

## Targets:

Understand the correspondence of the intersection to equilibrium

Know what it means to change the quantity

Know what it means to change the curve

Know the model of why the demand curve has its shape

Know the model of how the demand curve moves

Know the model of why the supply curve has its shape

Know the model of how the supply curve moves

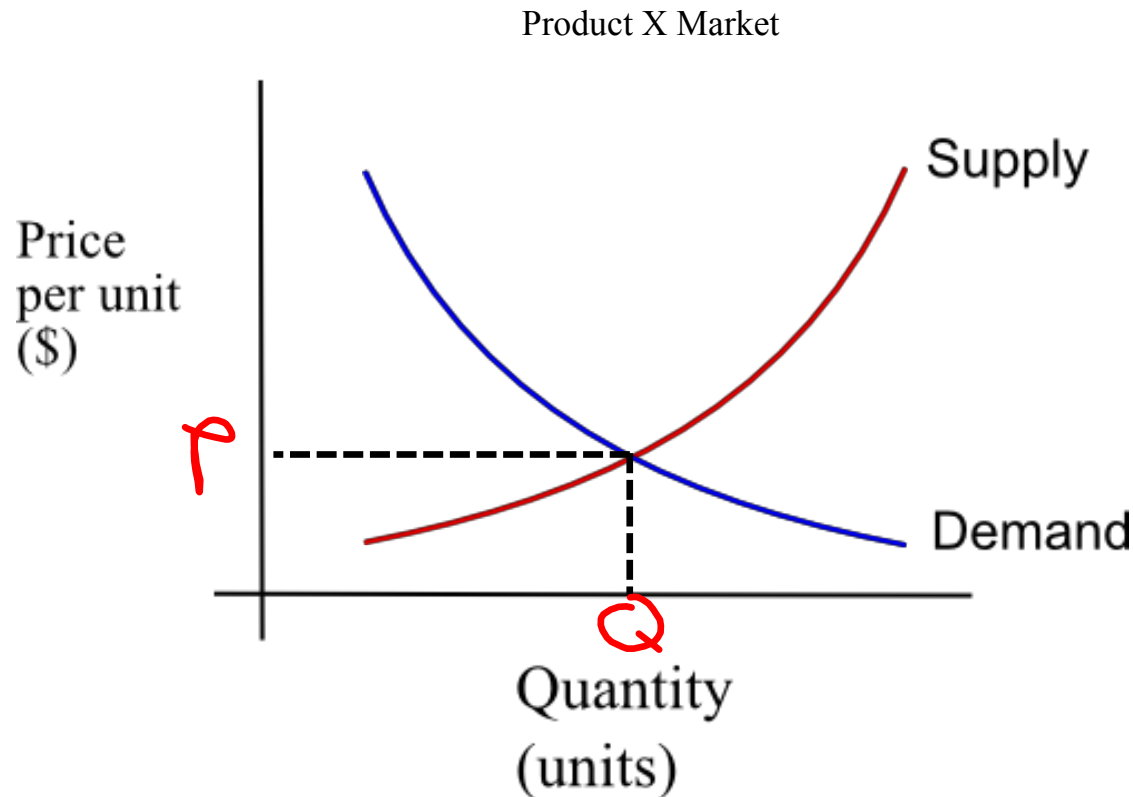
The picture of a market

What is the Supply curve?

What is the Demand curve?

What is important about where they cross?

