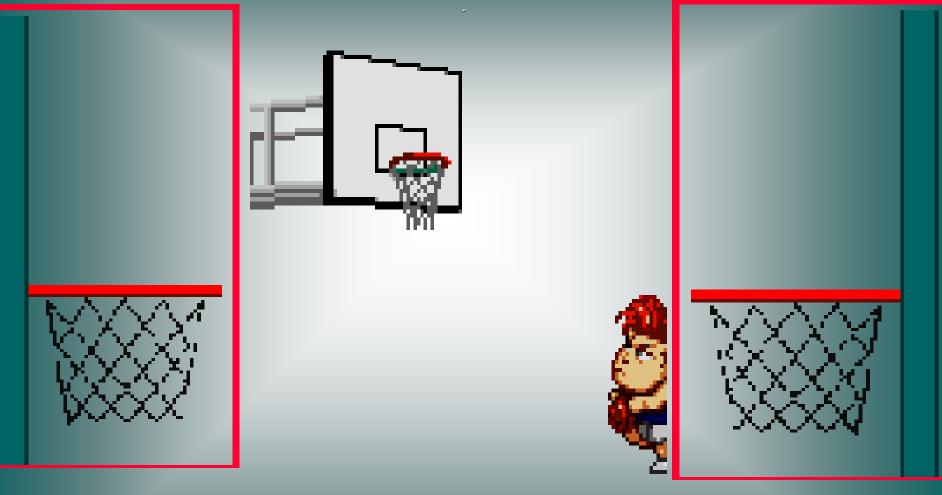
Traditional	Market	Command
<ul> <li>Economic decisions are based on customs and beliefs.</li> <li>Change is discouraged and sometimes even punished.</li> <li>Methods of production are often inefficient.</li> <li>Family and community ties are strong.</li> </ul>	<ul> <li>Economic decisions are made by individuals.</li> <li>Individuals own the factors of production and choose what to produce based on the information provided by market prices.</li> <li>Consumer choice is large.</li> <li>There is little incentive to engage in unprofitable ventures like caring for the sick.</li> </ul>	<ul> <li>Economic decisions are made by government leaders.</li> <li>The government owns the factors of production.</li> <li>Prices are set by the government.</li> <li>Consumer choice is often limited.</li> <li>Resources can be quickly rerouted.</li> <li>Income distribution can be controlled by the government.</li> </ul>







#### **8 Economic Goals**









Economic Growth [Increase in GDP or per capita GDP]
 3% annual growth will increase our standard of living.
 1929-Per capita=\$792; 1933-Per capita=\$430; 2009-per capita= \$48,000

8 Economic Goals

2. Full Employment – about 95-96% employment is full employment. In 1982, unemployment was 10.8% [12 M unempl.]

3. Economic Efficiency – resources are scarce so they must be used wisely. Wasting resources means fewer goods and services can be produced.



"Doing the best with the resources we have."







Reasonable inflation of 1-2% is OK.

-8 Economic Goals

4. **Price Level Stability** – sizable inflation or deflation should be avoided. We had over 10% in 73, 79, & 80. Inflation was 2% in the 1950s, 2.3% in 1960s and 7.4% in 80s.

A person making \$25,000 a year at age 30 would need (with average inflation of 5%) \$125,000 a year at age 65 to have the same standard of living.



In 1982, it took \$2.31 to buy what \$1 bought in 1972.

In 2011, it took \$2.37 to buy what \$1 bought in 1982.

#### In 1945, \$1.50 bought what \$1.00 did in 1860. Today, it takes \$11 to buy what \$1 bought in 1945.

## HYPERINFLATION in Brazil 1988-1994 1988 - 1,300% 1991 - 1,000% 1989 - 2,900% 1992 - 1,260% 1990 - 44% 1993 - 1,740% Prices in 1994 were 4 million times higher than in 1988.

- If we had Brazil's inflation from 1988 to 1994:
- 1. **\$35** Blue jeans would increase to **\$140** million per pair.
- 2. Gas would increase from \$2.00 to \$5 million per gallon.
- 3. \$20 for a pizza and movie would increase to \$80 million.
- 4. One new real was exchanged for 2,750 of the old reals.



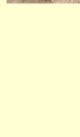




5. An Equitable Distribution of Income. One group shouldn't have extreme luxury while another is in stark poverty.

The richest 1%(3 mil.) have as much total income after taxes [average \$400,000 a year as the bottom 40% [100 million people]. The richest 1% have greater wealth than the bottom 90% of the population.











## HOUSEHOLDS AS INCOME RECEIVERS Personal Income (%)

Only 1 in 7 within this group even works. Lowest 20% Y Group[up to \$16,358] 3.4% [only 3% graduate from college] 2<sup>nd</sup> 20% Income Group [\$16,359-\$32,188] 8.6% [only 4.6% graduate from college] Middle 20% Income Group [\$32,189-\$57,212] 14.5% [only 12% graduate college] 4th 20% Group [\$57,213-\$97,298] 22.9% [25% graduate from college]

50.5% Highest 20%[over \$97,298] [51% graduate col.]

Income differences are caused by differences in IQ, energy, health, social skills, character, ambition, physical attractiveness, talent, and luck.

## 6. Economic Freedom

#### You are free to:

- Choose your occupation
- Choose where and when you work
- Work for yourself or someone else
- Leave your job and to move to another job

#### • Businesses are free to:

- Choose which workers they want
- Choose where and how they produce



 Economic Security – provision should be made for those not able to take care of themselves – handicapped, disabled, old age, chronically ill, orphans. Protection from lay-offs [unemployment insurance]. Also no discrimination.

#### 43 million Americans have some type of disability.

- A. Hearing impaired: 22 million (including 2 million deaf)
- B. Totally blind: 120,000 (Legally blind: 60,000)
- C. Epileptic: 2 million
- D. Paralyzed: 1.2 million
- E. Developmentally disabled; 9.2 million
- F. Speech impaired: 2.1 million
- G. Mentally retarded: up to 2.5 million
- H. HIV infected: 900,000



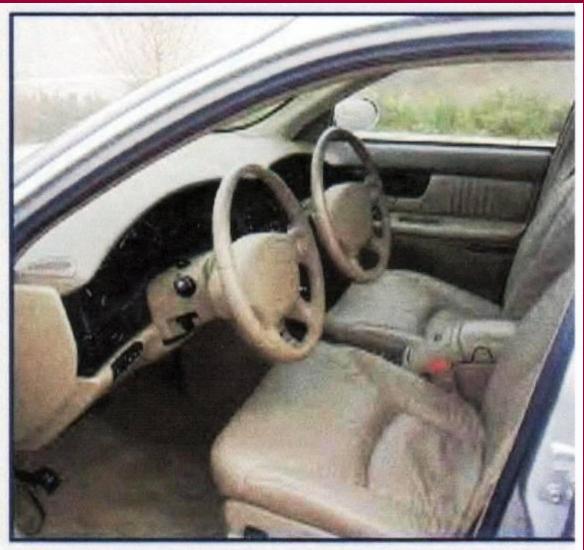
Social Security and Medicare provide security for older people.

Balance of Trade. Over \$400 billion a year the last few years.
 Some of these goals are 31. complementary [economic growth & F.E.] and some 32. conflict [F.E. and price level stability].





#### Our Latest Efforts To Sell Cars To The Japanese Who Drive On The Left Side





#### Characteristics of Market Systems





#### ROLE OF SELF-INTEREST







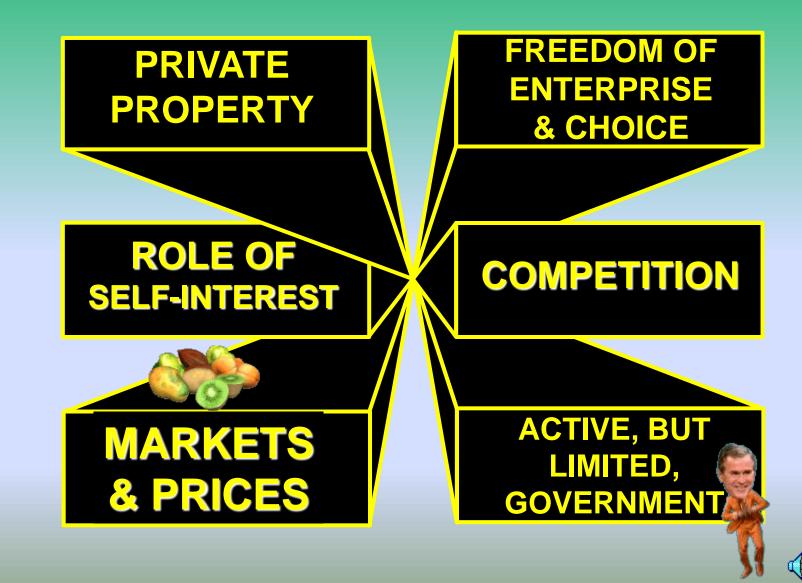






4







1. Private Property – the right of individuals to exercise control over things owned. Freedom to negotiate binding legal contracts.



TOMET

TO CHOS

**K-Mart**<sup>•</sup>

34 Contracts are legally binding in oral or written form.

[A verbal agreement is binding only if it involves a small sum of money over a short period of time and does not involve real estate purchases.]

2. Freedom of Enterprise <sup>33</sup> (business) & Choice. Can move within the economy to any job, to buy or sell property, or start a busines The consumer is "sovereign" (king) in the economy. His dollars vote as it is he who decides what gets produced. The U.S. has over 100,000 business failures each year.

3. Role of Self-Interest-each producer or consumer tries to do what is best for themselves. Self interestprofit motive is the main force driving the economy. Producers aim for maximum profits. Consumers seek the lowest prices & highest quality.

#### Pure Capitalism (No G) and the Circular Flow [Capitalism – "private ownership of capital"]

4. **Competition** – economic rivalry of a large number of buyers & sellers. [central mechanism of market economy] **Monopolies become fat & unresponsive** to consumers (**higher prices & fewer choices**). Competition prevents one seller from controlling the market. Monopolies are **"price makers"**. It is better to have **"price takers"** who are at the **"mercy of the market."** 

A monopoly's attitude i "We don't Care We don't have to We're a monopoly!



"Competition" and "self-interest" are like an "invisible hand". Monopolies can charge an arm and a leg.

So, the **"invisible hand"** refers to the way a market economy manages to harness the **power of self-interest** for the good of society.



And – an appendage to be named later,

like a -





The role of government was one of "laissez faire." ["hands off"] In the words of Adam Smith, the government should not interfere with the operation of the economy except serve as an arbitrator in settling disputes.

Arbitrator

The government's role:

- (according to Smith)
- a. provide defense,
- b. administer justice, and
- c. maintain certain public institutions.

The government controls about 1/3 of all economic activity. [settling disputes]

#### **Developed** and **Developing** Nations **Developed Nations** – they have access to advanced technology, natural resources & a way of life based on large industries. 1.7 of the world's 6.7 billion live in developed nations. These 23 nations include the U.S, Canada, Australia, Switzerland, Denmark, Hong Kong, Sweden, Singapore, Germany and Britain. **Developing Nations (Third World Countries)** – poorer, less **industrially** nations of the world. They are just beginning to develop industrially and are **extremely poor**. They have very high rates of illiteracy, higher unemployment rates, extensive underemployment, hyperinflations, primitive shelter, high infant mortality rate [200 per 1,000 compared to 5 per 1,000 in developed countries], chronic food shortages, And explosive population growth. Over half still work in agriculture. In Pakistan, 85% of the population live on less than \$2 a day. About 5 billion of the world's 6.7 billion live in developing nations.

