

AP[®] Macroeconomics Unit 1: Basic Economic Concepts

Topic 1.1- Scarcity

1. Define scarcity
Individuals, businesses, and governments have unlimited wants but limited resources.
2. What are the factors of production?
The resources required to produce goods and services. Land, labor, capital, entrepreneurship
3. Define capital goods
Goods made for indirect consumption. Goods that make consumer goods (example: restaurant oven).
4. Define human capital
Skills, knowledge, traits, and experience that make workers more productive (example: education).

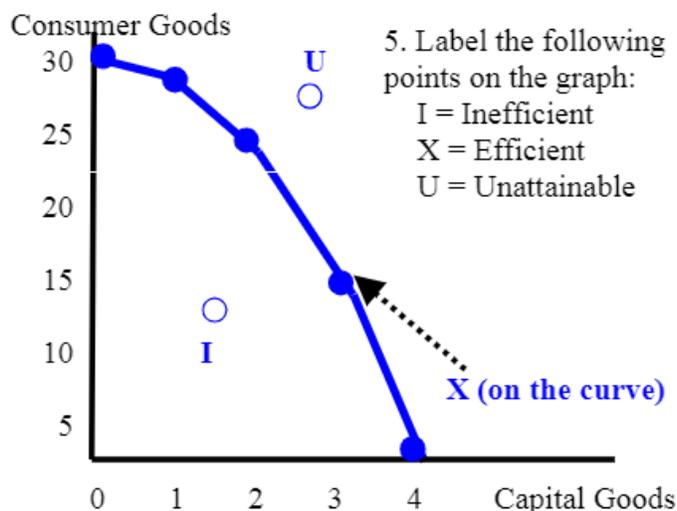
Use the chart to create a PPC on the graph

	A	B	C	D	E
Capital goods	0	1	2	3	4
Consumer goods	30	29	25	15	0

3. Calculate the opportunity cost from moving between the following combinations:
A to B: 1 Consumer good
B to C: 4 Consumer goods
E to D: 1 Capital good
C to A: 2 Capital goods
4. Assume combination D was produced rather than combination B. Will this economy's growth rate increase, decrease, or stay the same? Explain
The growth rate will increase because more capital goods are being produced.

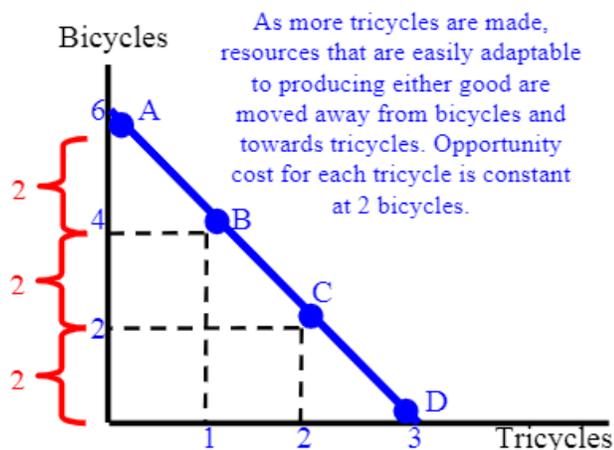
Topic 1.2- Opportunity Cost and the PPC

1. What is the difference between trade-offs and opportunity?
Trade-offs are ALL the options given up when an action is taken. Opportunity cost is the specific next best alternative. Decisions have infinite trade-offs but only one opportunity cost.
2. How does the PPC illustrate the ideas of scarcity and trade-offs?
The PPC shows that there are a limited number of goods that can be produced due to scarcity. When more of one good is produced, less of the other good is produced

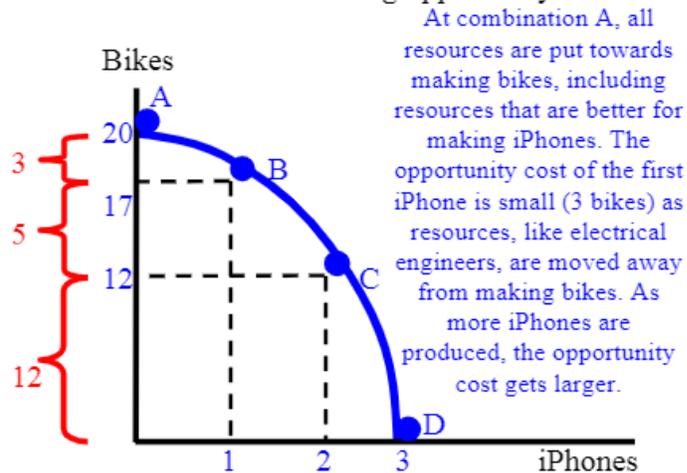


5. Label the following points on the graph:
I = Inefficient
X = Efficient
U = Unattainable

6. Why might producing two different products result in a constant opportunity cost? Resources are easily adaptable between both products.
7. Draw a PPC with constant opportunity cost