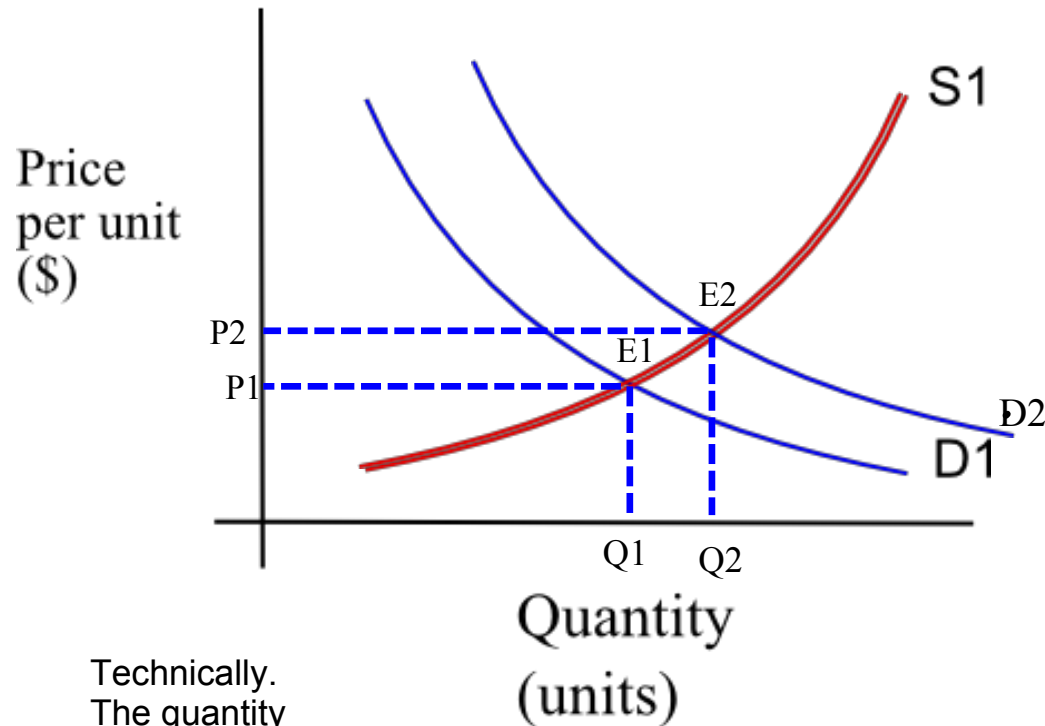
The curve shows combinations of quantities and prices that make sense to each of the actors, (producers and consumers)



Equilibrium is that special price at which the amount that the sellers want to sell happens to match price where the buyers want to buy.  
(Price is the independent var.)

• (P,Q)

Product X Market



Technically.  
The quantity  
demanded has  
increased.

My labelling is NOT over the top.

MORE AP POINTS HAVE BEEN  
LOST ON THIS  
TERMINOLOGY/USAGE ISSUE  
THAN ANY OTHER ISSUE OF  
ANY KIND.

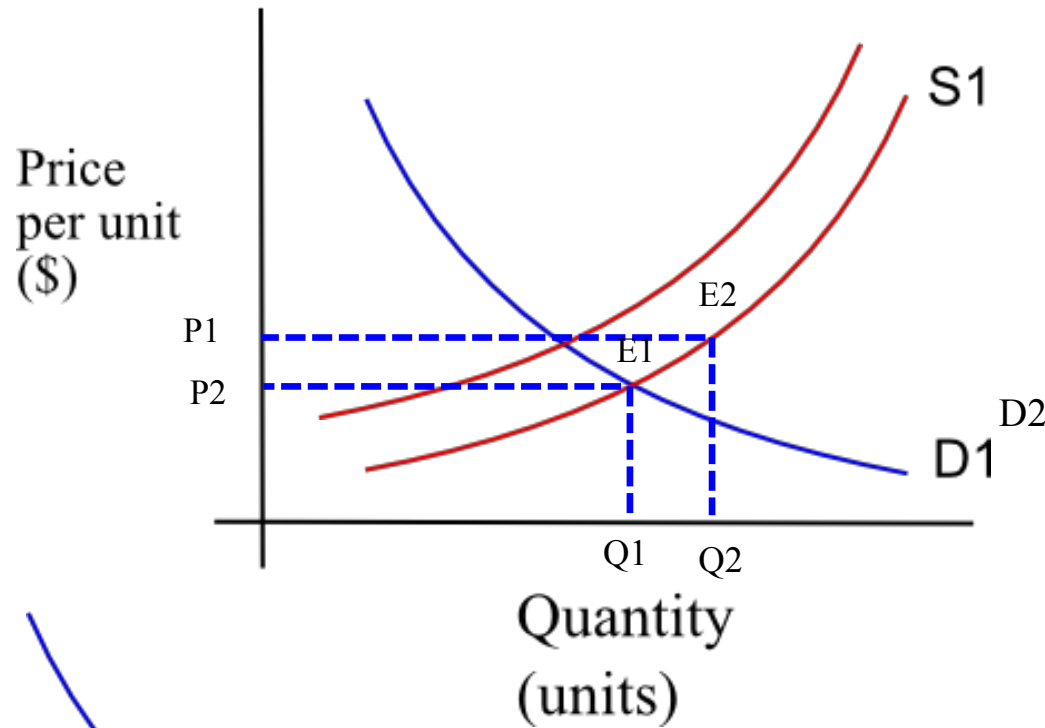
Describe what has happened to the  
curves and quantities in this picture?