There are more than **150** developing nations, most located in Africa, Latin America, and Southeast Asia.

21% of the worlds 6.7 billion people live on less than \$2 a day.

### Index of Economic Freedom [Ranking of 157 countries for 2008]

MOSTLY FREE

FREE

MOSTLY UNFREE

REPRESSED

Hong Kong
 Ireland

**5. United States** 

20. Belgium

31. Spain

48. France

101. Brazil

126. China

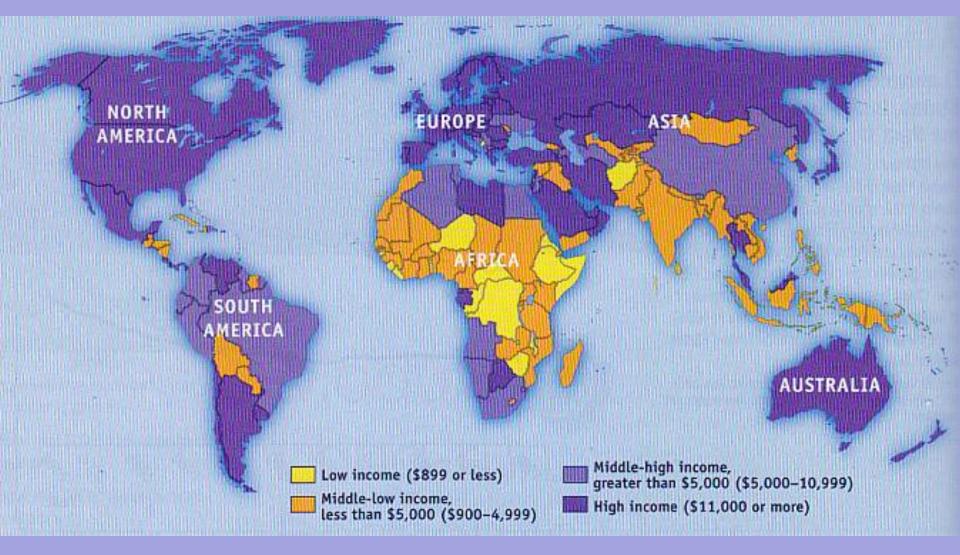
134. Russia

148. Venezuela

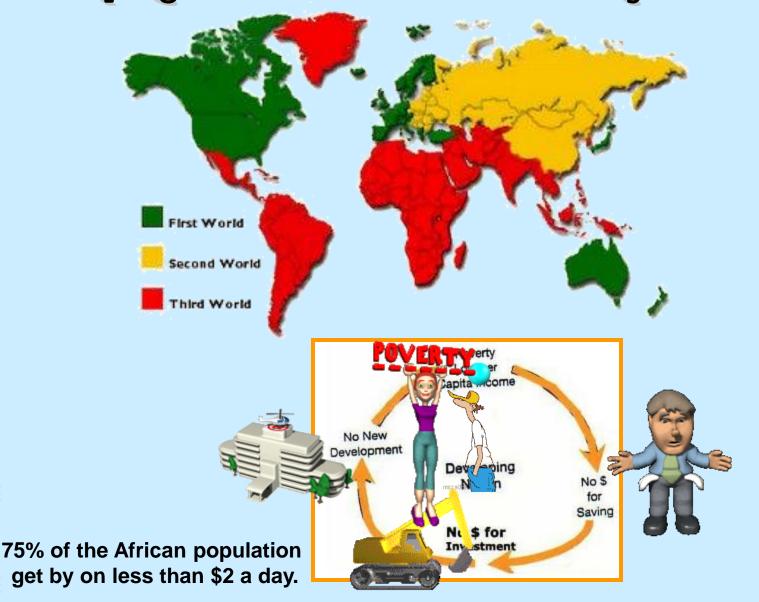
156. Cuba

157. North Korea

#### **Developed** and **Developing** [3rd World] Countries



### **Developed** and **Developing** [3<sup>rd</sup> World] Countries **Developing Countries Have No Money For Investment**



# **Private and Public Sectors**

Private Sector – economic activities of private individuals and private businesses (owned by

individuals or groups of individuals).



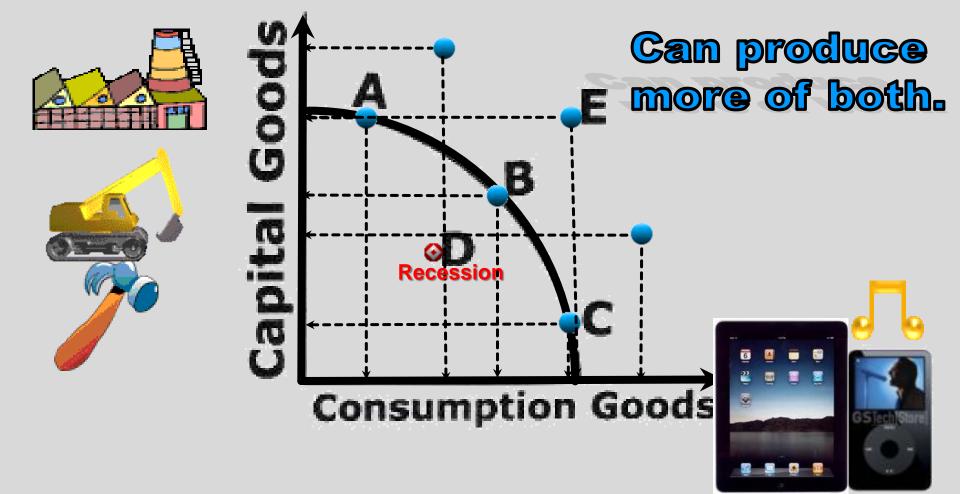


**Public Sector** – economic activities under the control of the federal government, the 50 state governments, or the 88,000 local governments.

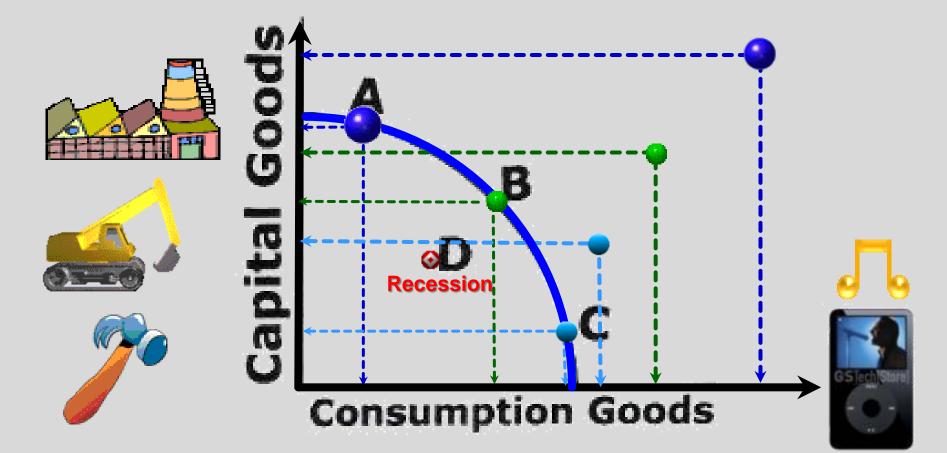


# **Production Possibilities Curve** [better known as the "PPC"]

**Production Possibilities Curve [PPC]** Let's demonstrate economic growth [result of more/better resources or better technology]



PPC [Economic Growth] Where a country produces today determines where they can produce tomorrow. Growth after combo C After combo B After combo A



## TINSTAVALFL **There Is No Such thing** As A Free Lunch. **Everything has a cost.** This cost [opportunity cost] is one of the most important concepts of the PPC.

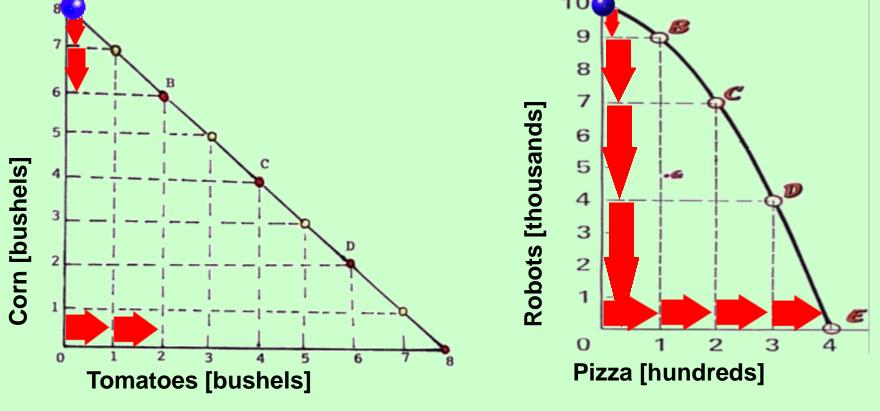
В

Food **Outside the PPF:** impossible points. 100 inside the PPF: productively inefficient ۵U points. 50 20

Gained food, gave up computers, opportunity cost was computers. Gained computers, gave up food, so opportunity cost was food. Computers



