经济学思想

工程学科研究生通选课

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课程时长：　18学时
考核方式：　半开卷考试，50道单项选择

08115301-（学院路）经济学思想

该二维码7天内(11月20日前)有效，重新进入将更新

08115301-（沙河）经济学思想

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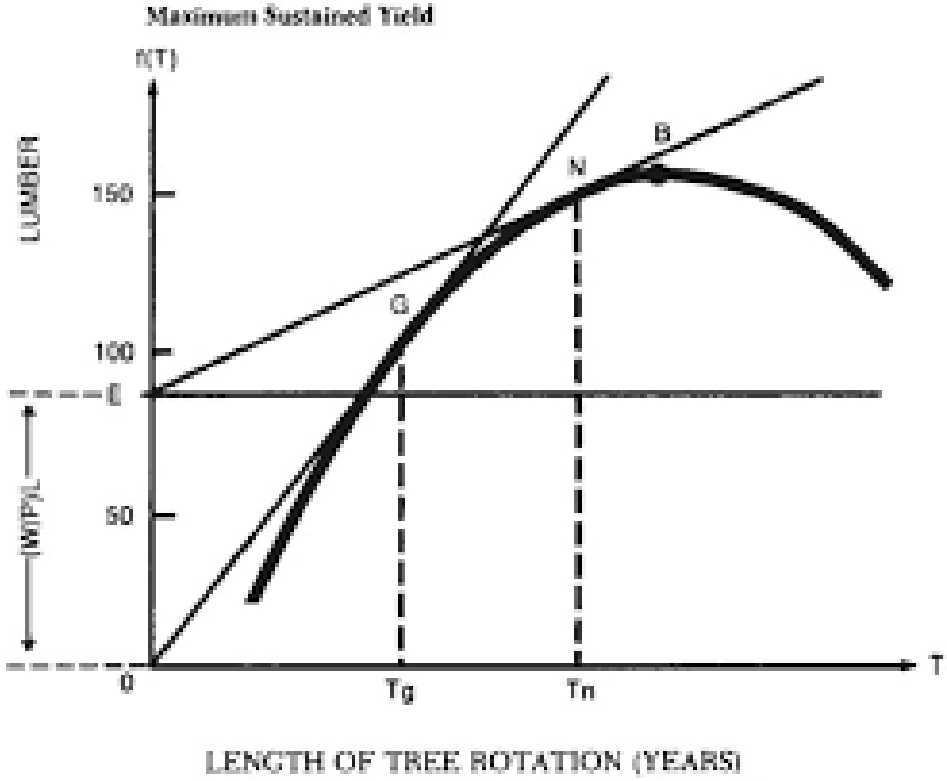
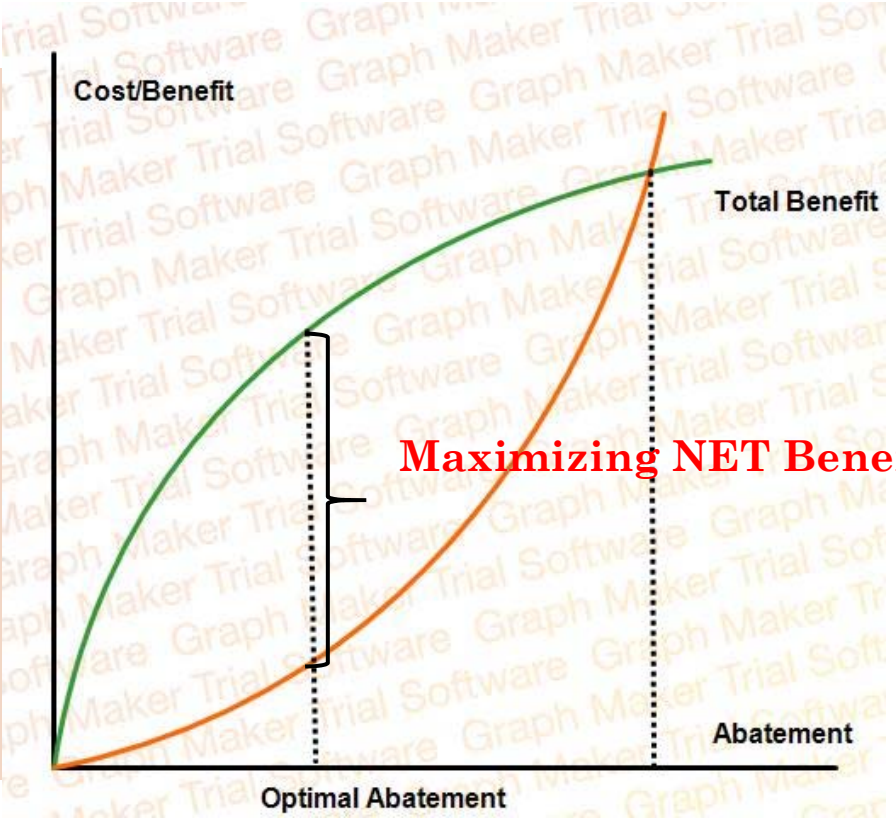
经济学家看待世界的独特视角

1100s-1700s：生态学观点主导时期，强调最大化林业可持续产量（**yield**）

1849至今：经济学观点主导时期，强调最大化林业可持续收益（**revenue**）



经济学家看待世界的独特视角



“打击污染，零容忍！”

“最优污染水平”

经济学是什么？


The Economist
Shameless greed at AIG
One more try on Iran
What's wrong with General Electric
Farmers rake it in
Let Michelle be Michelle
MARCH 21ST-27TH 2009
Economist.com
How China sees the world
PRADA
HERMES
EUROPE
AFRICA
ATLANTIC
OCEAN
AMERICA
PACIFIC
OCEAN
JAPAN
TAIWAN
HONG KONG
SPRATLY ISLANDS
TIANANMEN SQUARE
IMPERIAL PALACE
WALL STREET


9-15
WALL ST
STOCK EXCHANGE

经济学是什么？

世界货币基金组织总裁

克里斯蒂娜·拉加德

诺贝尔经济学奖获得者

理查德·塞勒

伯克希尔·**哈撒韦公司**CEO

沃伦·巴菲特

经济学是关于“选择”的科学

资源有限　　欲求无限

稀缺：有限的资源无法满足无限欲求的永恒矛盾

经济学：面临稀缺性，如何进行“明智”的选择？

The “I don’t know” Trade-Off

经济学中的“选择”