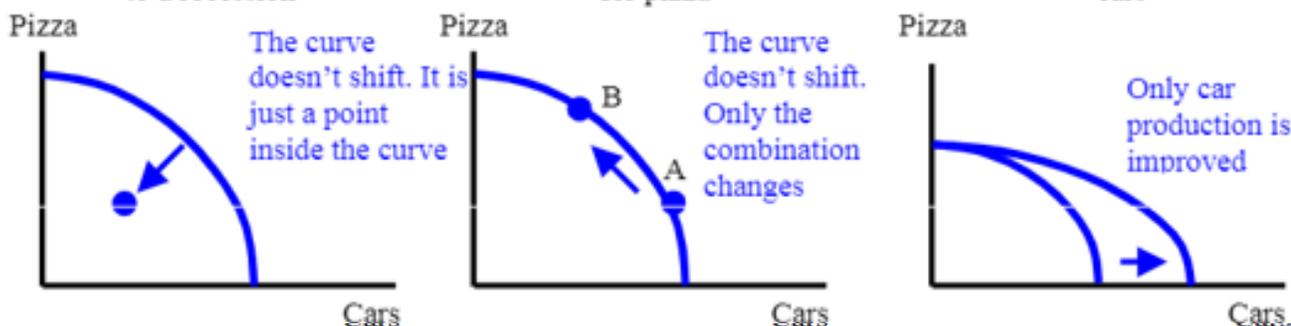
8. Why might producing two different products result in an increasing opportunity cost? Resources are not easily adaptable between both products
9. Draw a PPC with increasing opportunity cost



Topic 1.2- (continued)- Answer the question then show what happens as a result of each scenario

11. Identify three things that shift the production possibilities curve.
 Change in resource quantity or quality, change in technology, change in trade (Doesn't change the amount they can produce, but it does change the amount they can consume)

12. Workers lose their jobs due to a recession 13. Increase in consumer demand for pizza 14. More resources to produce cars



Topic 1.3- Comparative Advantage and Trade

The table shows the amount of sugar and cars each country can make with the same number of resources

	Sugar (tons)	Cars
Cuba	40 (1S costs ¼ Car)	10 (1C costs 4 Sugar)
Mexico	50 (1S costs 2 Cars)	100 (1C costs ½ Sugar)

- Which country has an absolute advantage in sugar? How about cars? **Mexico/Mexico**
- What is Cuba's opportunity cost for producing one car? **4 sugar**
- Which country has a comparative advantage in cars? How about sugar? **Mexico/Cuba**
- For both countries to benefit, how much sugar can be traded for each car? 1 car for 1 sugar (any number between 4 and ½)

The table shows the number of hours it takes to produce a ton of sausage and a ton of computers

	Sausage	Computers
Canada	2 (1S costs 1/3 comp)	6 (1C costs 3 sausage)
UK	10 (1S costs 1 comp)	10 (1C costs 1 sausage)

- Which country has an absolute advantage in sausage? How about computers? **Canada/Canada**
- What is Canada's opportunity cost for producing one computer? **3 sausage**
- Which country has a comparative advantage in computers? How about sausage? **UK/Canada**
- For both countries to benefit, how many sausages can be traded for each computer? 1 comp for 2 sausage (between 3 and 1)

Topic 1.4- Demand

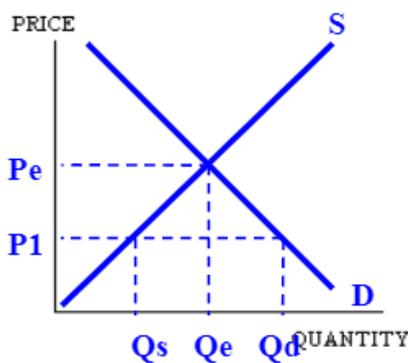
- What is the law of demand?
Inverse relationship between price and quantity demanded
 $P \uparrow Q_d \downarrow$
 $P \downarrow Q_d \uparrow$
- What three concepts explain why demand curves are downward sloping?
Substitution effect
Income effect
Law of diminishing marginal utility
- What are the five shifters of demand?
Tastes and preferences, number of consumers, price of related goods (Substitutes and complements), income, future expectations

Topic 1.5- Supply

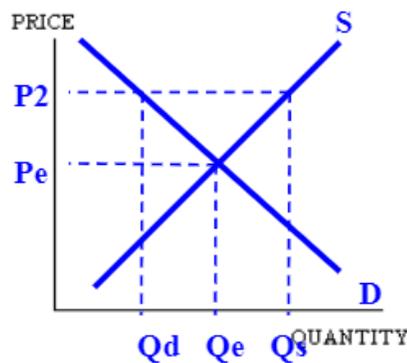
- What is the law of supply?
Direct relationship between price and quantity supplied
 $P \uparrow Q_s \uparrow$
 $P \downarrow Q_s \downarrow$
- Why is the market supply curve upward-sloping?
Higher prices give profit-seeking firms an incentive to produce more output
- What are the five shifters of supply?
Prices of resources, number of producers, technology, government action (taxes, subsidies, regulations), expectations of future profit