# Production Possibilities Curve [PPC] Let's look at the difference between constant and increasing [opportunity] cost.

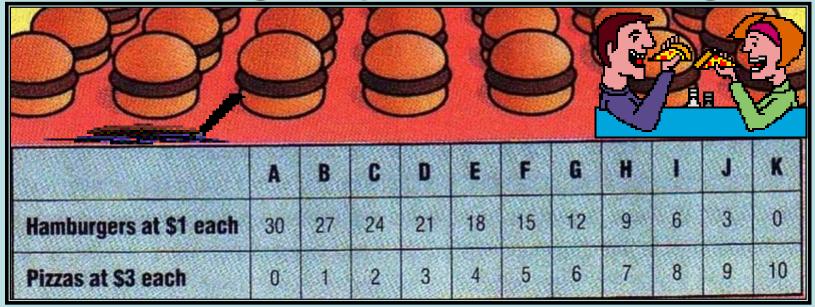


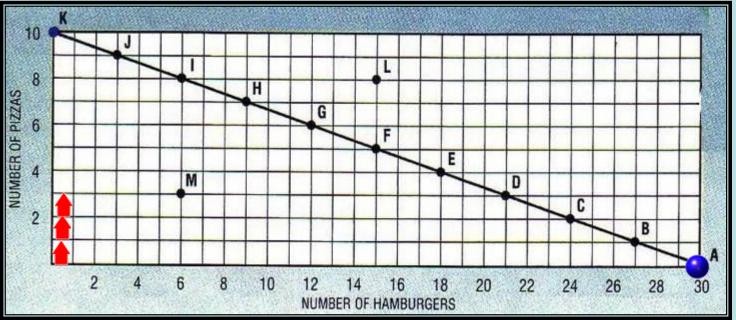
**Constant [opportunity] Cost** 

Increasing [opportunity] Cost



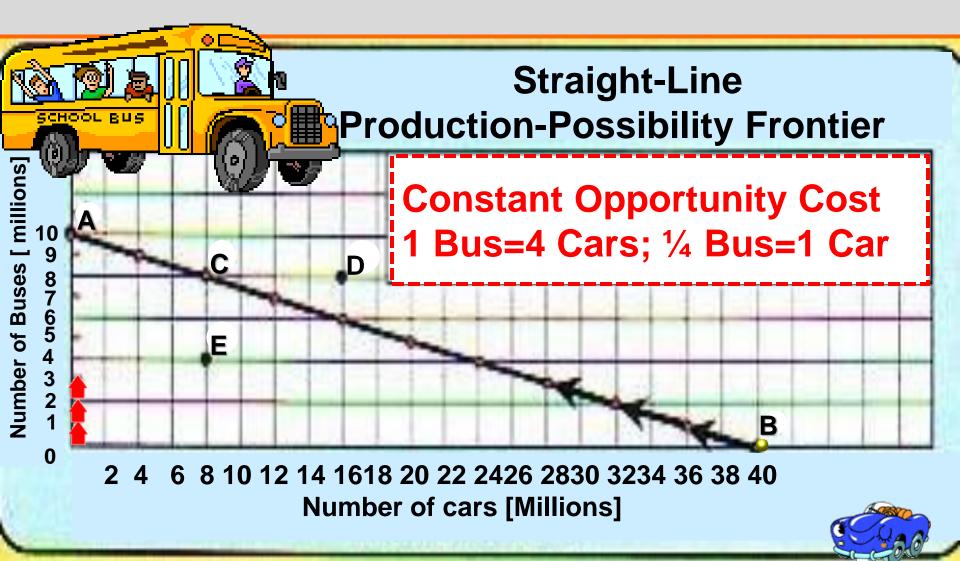
#### Number of hamburgers & pizzas that can be bought for \$30.

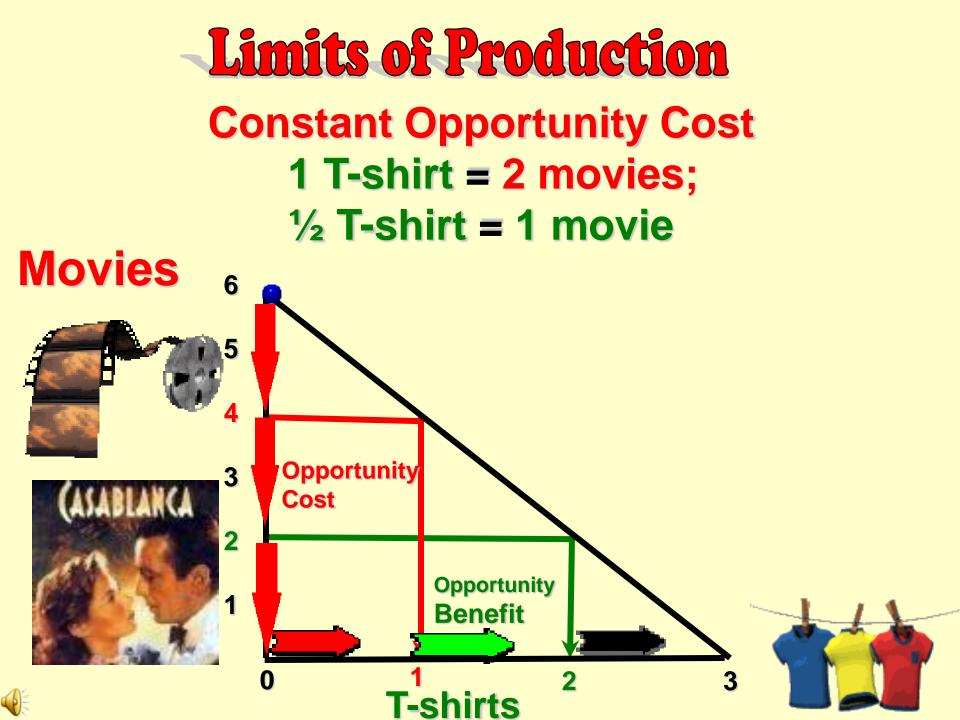






### Limits of Production

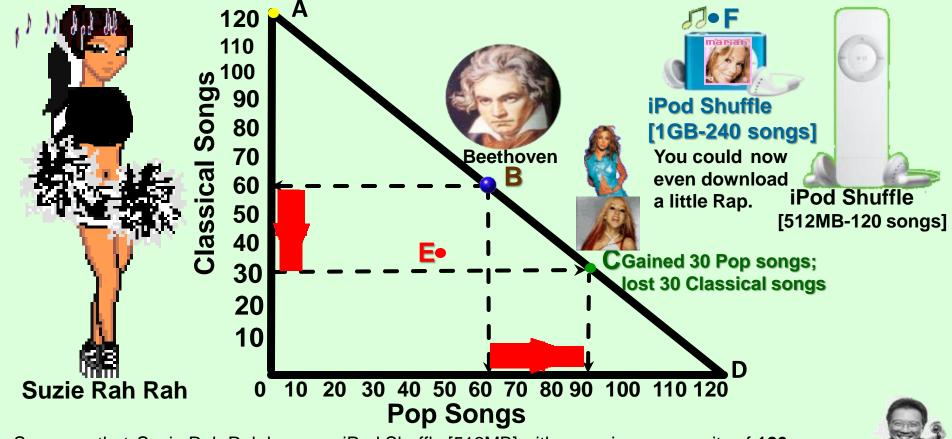






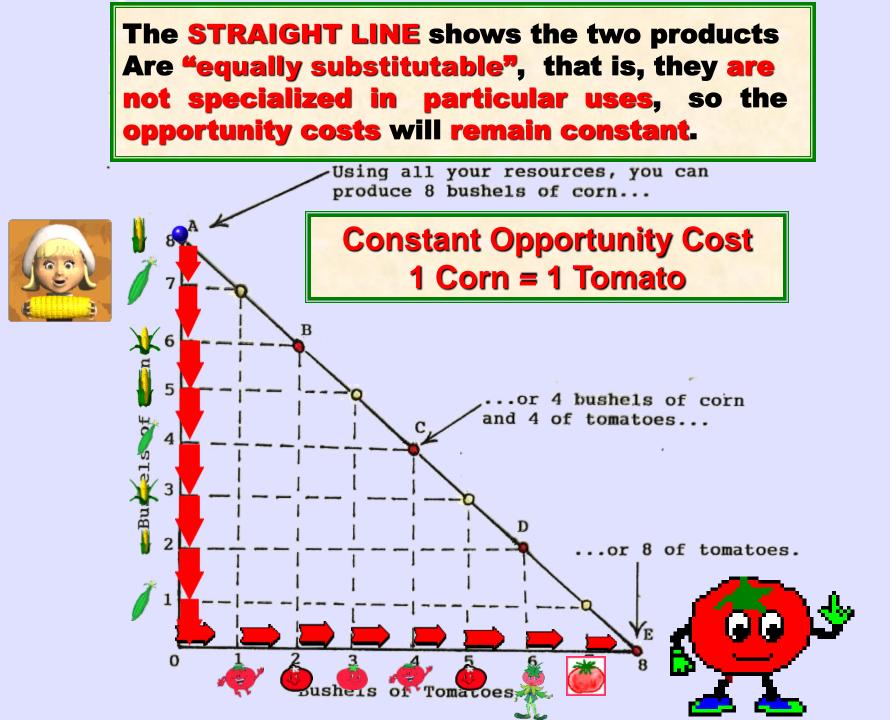
If we are inside the PPC, does anything have to be given up? So – the answer is ... The 4 assumptions of the PPC [the "curve" are these. **Fixed** Resources **Full** Employment **Fixed** Technology **Two** Products F Unattainable [More/better Resources, Technology] \*Shows opportunity cost Robots more than anything icient This PPC Line means we are operating at full capacity with best available resources/  $\square$ technology & producing at its full potential. **Boom Boxes** 

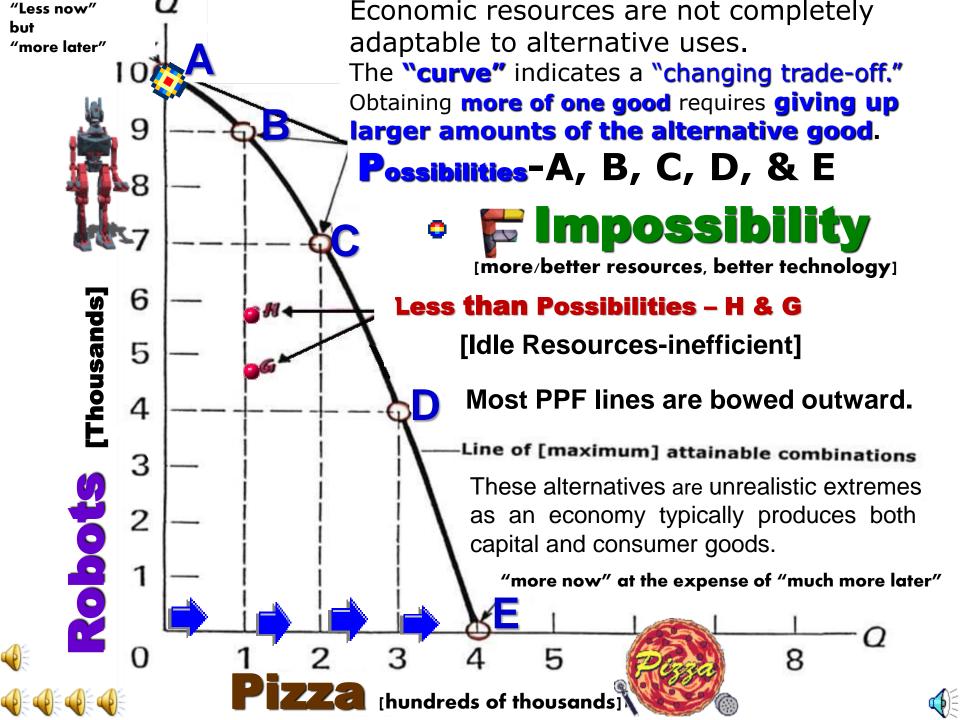




Suppose that Suzie Rah Rah buys an iPod Shuffle [512MB] with a maximum capacity of **120 songs** and loads up **60 Classical songs** and **60 Pop songs**. If she had put **120 classical songs** on her iPod, then there be no room for Pop songs without giving up some classical like Yo-Yo Ma. Notice that at **point E**, Suzie can add **more music of either w/o incurring opportunity cost**. Say Suzie is currently at **point B** and moves to **point C**. **She would be gaining 30 Pop songs but losing 30 classical songs**. If Suzie moves from **point C** back to **point B**, she would **gain 30 classical songs and lose 30 Pop songs**.