金融学

- 有限的资金约束
- 如何选择资产类型

能源经济学

- 有限的能源资源禀赋
- 如何配置能源用途

财政学

- 政府收入约束
- 如何选择公共支出方向

○ ○ ○ ○ ○

- 可支配资源有限
- 如何明智地利用资源

经济学是什么？

- 经济学研究和钱有关的一切：没钱、赚钱、花钱、存钱、借钱、还钱
- 经济学是一套能让你发家致富的准则
- 经济学是为了解释如何组织生产和如何分配财富
- 经济学是理解人类历史的抓手
- 经济学关乎生命、宇宙和一切

参考书目

经济学的逻辑

- 经济学原理（第八版），Gregory Mankiw，北京大学出版社
- 第一本经济学，Robert Murphy，海南出版社

经济学的茶点

- 魔鬼经济学（全四册），Steven Levitt & Stephen Dubner，中信出版社
- 思考快与慢，Daniel Kahneman，中信出版社
- 每个人的经济学，Ha-Joon Chang，广西师范大学出版社
- 从零到一，Peter Thiel，中信出版社
- 摇滚吧，经济学，Alan Krueger，湖南文艺出版社

从Trade-Off到机会成本

- 每一个决策都是对不同选项的“成本”和“收益”的比较
- 任何事物的**机会成本**都是你为了得到它所必须放弃的其他利益中最大的那一个
  - 读书的机会成本？
- **沉没成本：**已经发生但不可收回的支出
  - 看电影的沉没成本？

ACTIVE LEARNING 1

Applying the principles

You are selling your 1996 Mustang. You have already spent $1000 on repairs.

At the last minute, the transmission dies. You can pay $600 to have it repaired, or sell the car "as is."

In each of the following scenarios, should you have the transmission repaired? Explain.

A. Blue book value (what you could get for the car) is $6500 if transmission works, $5700 if it doesn't

B. Blue book value is $6000 if transmission works, $5500 if it doesn't

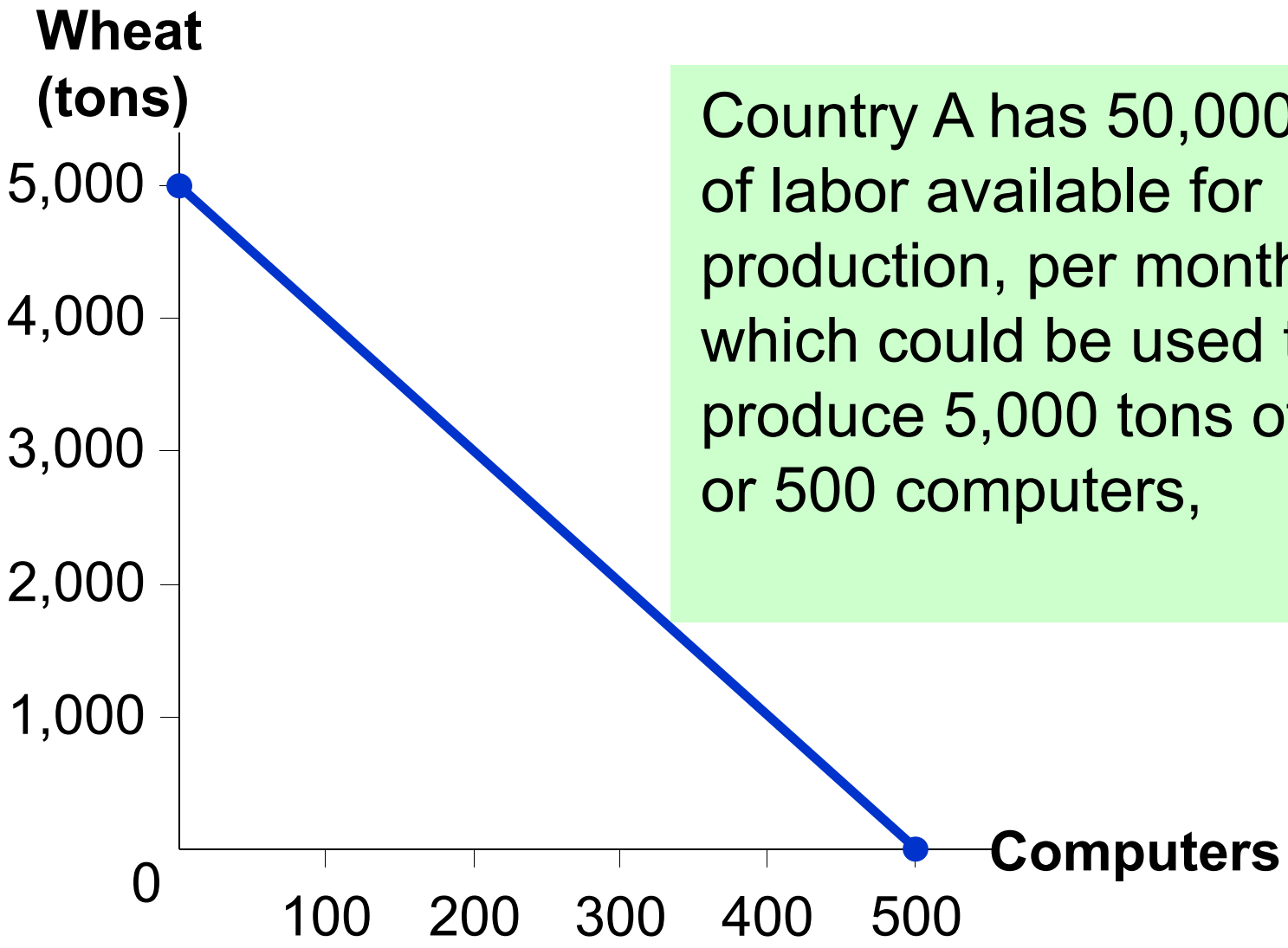
Our Example

- Two countries: A and B
- Two goods: computers and wheat
- One resource: labor, measured in hours
- We will look at how much of both goods each country produces and consumes
  - if the country chooses to be self-sufficient
  - if it trades with the other country