Demand has  
shifted right  
or  
increased.

**Supply has not changed.**

The quantity supplied  
has increased.

Product X Market



Changes in the quantity demanded occur because of

changes in the supply curve.

Changes in demand occur because of

changes in the determinants of demand (next topic).

Changes in the quantity supplied occur because of

changes in the demand curve.

Changes in supply occur because of

changes in the determinants of supply.



## Topics

Law of Demand/shape of demand curve

Shifters of demand curve

Normal vs. inferior goods

Complements and supplements

## Laws:

Got:

**The law of increasing opportunity costs states that as the production of a good increases the opportunity cost of producing additional units rises.**

**The law of diminishing marginal utility states that beyond a certain quantity, additional units of a specific good will yield declining amounts of extra satisfaction to a consumer.**

Getting:

The law of diminishing returns states that as successive units of a variable resource, such as labor, are applied to fixed resources, beyond some point the marginal product associated with each additional unit of the variable resource declines.

## The relationship of price to QUANTITY DEMANDED

Law of demand: All else equal, as prices falls, the quantity demanded rises and as price rises, the **quantity demanded** falls.

Why?

1) Because "Price is an obstacle" (?)

*p*

2) Diminishing marginal utility: Progressive units give less satisfaction.

*d*

3) Income effect: Higher prices consume your budget

*i*

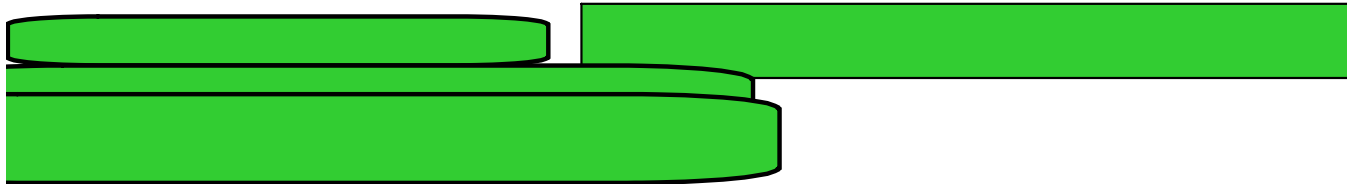
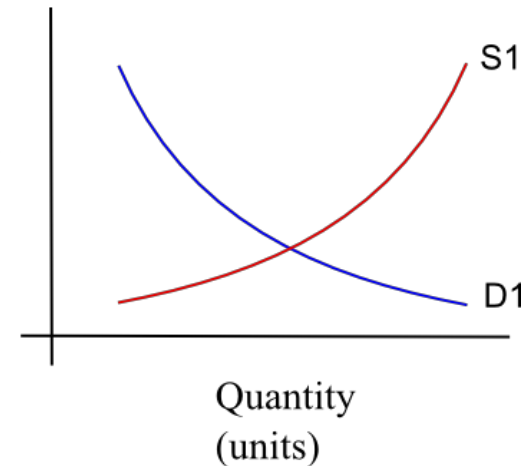
4) Substitution effect: At lower prices you will use this product instead of others that meet similar needs

*s*

Are these the same for consumer? =>

- Individuals vary, we are looking at the aggregate
- The curve captures the average impact of these rules.

Price  
per unit  
(\$)



The market demand curve: An aggregate at a point of time from fickle consumers, instant survey.