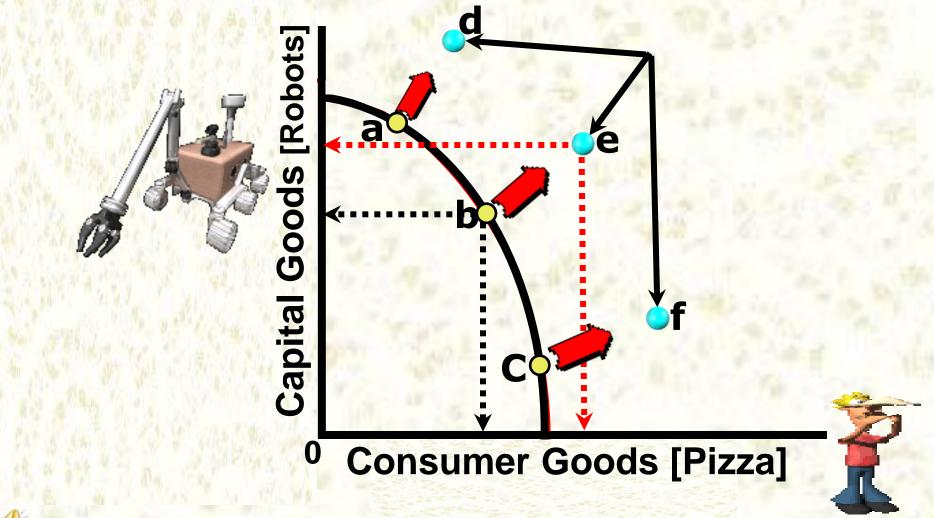
What needs to happen for Suzie to be able to move beyond PPF curve **ABCD** [Let's say **point B** to **point F**? **If Suzie bought an iPod with greater storage space, like the iPod Shuffle [1GB - 240 songs].** If Suzie is using the maximum capacity of the smaller iPod Shuffle [512MB with120 songs], what is the opportunity cost of classical songs she must give up to get one more Pop song? **Constant opportunity cost of "1" Classical song for each Pop song.** 



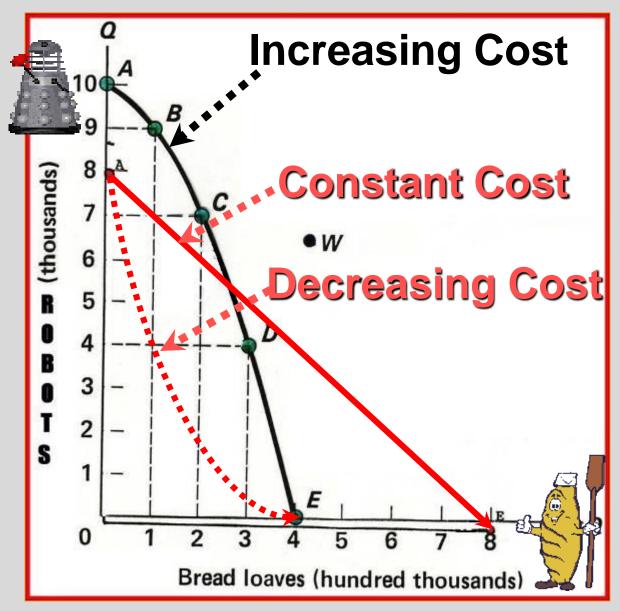


### Demonstrating "Economic Growth" on a PPC Graph

**Economic Growth** - ability to produce a larger total output over time.

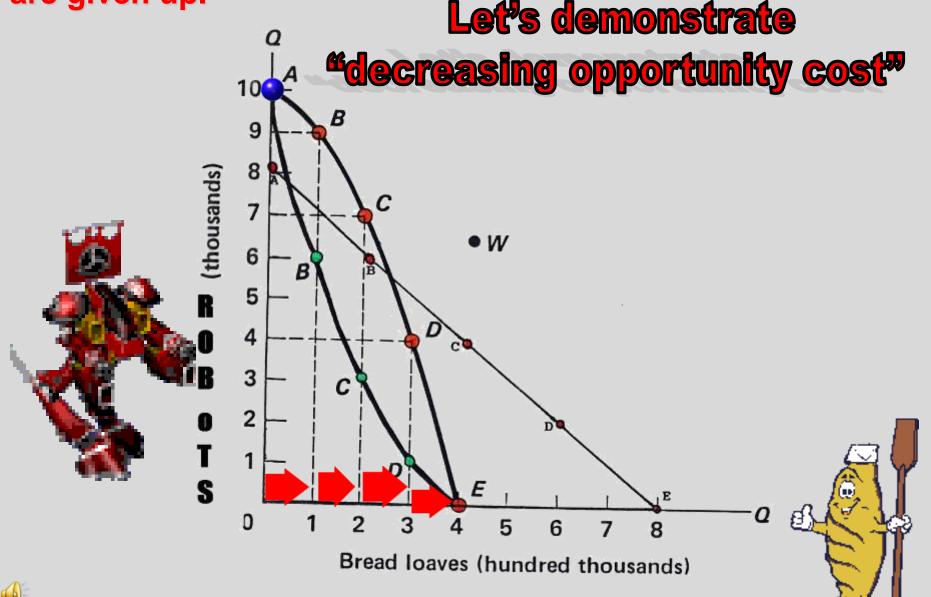


The straight line shows the two products are "equally substitutable", that is they are not specialized in particular uses, so the opportunity costs will remain the same.

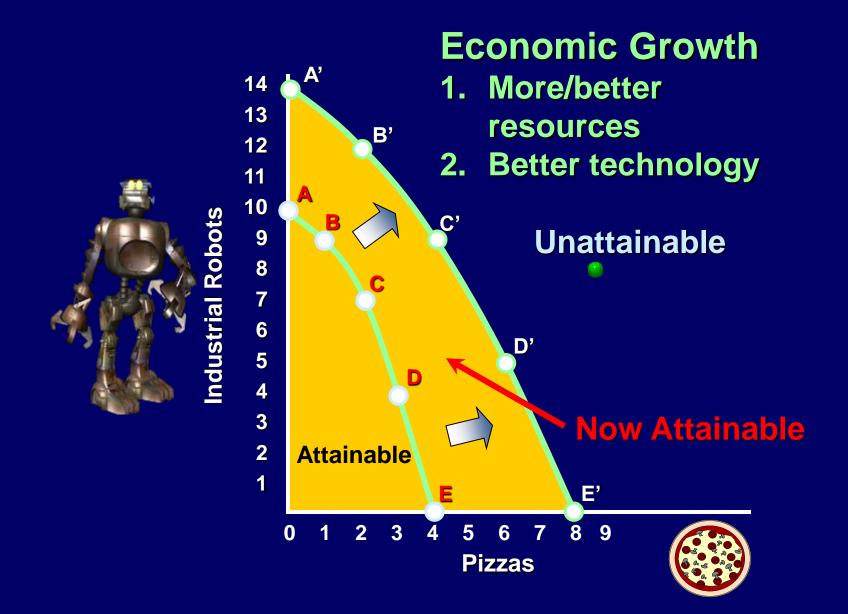




A convex curve (bowed-in) shows the Law of Decreasing Cost – for each additional bread – decreasing amounts of robots are given up.



#### **Production Possibilities Curve**



## Four Assumptions for our PPC Model

- Resources are fixed. There is no way to increase the availability of land, labor, capital or entrepreneurship. However, reallocation of these resources is possible.
- 2. All resources are fully employed. No unused land, labor, capital, or entrepreneurship exists. The economy is running at full production and producing goods and services at the least cost (productive efficiency].
- 3. Technology is fixed. No new technological breakthroughs. PPC represents one specific time period.
- 4. Only two things can be produced[2-good model]

#### "There is no free pizza."

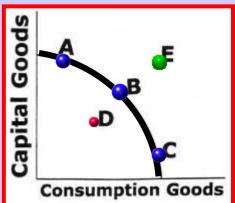








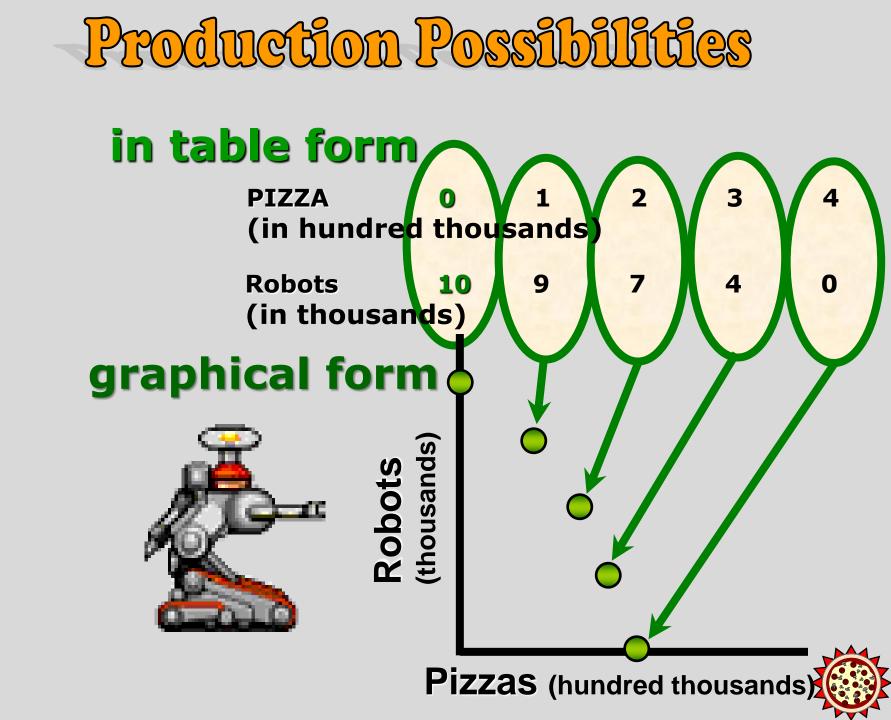
- **1. Scarcity** is represented by the frontier line.
- 2. **Choices** -represet by pts A, B. or C. [Choices implies "**opportunity cost**"]



- 3. **Opportunity Cost** is illustrated in terms of moving from **one point to another** on the PPC, when resources are being utilized to their full potential. [must make choices]
- 4. Efficiency producing maximum output with available resources and technology. We can't increase production of one good without decreasing that of another.
- 5. Economic growth occurs for one of two reasons.
   A. More resources [land, labor, or capital] become available.
   B. Technology improves. [more outputs from same inputs]







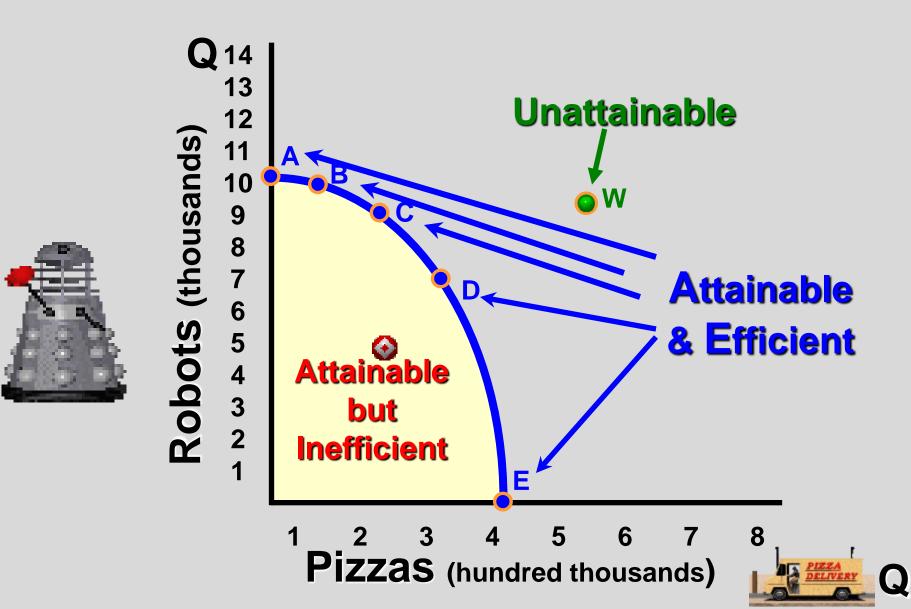


Production Possibilities Limited Resources means a limited output...