Production Possibilities in A

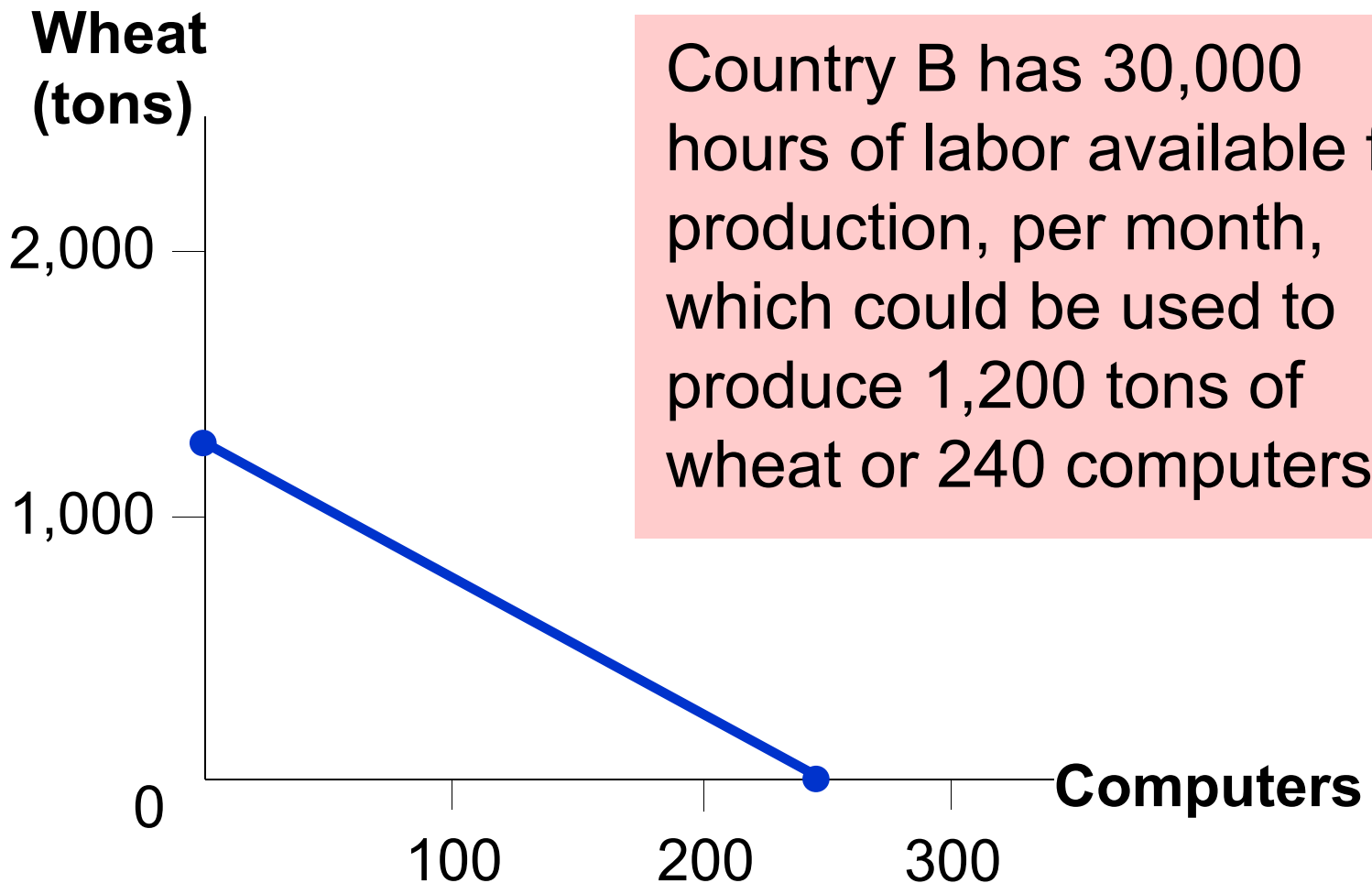
- The U.S. has 50,000 hours of labor available for production, per month.
- Producing one computer requires 100 hours of labor.
- Producing one ton of wheat requires 10 hours of labor.

Production Possibility Frontier for Country A



Country A has 50,000 hours of labor available for production, per month, which could be used to produce 5,000 tons of wheat or 500 computers,