What can change? Smart Phones

- Income !BE CAREFUL - EFFECTS UNCLEAR !

- Number of consumers

- Expectations

- Related goods=> Two kinds

- Tastes and preferences



!BE CAREFUL! Continued

Normal vs. inferior goods

Name examples

Normal

Bear and Grill

Right answer? do a study

Inferior

MacDonalds

Firewood

Generic Mac & Cheese

Small cars

Lawn mowers



## Related goods

Substitute: Like margarine vs. butter

When the price for a substitute good goes up then the demand for the product goes ↑

$$P_s \uparrow \Rightarrow D \uparrow \quad P_s \downarrow \Rightarrow D \downarrow$$

Complement: Like ski boots vs. skis

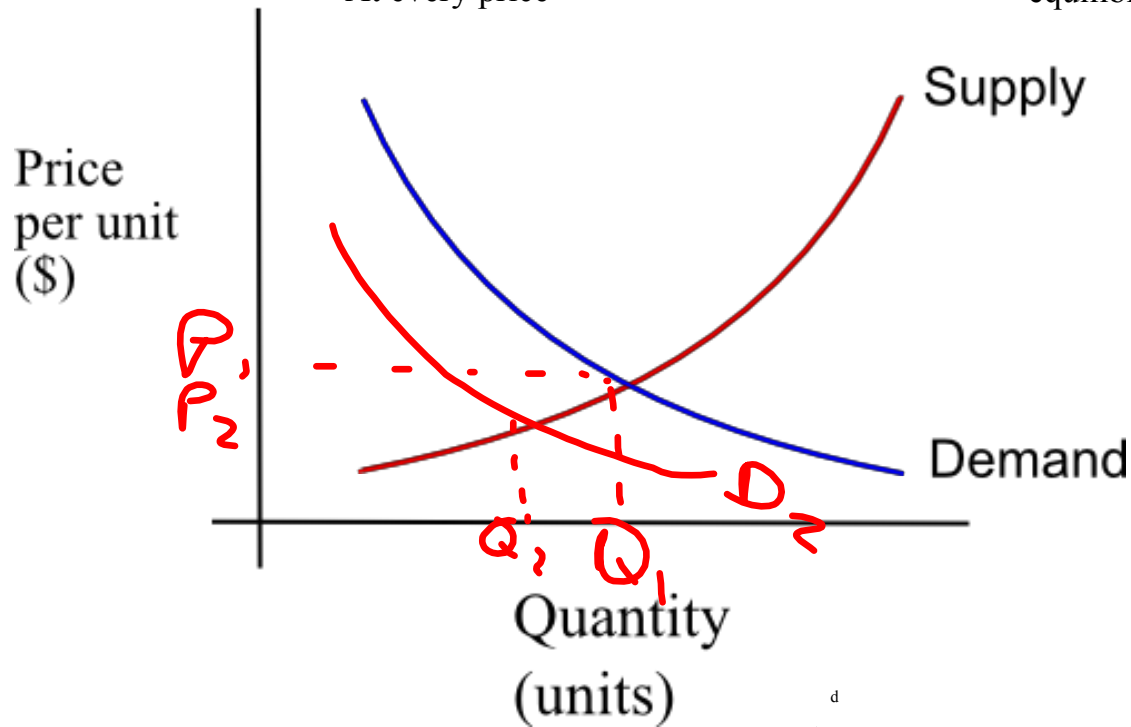
When the price for a complementary good goes up then the demand for the product goes ↓

$$P_c \uparrow \Rightarrow D \downarrow \quad P_c \downarrow \Rightarrow D \uparrow$$

Lets tell inert stories

- Draw the effect
- At every price

What is the process by which we get to equilibrium after the shift?



I ↑ ⇒ D ↑ ⇒ Q ↑ ⇒ MC ↑ ⇒ P ↑ ⇒ Q<sub>2</sub> ↑  
 Determinant Curve change Producer reacts Climbs MC curve Cost is higher Consumer chooses

(W)

I ↑ ⇒ D ↑ ⇒ P ↑ Q ↑

Determinant Curve change Cost is higher

(W)

Always say both

Always say both

Demand and supply analysis are very different

Demand analysis is about inscrutable, often arbitrary consumer preferences.  
We apply rational analysis to the subjective.