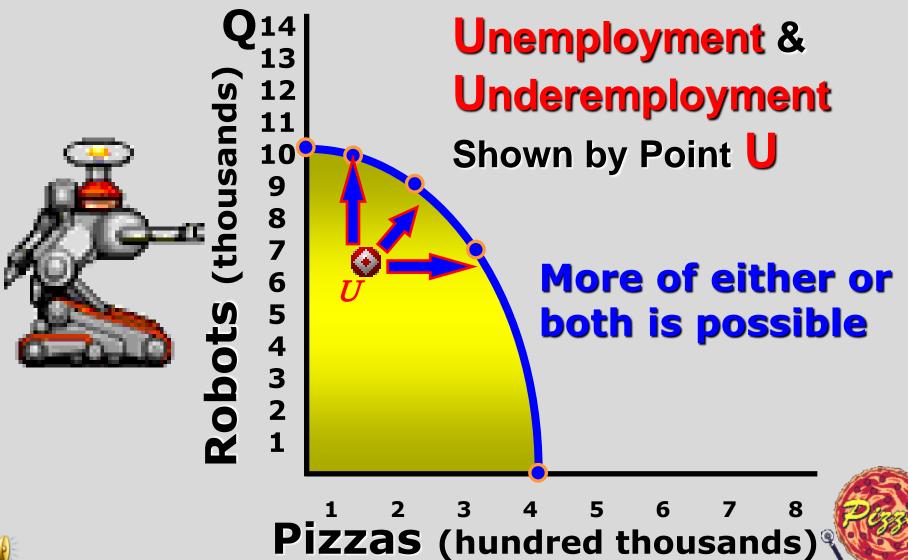
At any one point in time, a full-employment, full-production economy must sacrifice some of product X to obtain more of product **V**. Or, sacrifice some of product V

to obtain more of product X.

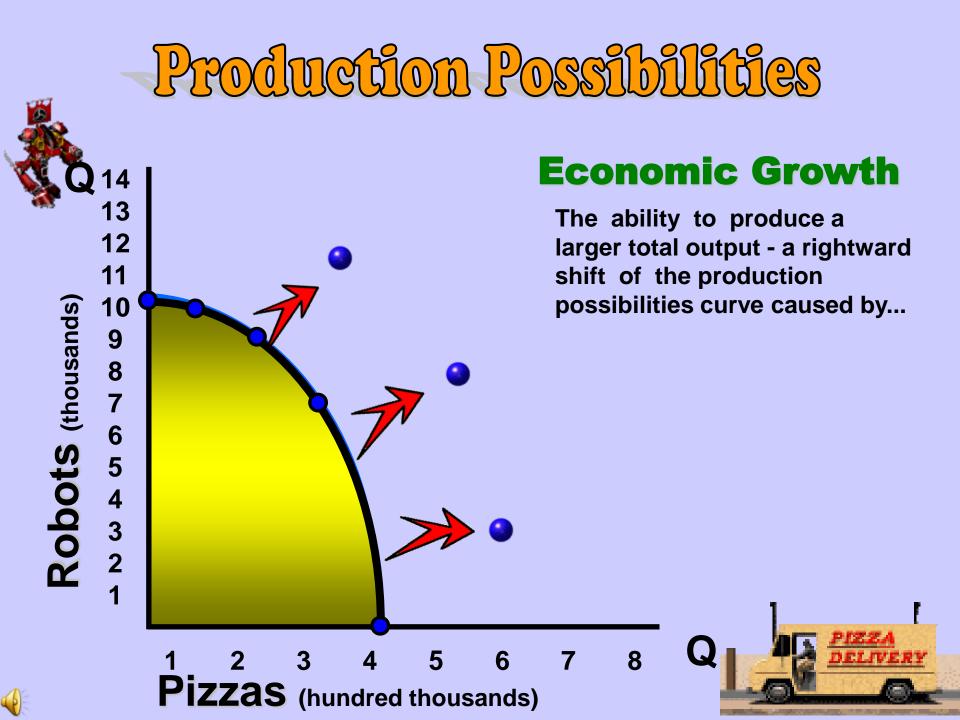
# Production Possibilities



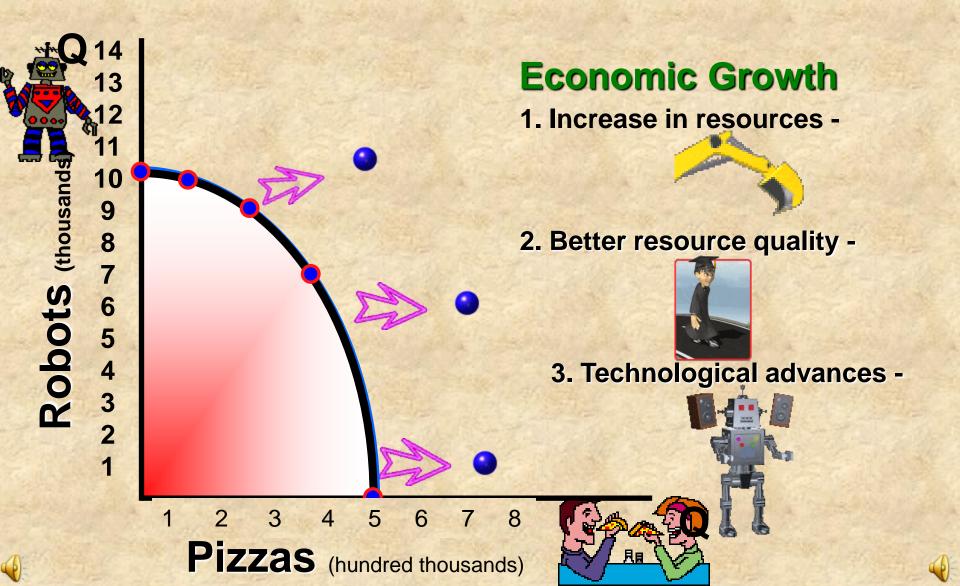
# Production Possibilities







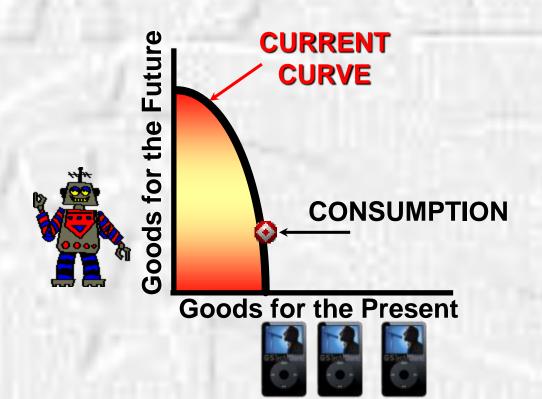
### Production Possibilities More of either or both is possible.



#### Production Possibilities

#### **Two Examples of Economic Growth**

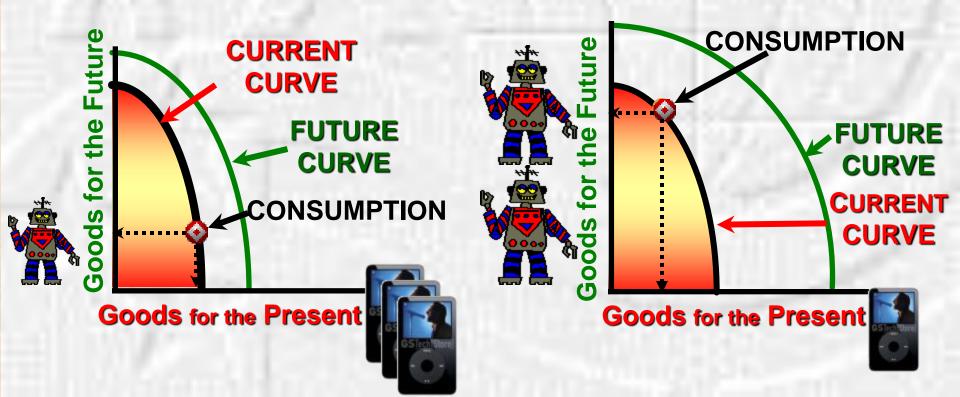
#### FAVORING PRESENT GOODS



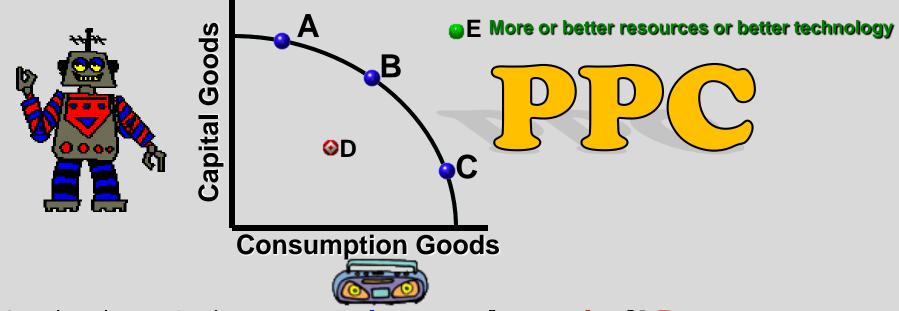
**Production Possibilities** Two Examples of Economic Growth

#### FAVORING PRESENT GOODS

#### FAVORING FUTURE GOODS



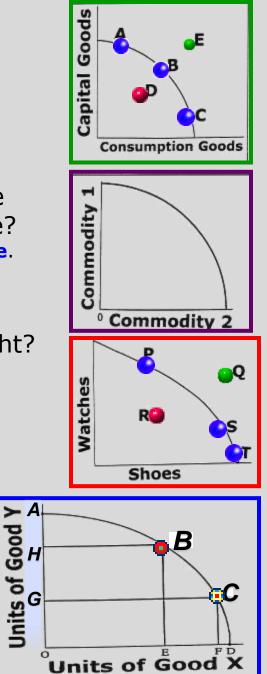
Production Possibilities



- 41. At what letter is there **unemployment** [**recession**]? **D**
- 42. What letters represent resources being used in their most productive manner? [full employment, full production, and best available technology] A, B, or C
- 43. What letter represents an **improvement in technology**, therefore a **new PPC** frontier line?
- 44. The (straight line/curve) illustrates the "line of increasing cost"?
- 45. The (straight line/curve) illustrates the "law of constant cost."
- 46. At what letter would there be the most economic growth in the future if a country were producing there now?
  A What is the opportunity cost when moving from "C" to "A"; Consumption B to C; Capital & do we have to give anything up when moving from D to B? no