Production Possibility Frontier for Country B

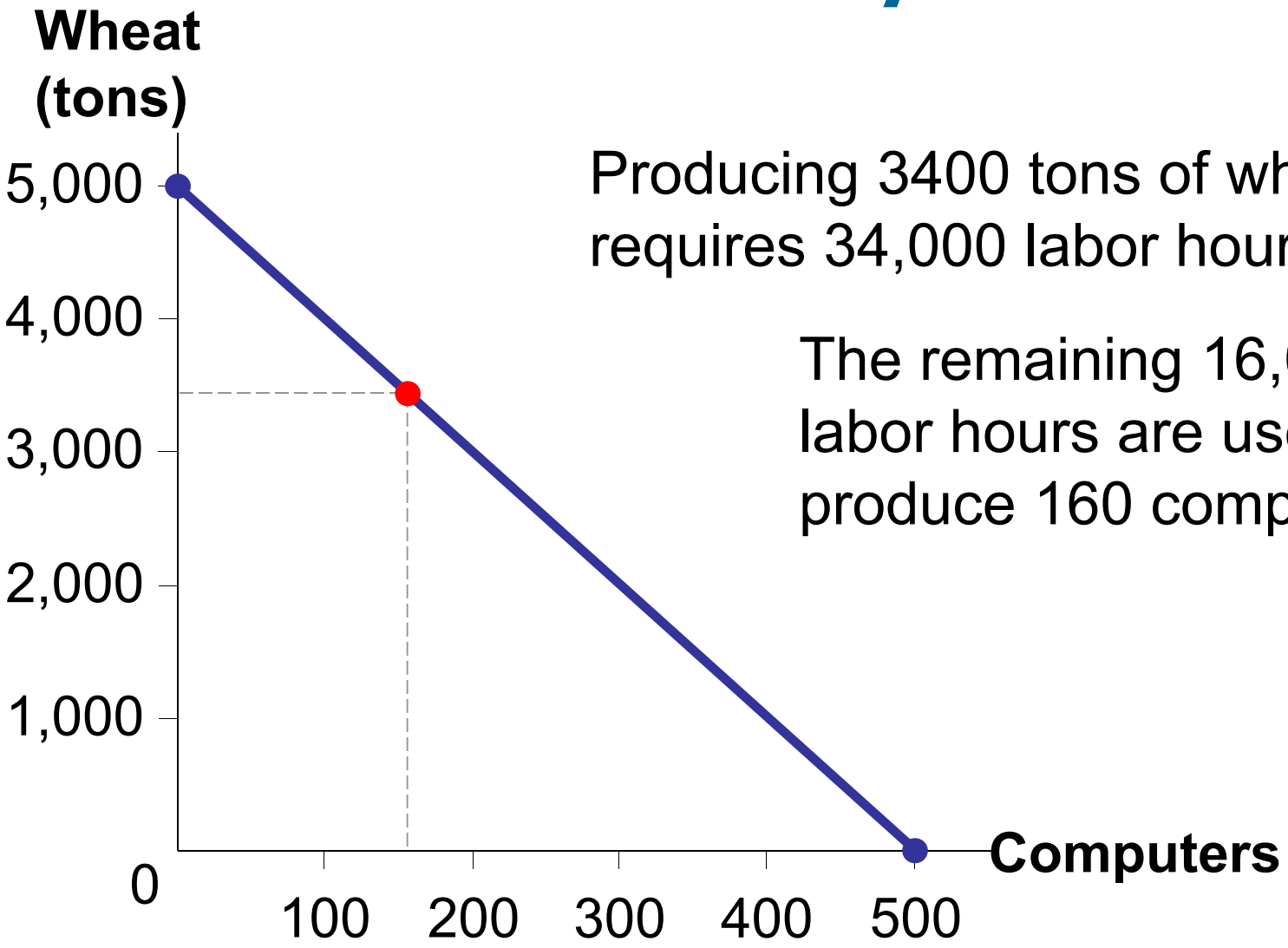


Country B has 30,000 hours of labor available for production, per month, which could be used to produce 1,200 tons of wheat or 240 computers,

Consumption With and Without Trade

- Without trade,
  - Consumers in Country A get 250 computers and 2500 tons wheat.
  - Consumers in Country B get 120 computers and 600 tons wheat.
- We will compare consumption without trade to consumption with trade.
- First, we need to see how much of each good is produced and traded by the two countries.

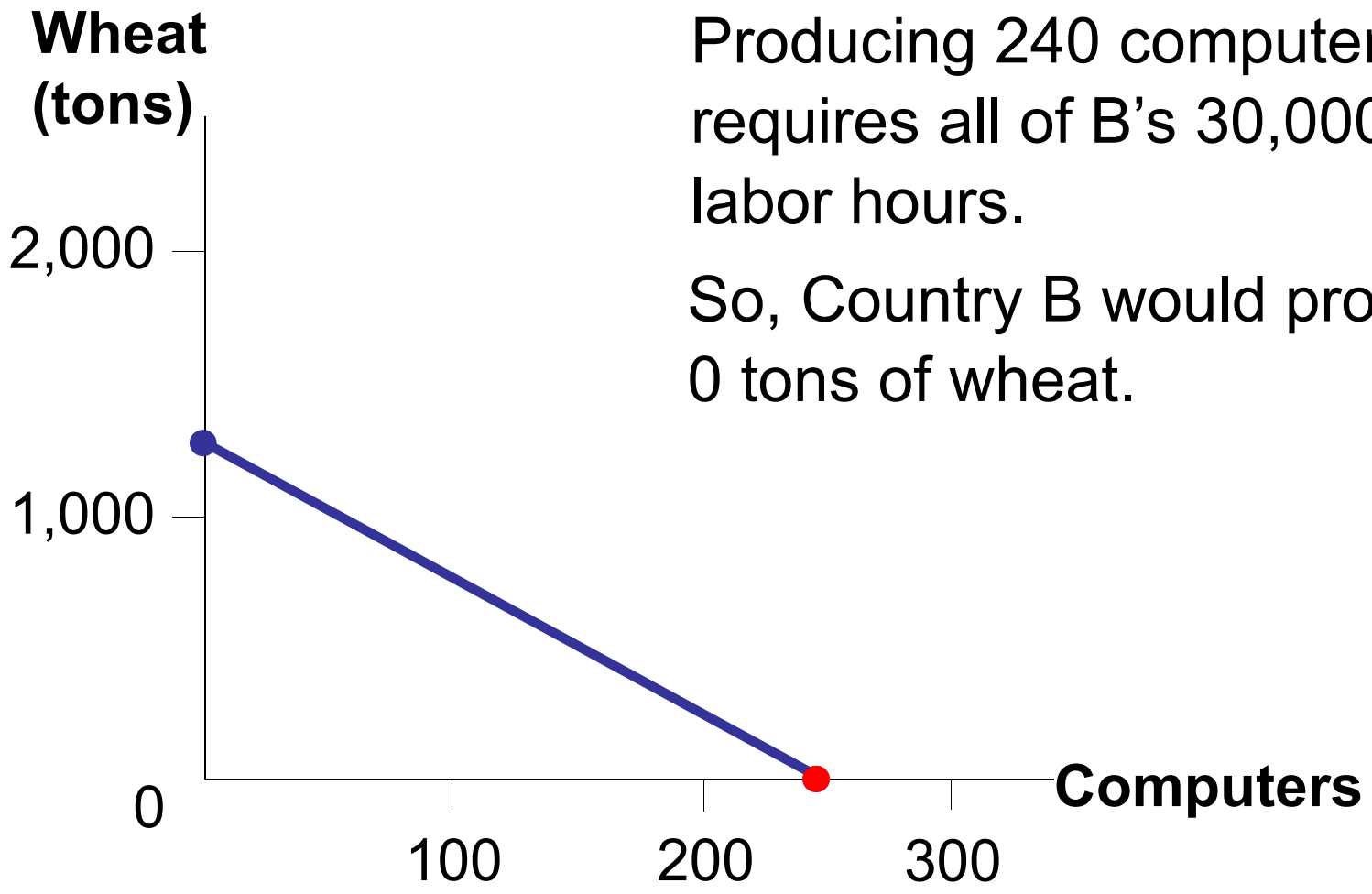
Production in Country A With Trade



Producing 3400 tons of wheat requires 34,000 labor hours.

The remaining 16,000 labor hours are used to produce 160 computers.