Supply analysis is about profit maximization.  
Objective calculation to maximize a number.

- All about costs (what is the "special" cost?)
- What is the producers sequence of thought?

Unit Price  $\Rightarrow$  Unit Cost to produce at  $\Rightarrow$  Quantity

Why does the supply curve slope up?

Increasing marginal costs

econ b19y6.isf



SUPPLY => Simple minded compared to demand analysis of inscrutable consumers

- All about costs (what is the "special" cost?)
- What is the producers sequence of thought?
- : Unit Price indicates: Unit Cost we can produce up to: indicates Quantity

Resource prices - the biggie

Other goods - the return on other goods (prices, maybe)

Technology - efficiency

Taxes and subsidies - mimic other determinants

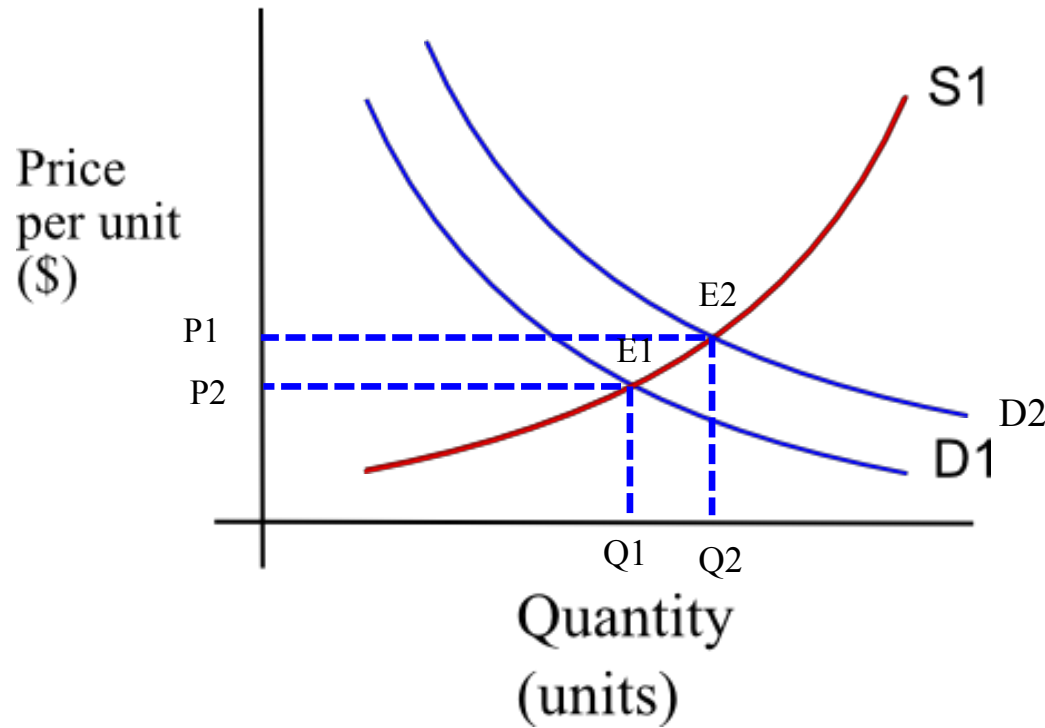
Expectations - very hard to predict/argue

Number of sellers - the curve is the aggregate

last year's 20 next



Product X Market



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How does equilibrium happen?