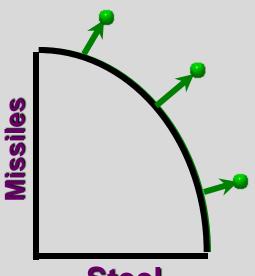
**PPC** AP Questions

- An economy that is fully employing all its productive resources but allocating less to investment than to consumption will be at which of the following positions on the PPC to the right?
   A b. B c. C d. D e. E
- 2. Which of the following best explains the shape of the PPC for the two-commodity economy shown above?
- a. Opportunity cost of producing another unit of each stays the same.
- b. Opportunity cost of producing another unit of each **decreases**.
- c. Opportunity cost of producing another unit of each **increases**.
- 3. Which of the following is **true of the PPC** on the right?
  - a. Point Q is attainable but undesirable.
  - b. Point R is unattainable but undesirable.
  - c. A technological improvement of watches would move the economy from T to P.
  - d. There is unemployment at point T because workers
  - e. The opportunity cost of moving from S to T is the # of watches given up.
- 4. If we move from **B to C** on the graph (right), the **opportunity cost** is?
  - a. AH units of good Y
  - b. OG units of good Y
  - c. EF units of good X
  - d. HG units of good Y



### PPC AP Questions

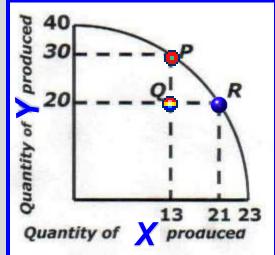
- 5. Which of the following would cause the PPC shown (right) to shift outward?
  - a. Reopening steel plants that had been closed
  - **b.** Rehiring laid-off workers
  - c. Using machinery for missile production instead of steel production
  - d. Using machinery for steel production instead of missile production



e. Developing a more efficient steelmaking process

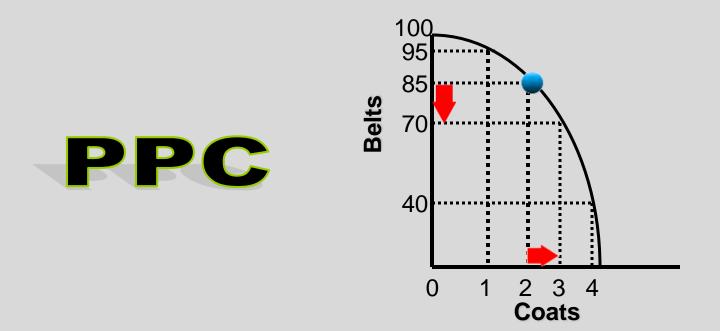
Steel

- 6. Base on the graph (right), which statements are true?
  - I. The opportunity cost of moving from P to R is 10 units of Y.
  - II. The opportunity cost of moving from R to P is 8 units of X.
  - III. The opportunity cost of moving from Q to R is 0 units.
    - a. I only b. III only c. I & II only d. I, II, & III

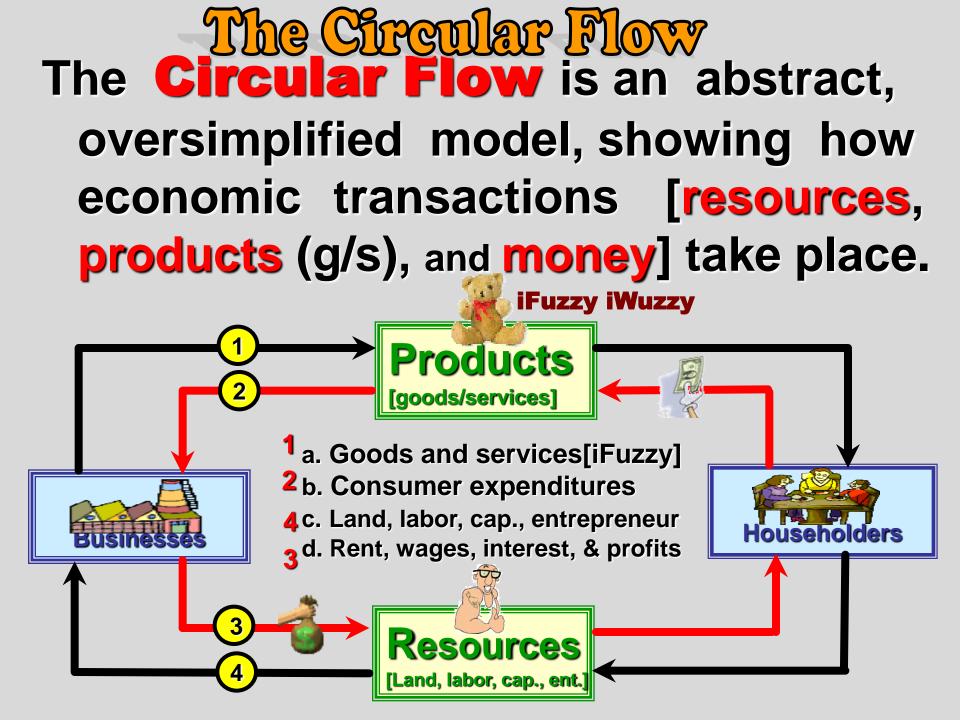


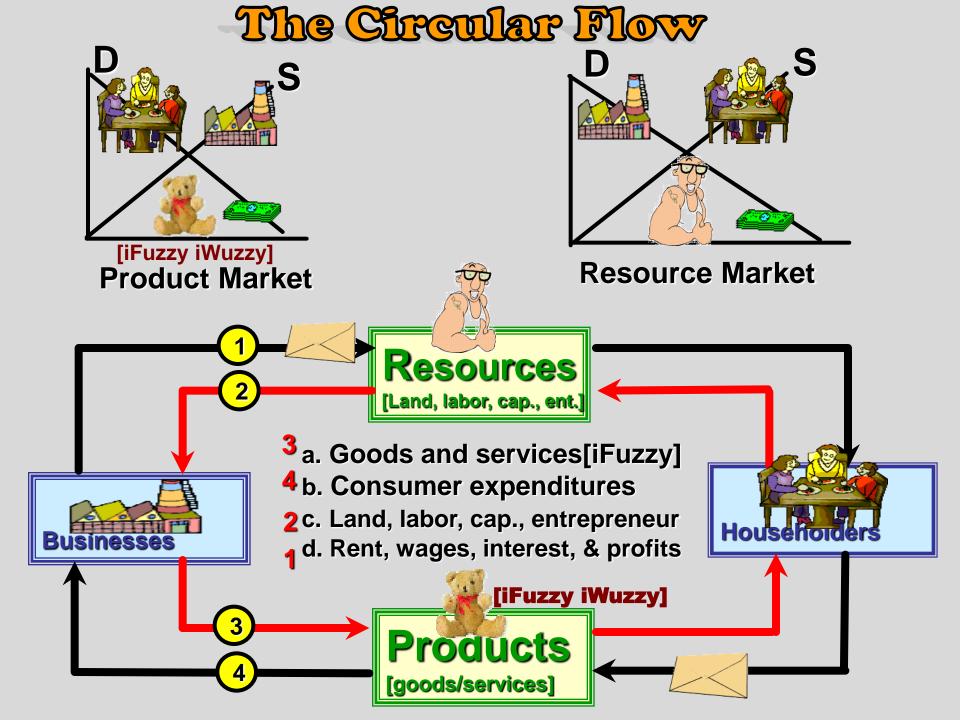
# From the 2005 Macro MC Exam

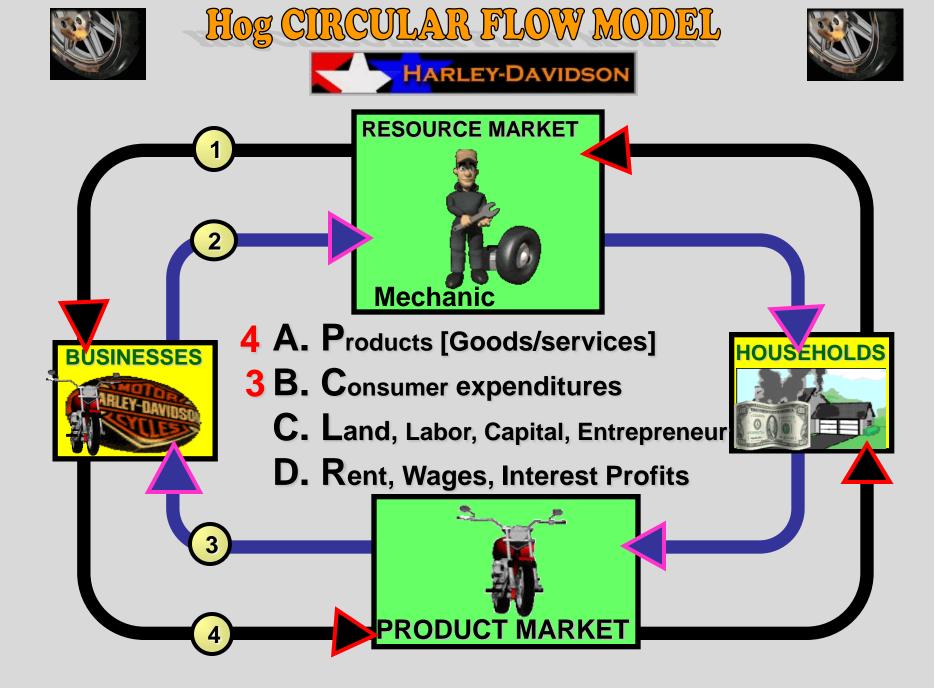
(89%) 3. If two coats are currently being produced, the opportunity cost of producing the third coat is
 a. 85 belts
 b. 75 belts
 c. 40 belts
 d. <u>15 belts</u>
 e. 10 belts