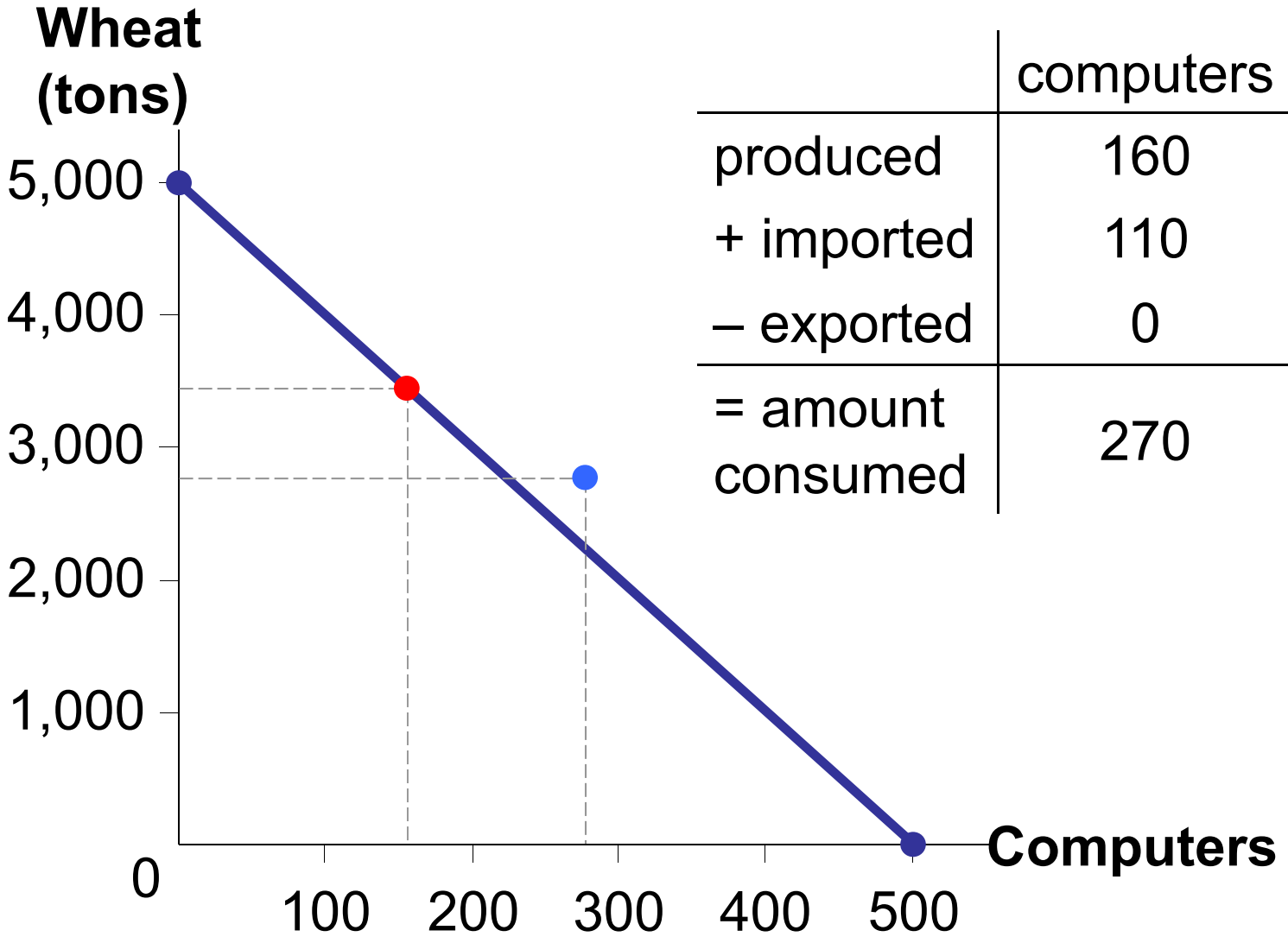
Production in Country B With Trade



Producing 240 computers requires all of B's 30,000 labor hours.

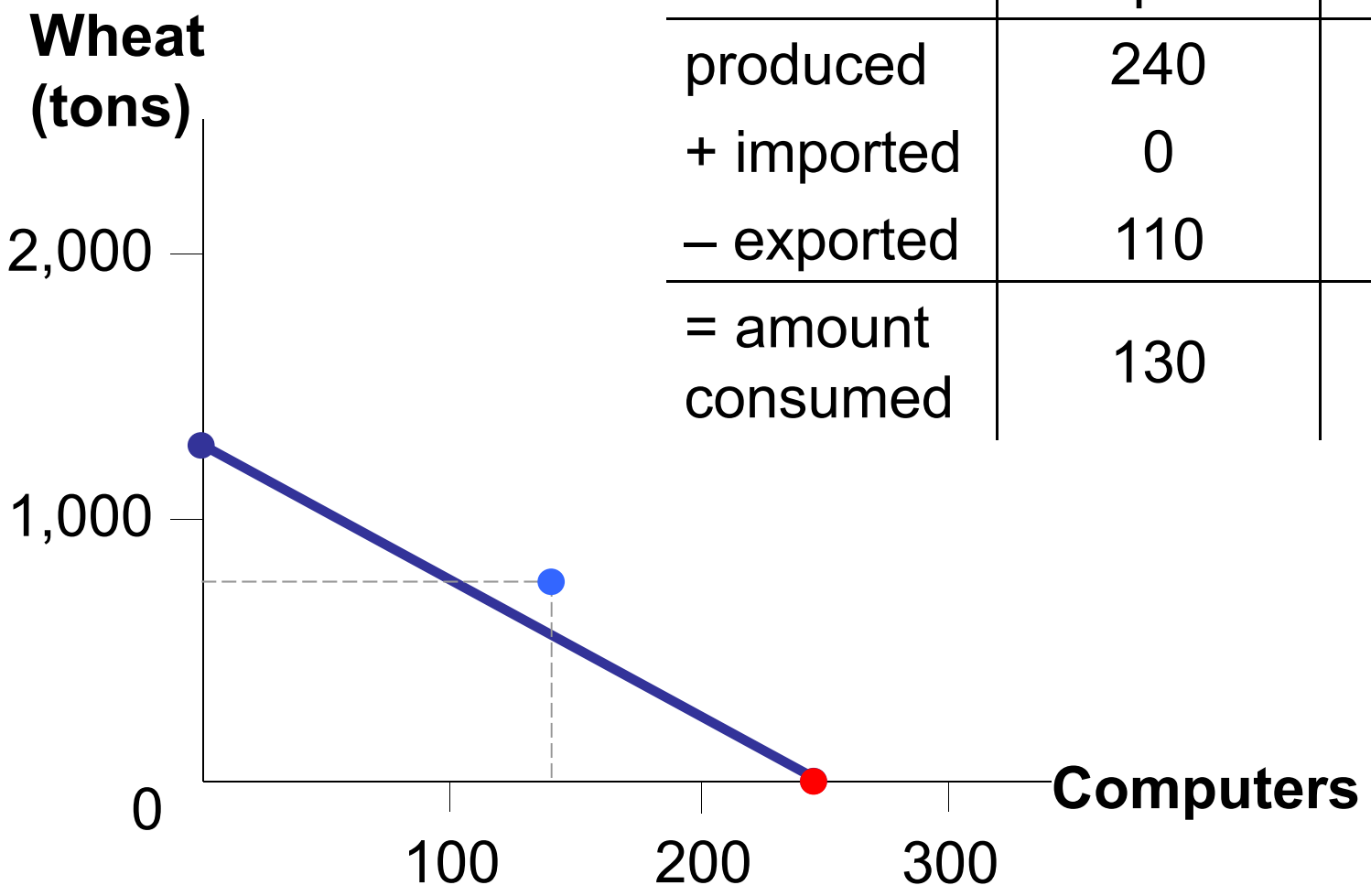
So, Country B would produce 0 tons of wheat.