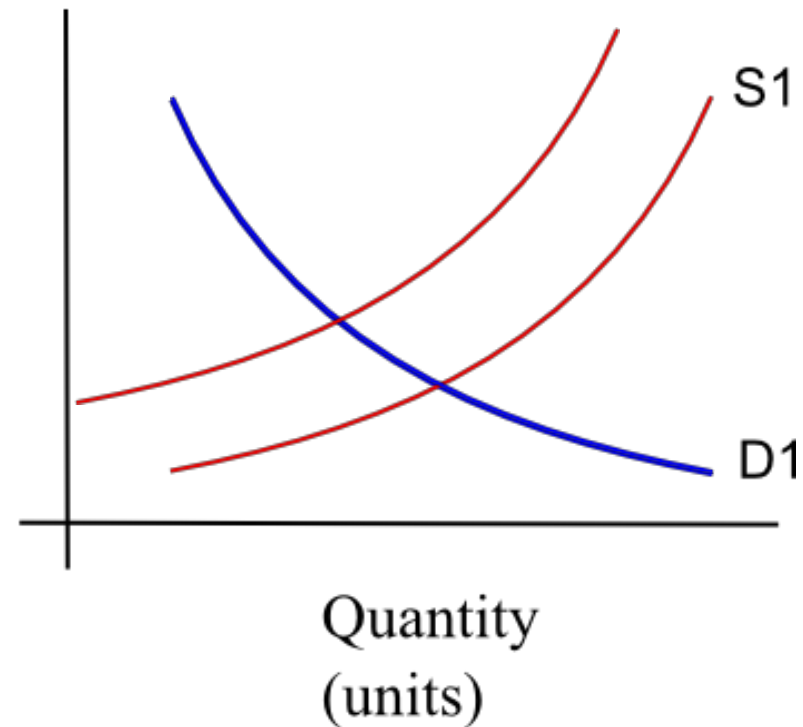
Change in supply:

$RP \uparrow \Rightarrow S \downarrow \Rightarrow Q \downarrow \Rightarrow P \uparrow \Rightarrow Q_d \downarrow (Q_s)$   
at each price

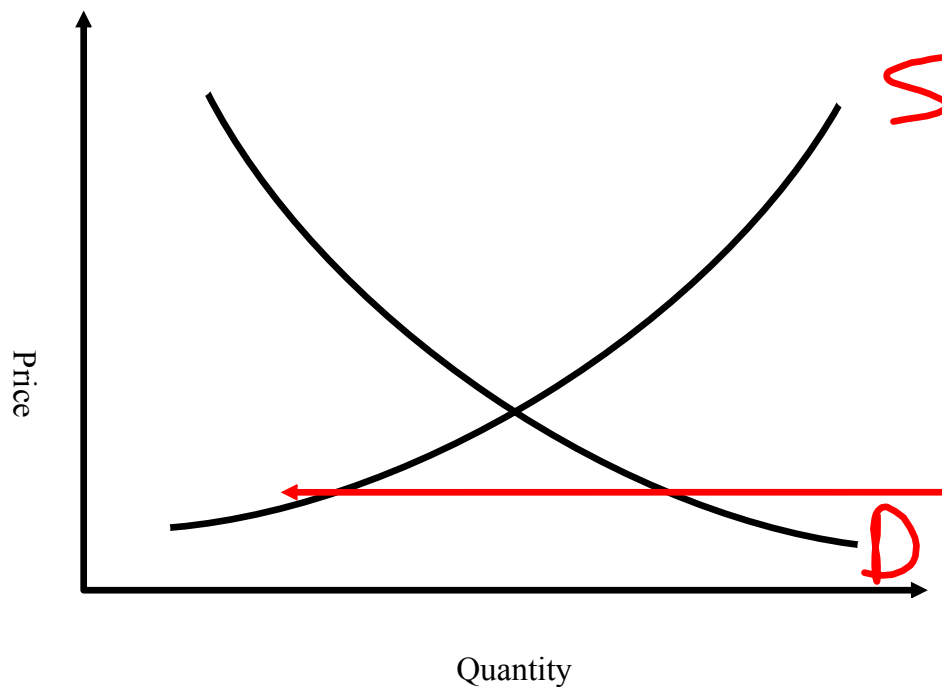
Price  
per unit  
(\$)

Change in demand:

Rationing function of prices:  
The Supplier and Demanders responses to price define a process that brings us to a stable and proper Q for each product.



Rationing function of prices: the process by which the market finds equilibrium eliminates surplus and shortages, properly rationing resources.