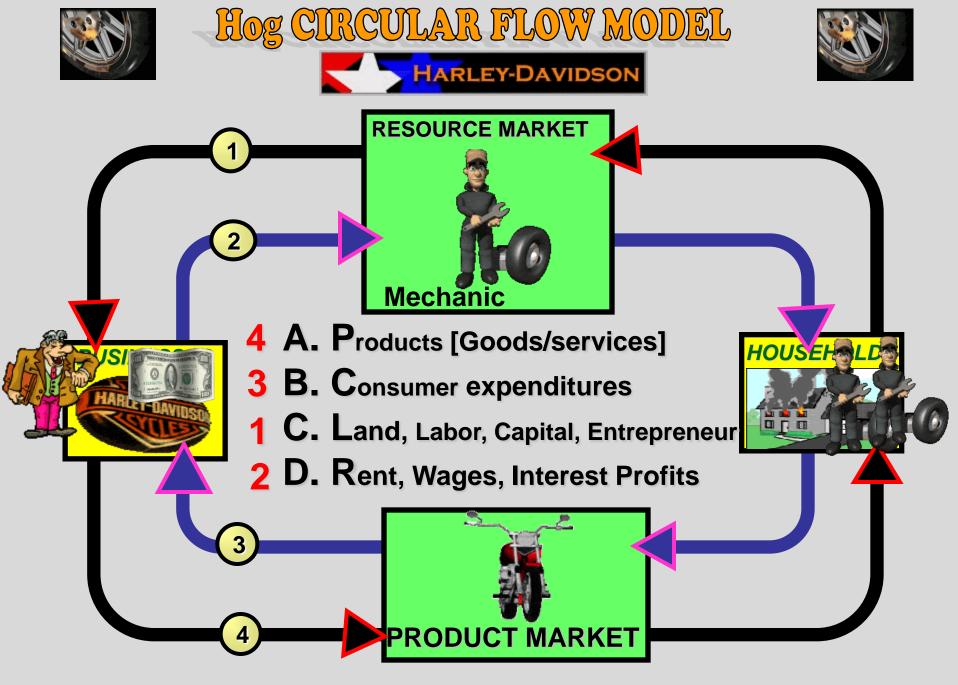
## The Circular Flow





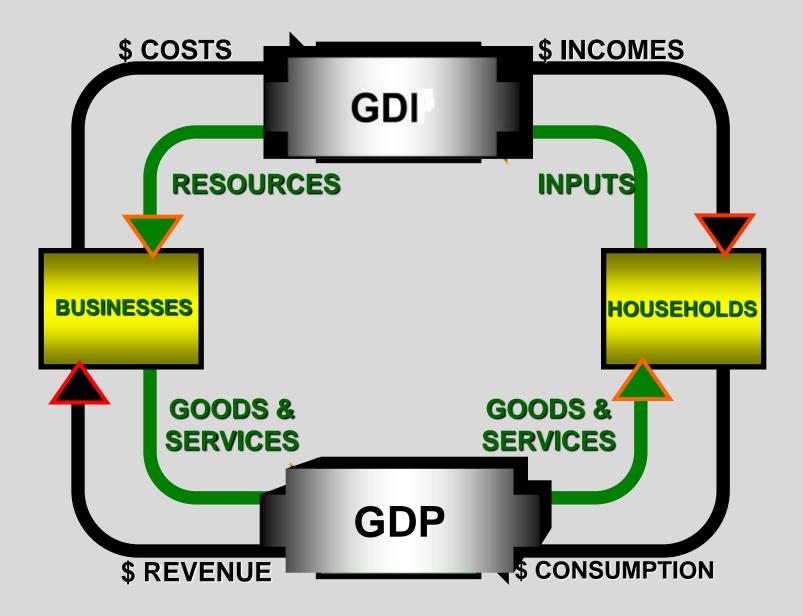












## The Circular-Flow Diagram Product Market



#### What flow are the following?

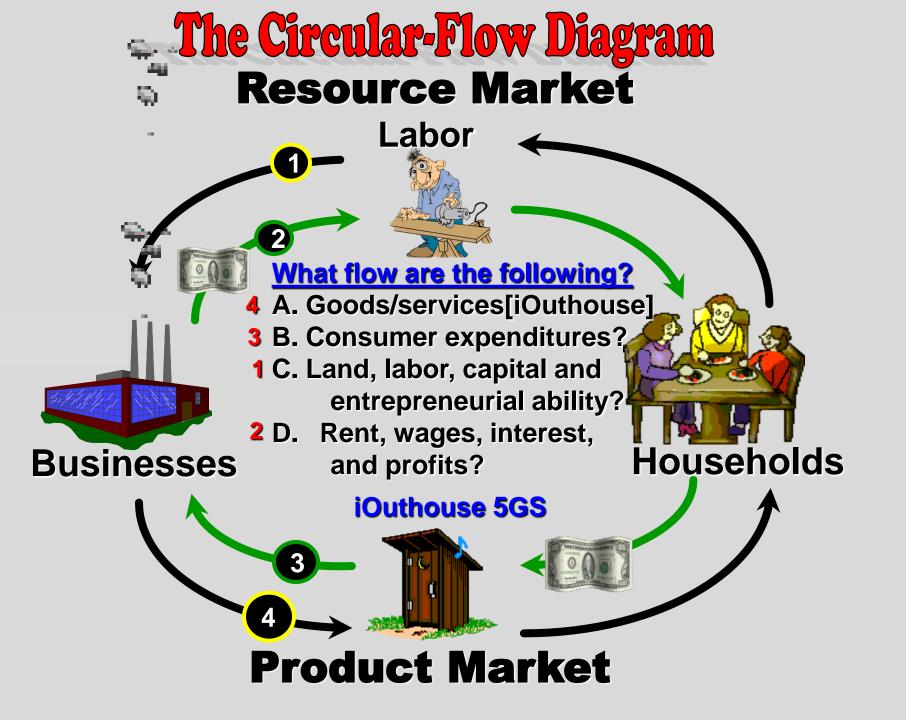
**Businesses** 

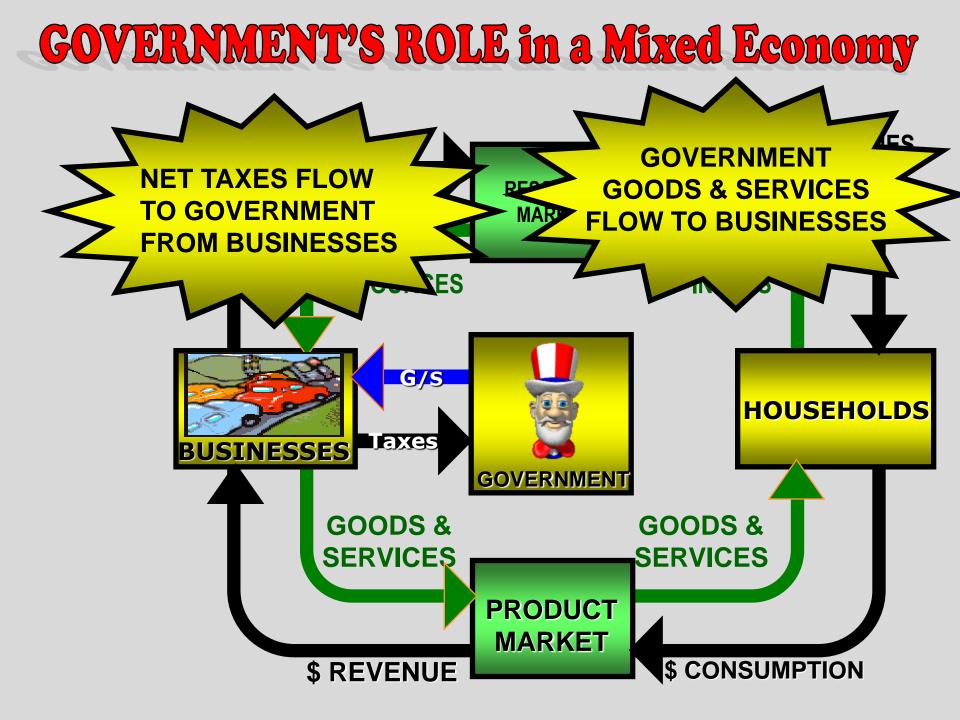
- **2** A. Consumer expenditures?
- **B.** Goods and services?
- C. Land, labor, capital, and entrepreneurs?
- 3 D. Rent, wages, interest, and profits?