Consumption in Country A With Trade



	computers	wheat
produced	160	3400
+ imported	110	0
– exported	0	700
= amount consumed	270	2700

Consumption in Country B With Trade



	computers	wheat
produced	240	0
+ imported	0	700
– exported	110	0
= amount consumed	130	700

Trade Makes Both Countries Better Off

Country A			
	consumption without trade	consumption with trade	gains from trade
computers	250	270	**20**
wheat	2500	2700	**200**

Country B			
	consumption without trade	consumption with trade	gains from trade
computers	120	130	**10**
wheat	600	700	**100**

Where Do These Gains Come From?

- A. has an absolute advantage in wheat:
  - producing a ton of wheat uses 10 labor hours in A vs. 25 in B;
  - producing a computer uses 100 labor hours in A vs. 125 in B
- Absolute advantage measures the cost of a good in terms of the inputs required to produce it.
- Another measure of cost is *opportunity cost.*
- In our example, the opportunity cost of a computer is the amount of wheat that could be produced using the labor needed to produce one computer.

Opportunity Cost and Comparative Advantage

- **Comparative advantage**: the ability to produce a good at a lower opportunity cost than another producer
- Which country has the comparative advantage in computers?
  - 10 tons of wheat in A
  - 5 tons of wheat in B
- So, B has a comparative advantage in computers. *Lesson: Absolute advantage is not necessary for comparative advantage!*

Comparative Advantage and Trade

- Gains from trade arise from comparative advantage (differences in opportunity costs).
- When each country specializes in the good(s) in which it has a comparative advantage, total production in all countries is higher, the world's "economic pie" is bigger, and all countries can gain from trade.
- The same applies to individual producers (like the farmer and the rancher) specializing in different goods and trading with each other.

ACTIVE LEARNING 2

Managing a fashion shop

	整理店铺	说服客户购买
二狗	60 min	120 min
王小丫	30 min	15 min

课程大纲

微观经济学部分

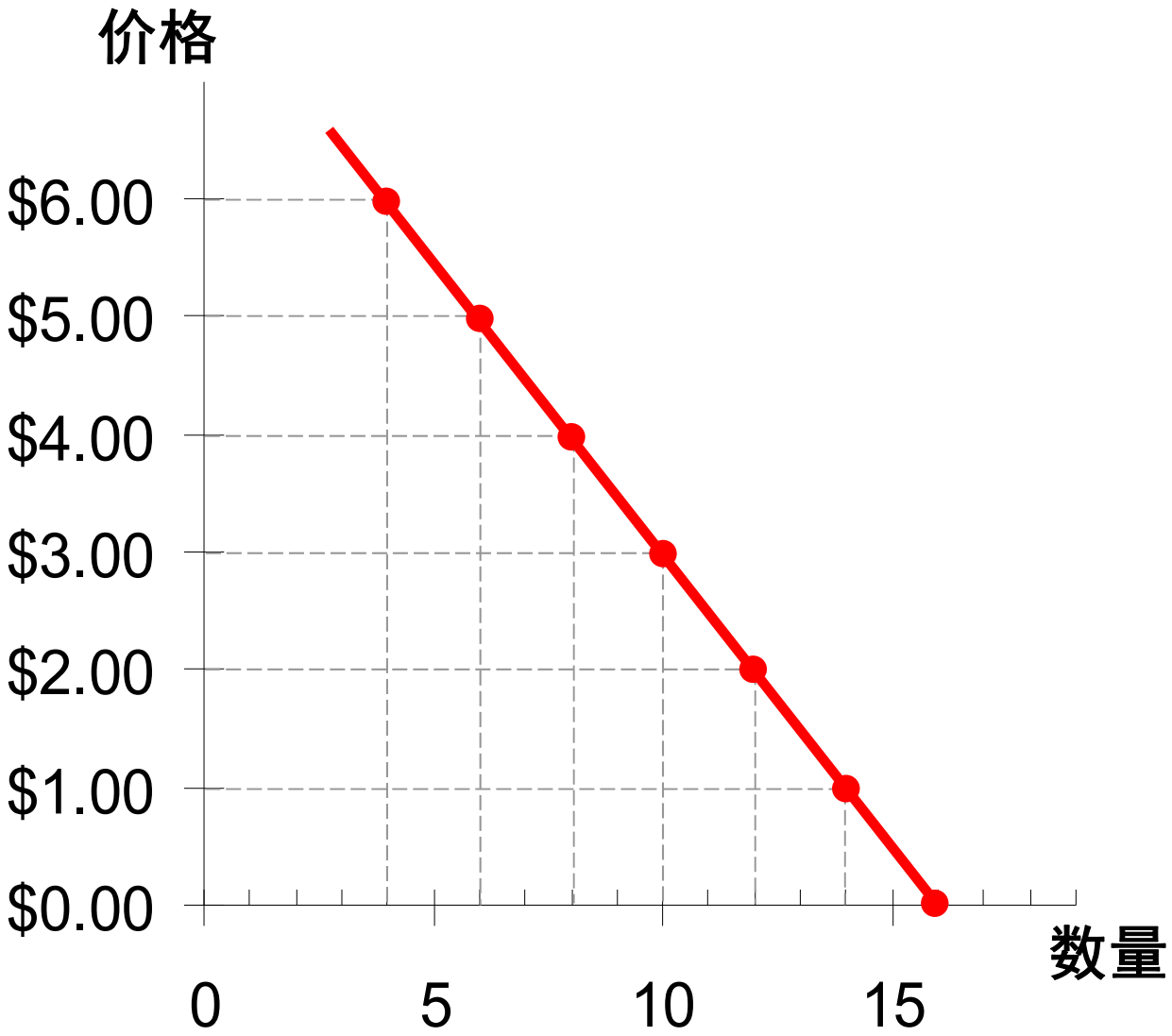
- **供给-需求模型：**一个理想化的市场机制如何实现社会财富的有效分配
- **市场失灵：**税收、管制、信息不对称、垄断、外部性、交易成本、有限理性