What would happen if the market price were some how here?:

- Surplus:

=> Firms cut production

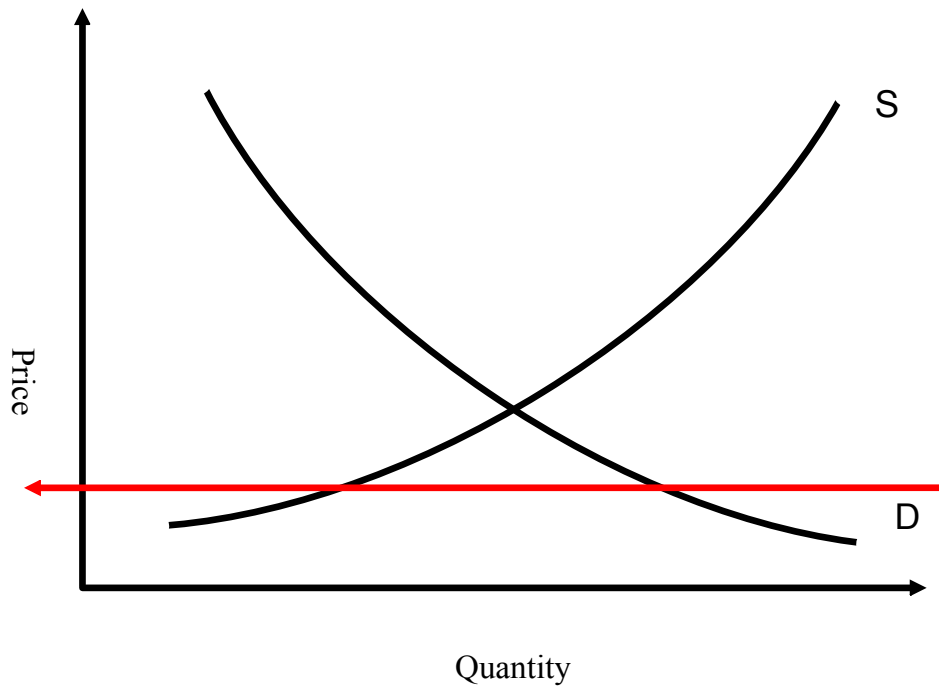
=> lower cost production

=>  $Q \downarrow$  supplied  $P \downarrow$

=>  $P \downarrow$  =>  $Q$  demanded  $\uparrow$

Until equilibrium

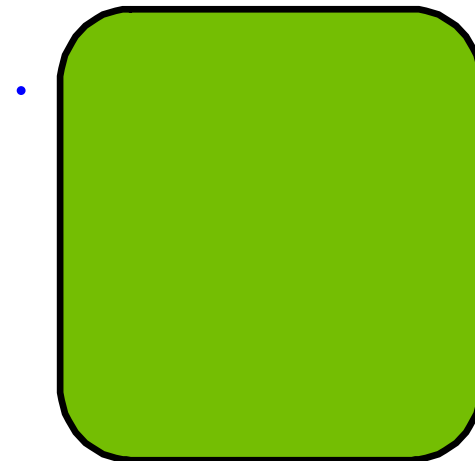




:  
 Shortage:  
 => Firms incr. production  
 => higher cost production  
 =>  $Q \uparrow$  supplied  $P \uparrow$   
 =>  $P \uparrow$  =>  $Q \downarrow$  demanded

Until equilibrium

What would happen if the market price were some how here?



Why the curves have their shape.

Why they move.

How equilibrium is found.

Curve 1 move => Different quantity wanted at current price

=> pressure towards temporary pseudo-surplus or pseudo-deficit

=> Curve 2 deciders react and move along their curve meeting

new quantity, at the right price for them

ANSWER THE QUESTION.

How does it effect the curve?

The curve moves \_\_\_\_\_

Does it?

Yes or No

"EXPLAIN" IS AN ABSOLUTELY HUGE WORD

\_\_\_\_\_ **BECAUSE** \_\_\_\_\_

Use specific terminology

I'm done:

Test Monday.

HW questions?

Or I just move on.

(Work load is really inconsistent.)

## Attachments

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supplyanddemandS1D1.svg

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eco00b19y7.notebook

geo22 B20y6.isf