Topic 1.6- Market Equilibrium, Disequilibrium, and Changes in Equilibrium

Graph #1 (shortage)

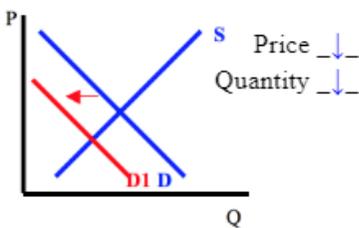


Graph #2 (surplus)

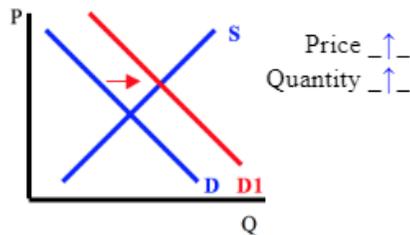


1. Draw a shortage on graph #1. Label price (P_1), quantity supplied (Q_s), and quantity demanded (Q_d).
2. Draw a surplus on graph #2. Label price (P_2), quantity supplied (Q_s), and quantity demanded (Q_d).
3. On graph #2, what happens to the quantity demanded (Q_d) and quantity supplied (Q_s) if market forces return the market to equilibrium?
 Q_d $\underline{\quad}$ $\underline{\quad}$ Q_s $\underline{\quad}$ $\underline{\quad}$

4. Draw a demand decrease

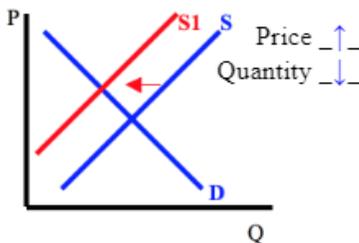


5. Draw a demand increase

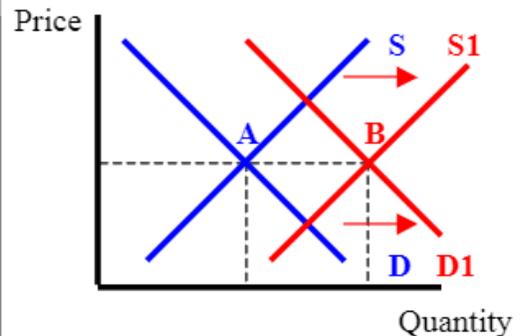
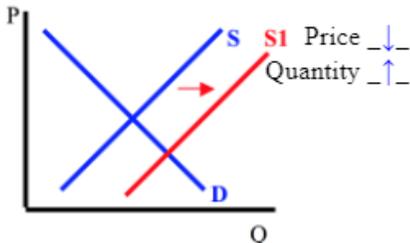


8. What is the double shift rule?
 When two curves shift at the same time, EITHER price or quantity will be indeterminate.
9. Draw an increase in demand AND an increase in supply.
 Price indeterminate, quantity up

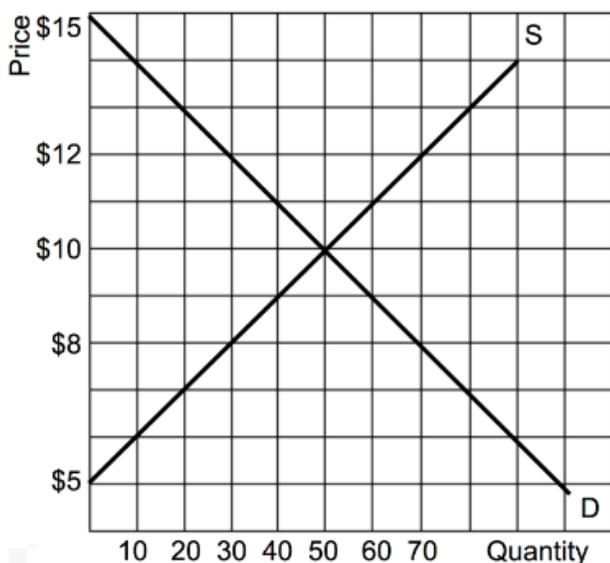
6. Draw a supply decrease



7. Draw a supply increase



Market for Pizza



10. Calculate the amount of the shortage when the price is \$8. **40 pizzas**
11. Calculate the amount of the surplus when the price is \$11. **20 pizzas**
12. Identify a specific scenario that would cause the equilibrium price to be \$12 and the equilibrium quantity to be 30 units. **Anything that causes the supply to decrease (e.g. tax on pizzas, increase in cost of cheese, etc.)**
13. Identify a specific scenario that would cause the equilibrium price to be \$7 and the equilibrium quantity to be 20 units. **Anything that causes the demand to decrease (e.g. fewer consumers, decrease the price of a substitute good, people prefer less pizza, etc.)**

14. What is the difference between a change in demand and a change in quantity demanded? **A change in quantity demanded is movement along the curve due to a change in the own-price. A change in demand is when the entire demand curve shifts due to a change in one of the shifters**