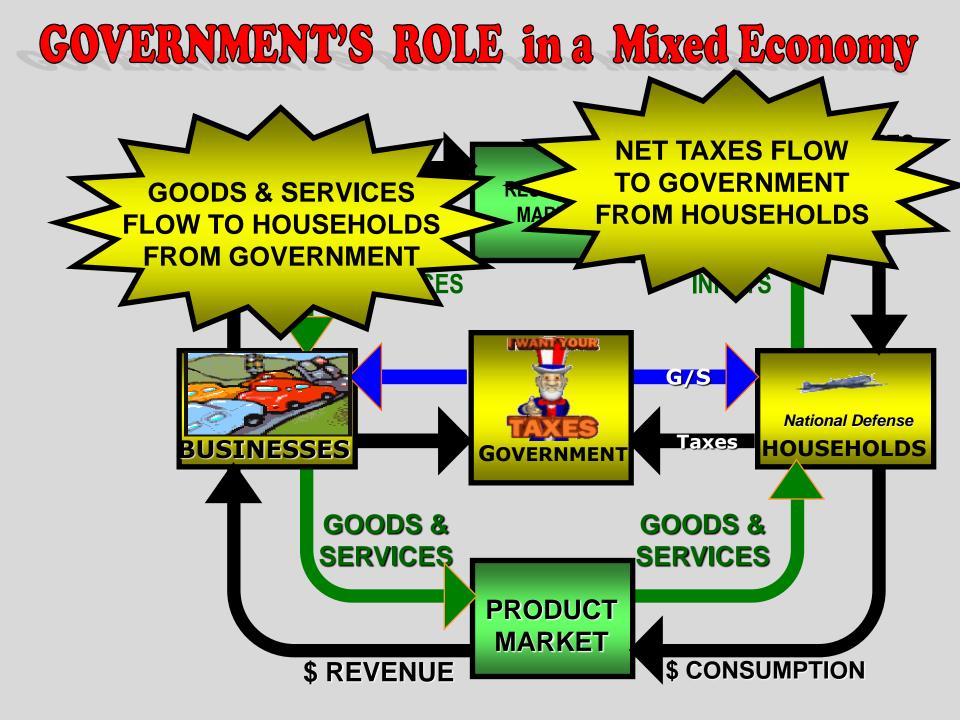
Labor

**Households** 

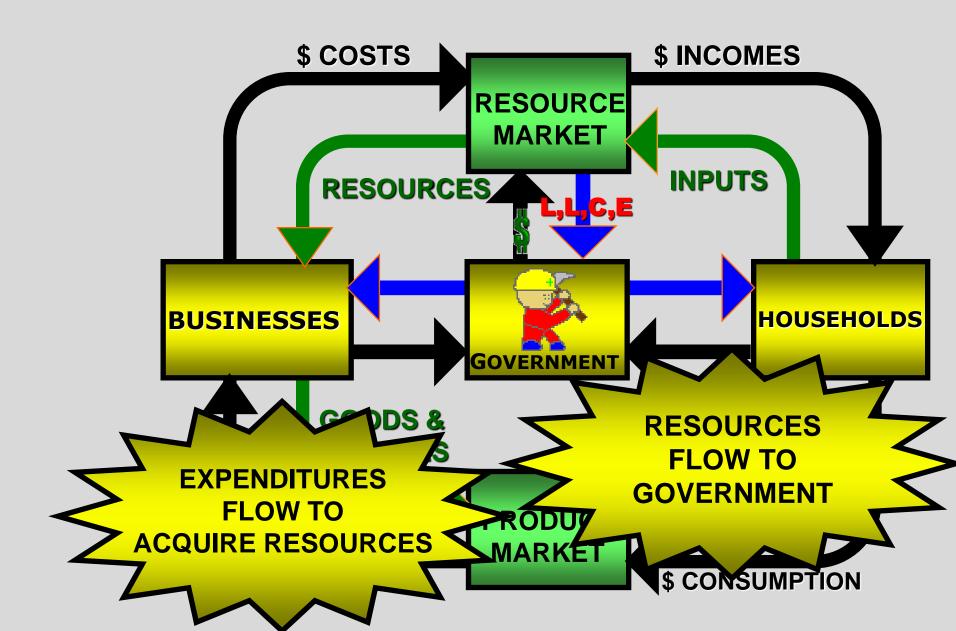
### **Resource Market**

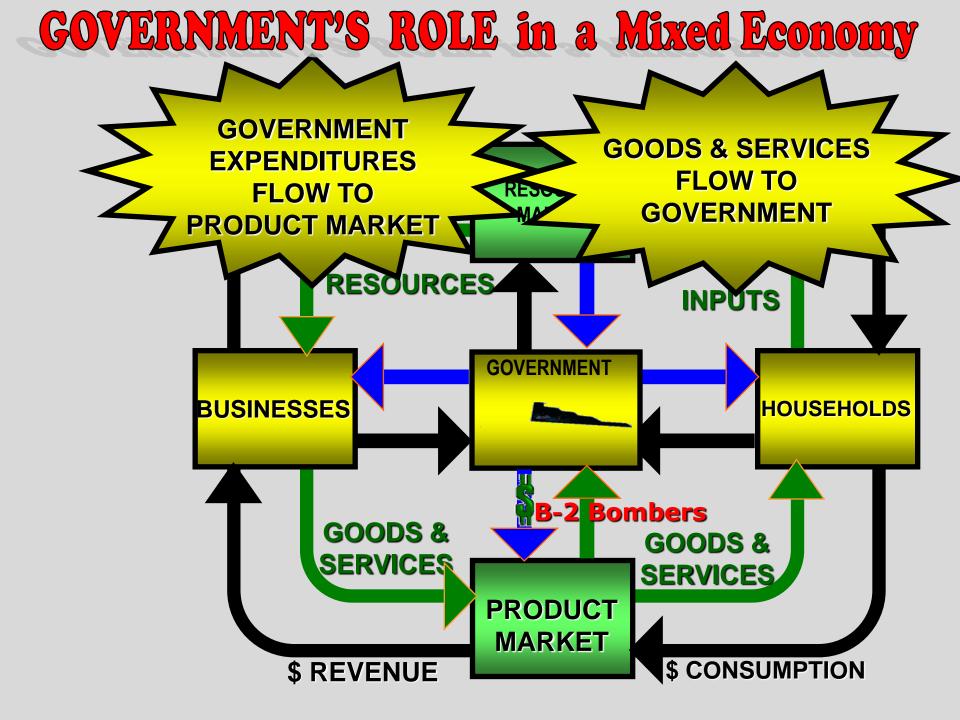






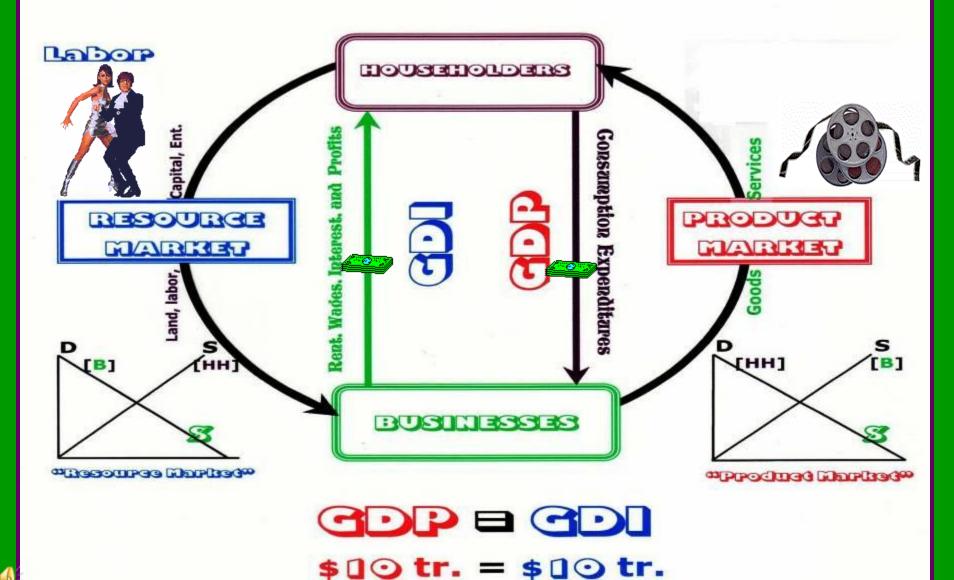








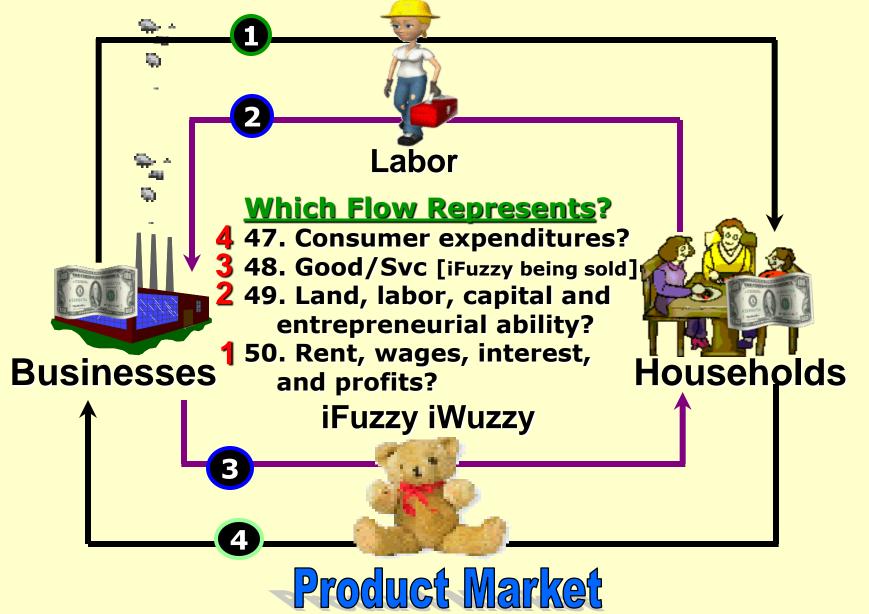
[of Resources, Products(g/s), & Money] [Abstract, oversimplified model showing how econ. trans. take place]



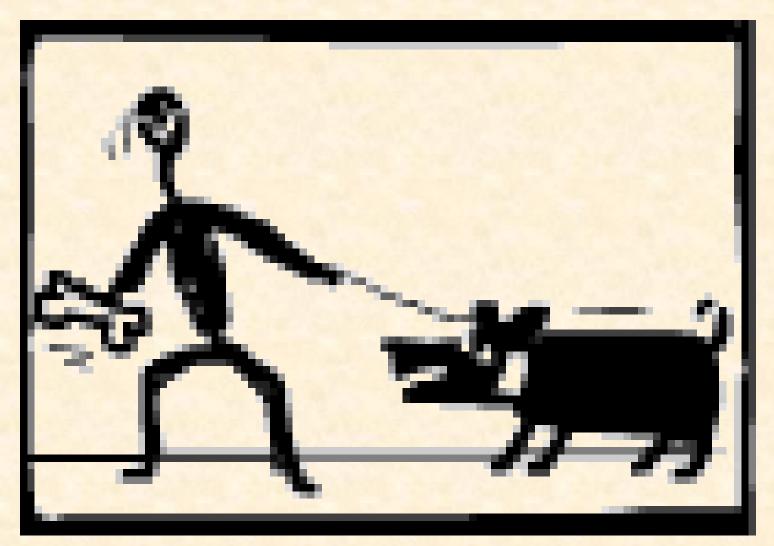


- In the product market (householders/businesses) are the demanders and (householders/businesses) are the suppliers.
- In the resource market (householders/businesses) are the demanders and (householders/businesses) are the suppliers.
- 3. In the **resource market**, (householders/businesses) **sell resources** to (householders/businesses).
- In the product market, (householders/businesses) sell products [goods/services] to (householders/businesses).

#### Note Sheet Questions 47-50 Resource Market



# The End





#### The "Gangsta Car"





190

**Chrysler Plant** 

**Businesse** 

Which flow represents?
A. Consumer expenditures?
B. Goods and services?
C. Land, labor, capital, and entrepreneurial ability?
D. Rent, wages, interest, and profits?
Labor for

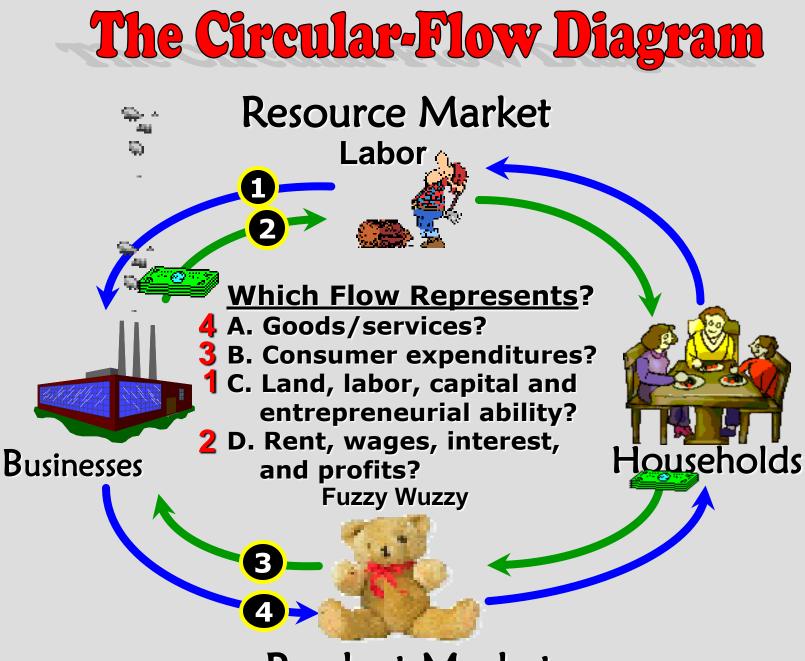
### **Resource Market**

Gangsta Cars"

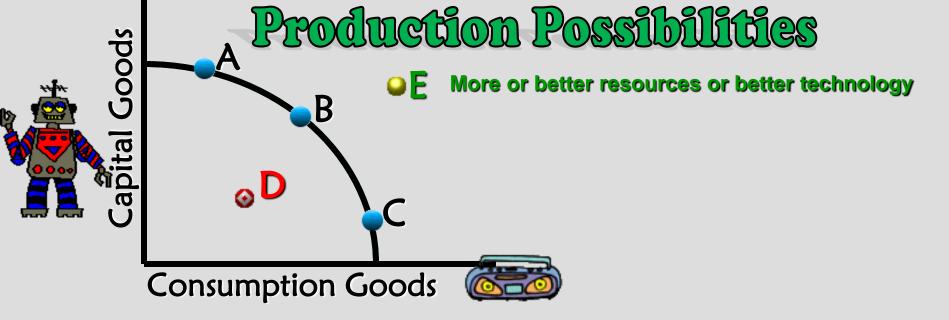
**Circular Flow** 

Chrysler300 "Gangsta Car

**Product Market** 



**Product Market** 



- 41. At what letter is there unemployment [recession]? D
- 42. What letters represent resources being used in their most productive manner? [full employment, full production, and best available technology] A, B, or C
- 43. What letter represents an improvement in technology, therefore a new PPC frontier line?
- 44. The (straight line/curve) illustrates the "law of increasing cost"?
- 45. The (straight line/curve) illustrates the "law of constant cost."
- 46. At what letter would there be the most economic growth in the future if a country were producing there now? A What is the opportunity cost when moving from "C" to "A"; Consumption when moving from B to C; Capital and do we have to give anything up when moving from D to B? no