宏观经济学部分

- **总供给-总需求模型：**通货膨胀、失业与GDP
- **宏观经济政策工具：**宽松（紧缩）的财政（货币）政策工具

供给-需求模型

Demand Schedule and Curve



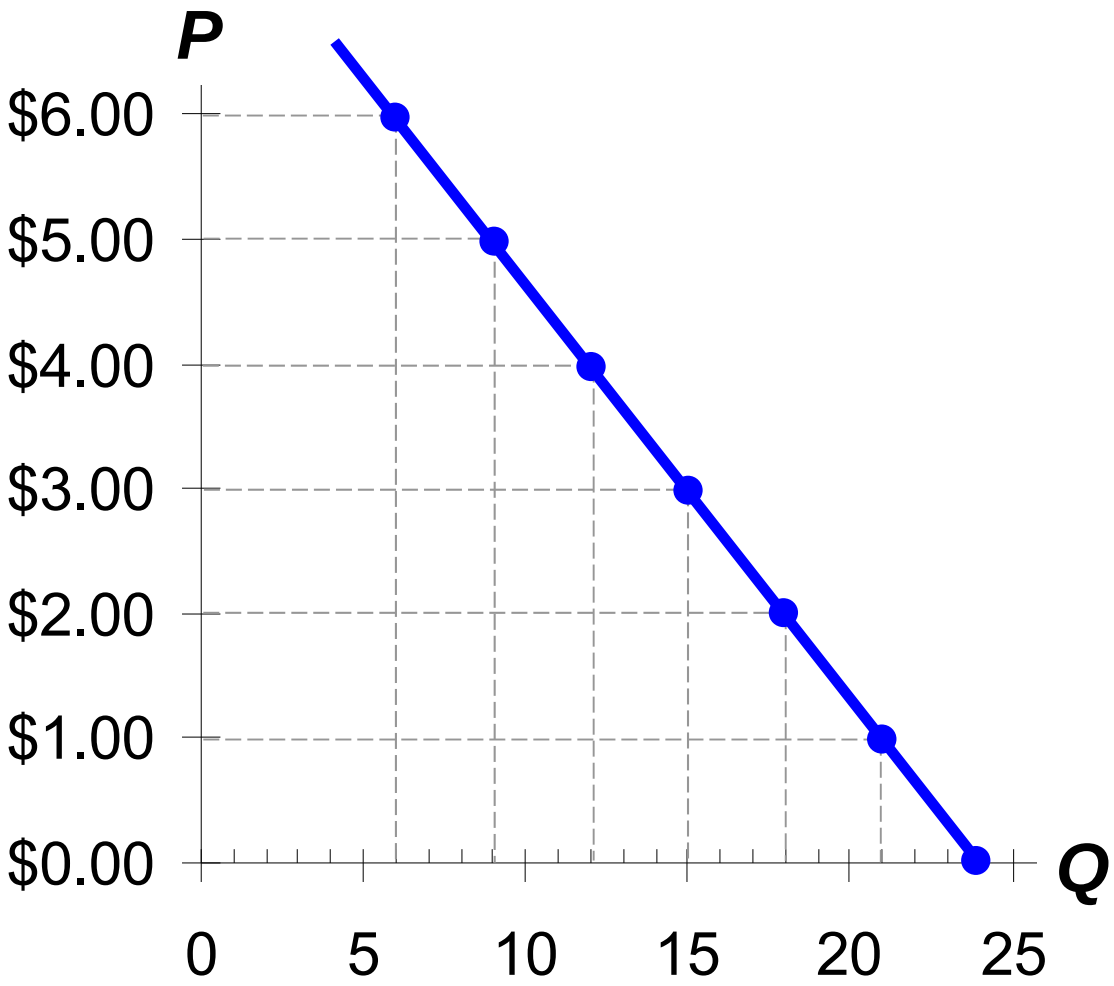
Price of lattes	Quantity of lattes demanded
$0.00	16
1.00	14
2.00	12
3.00	10
4.00	8
5.00	6
6.00	4

Market Demand versus Individual Demand

- The quantity demanded in the market is the sum of the quantities demanded by all buyers at each price.
- Suppose Helen and Ken are the only two buyers in the Latte market. (Q^d = quantity demanded)

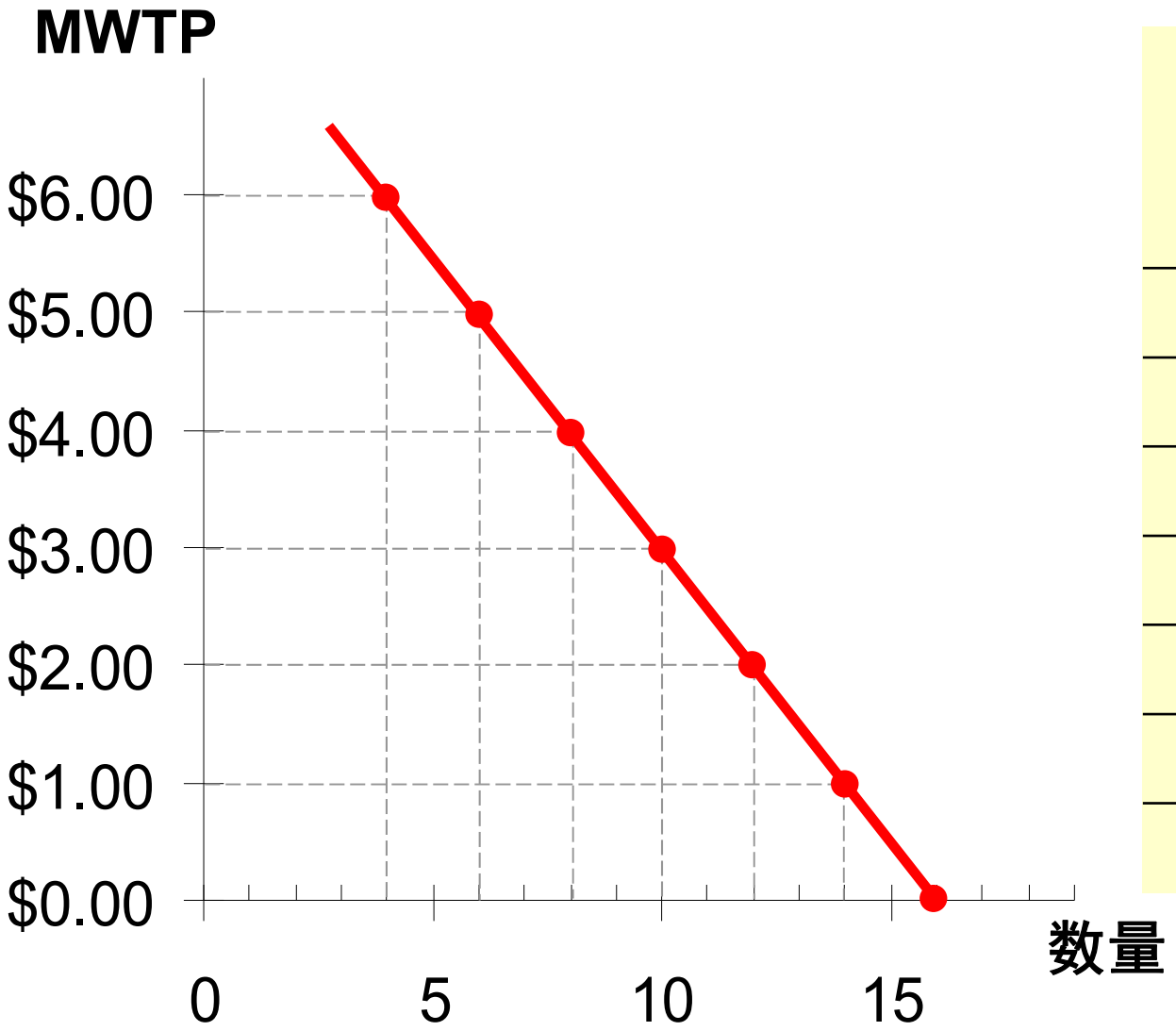
Price	Helen's Q^d		Ken's Q^d		Market Q^d
$0.00	16	+	8	=	24
1.00	14	+	7	=	21
2.00	12	+	6	=	18
3.00	10	+	5	=	15
4.00	8	+	4	=	12
5.00	6	+	3	=	9
6.00	4	+	2	=	6

The Market Demand Curve for Lattes



P	Q^d (Market)
$0.00	24
1.00	21
2.00	18
3.00	15
4.00	12
5.00	9
6.00	6

Demand Schedule and Curve



Quantity of lattes consumed	MWTP for lattes
4	$6.00
6	$5.00
8	$4.00
10	$3.00
12	$2.00
14	$1.00
16	$0.00

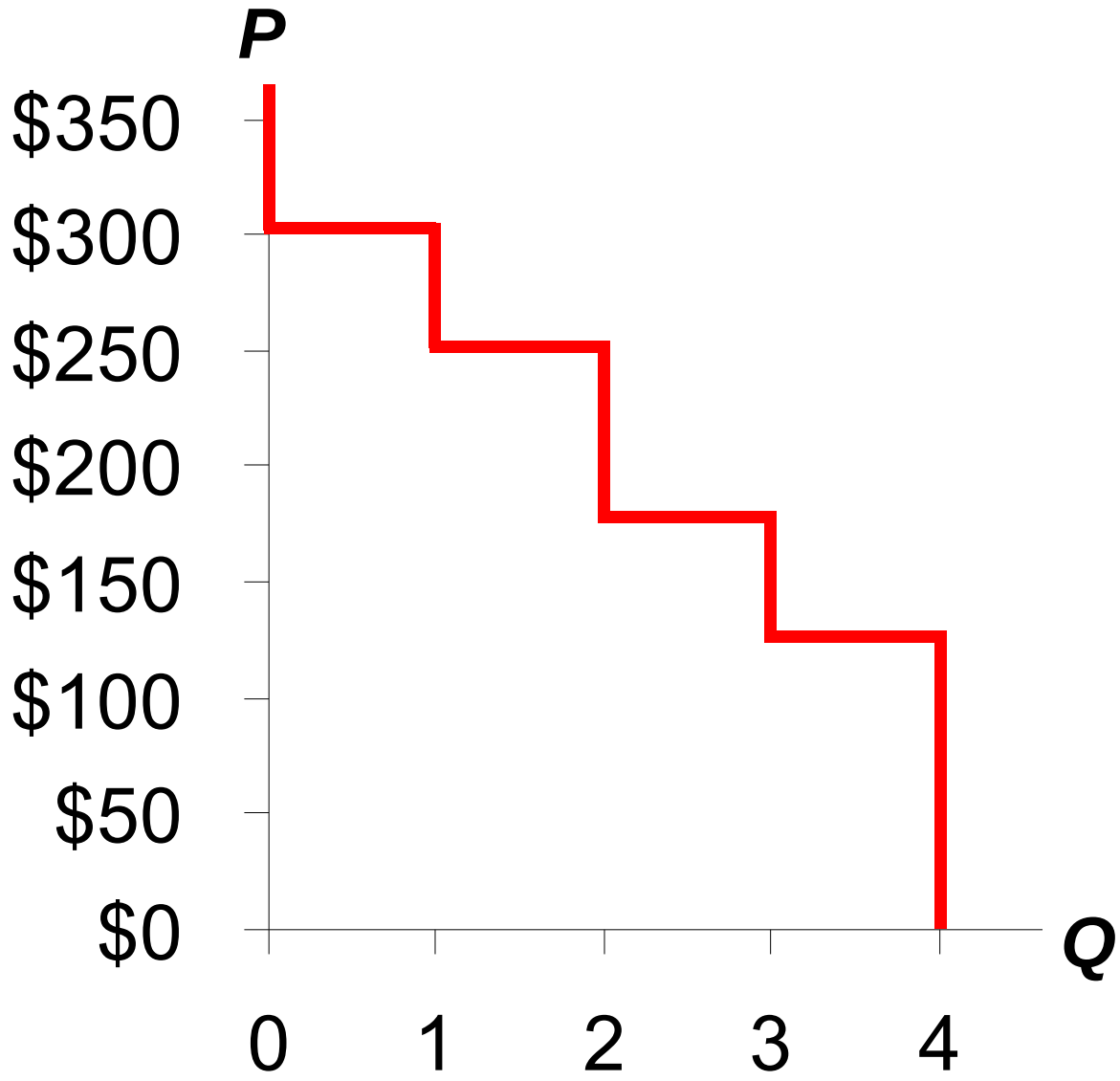
WTP and the Demand Curve

Derive the demand schedule:

name	*WTP*
Anthony	$250
Chad	175
Flea	300
John	125

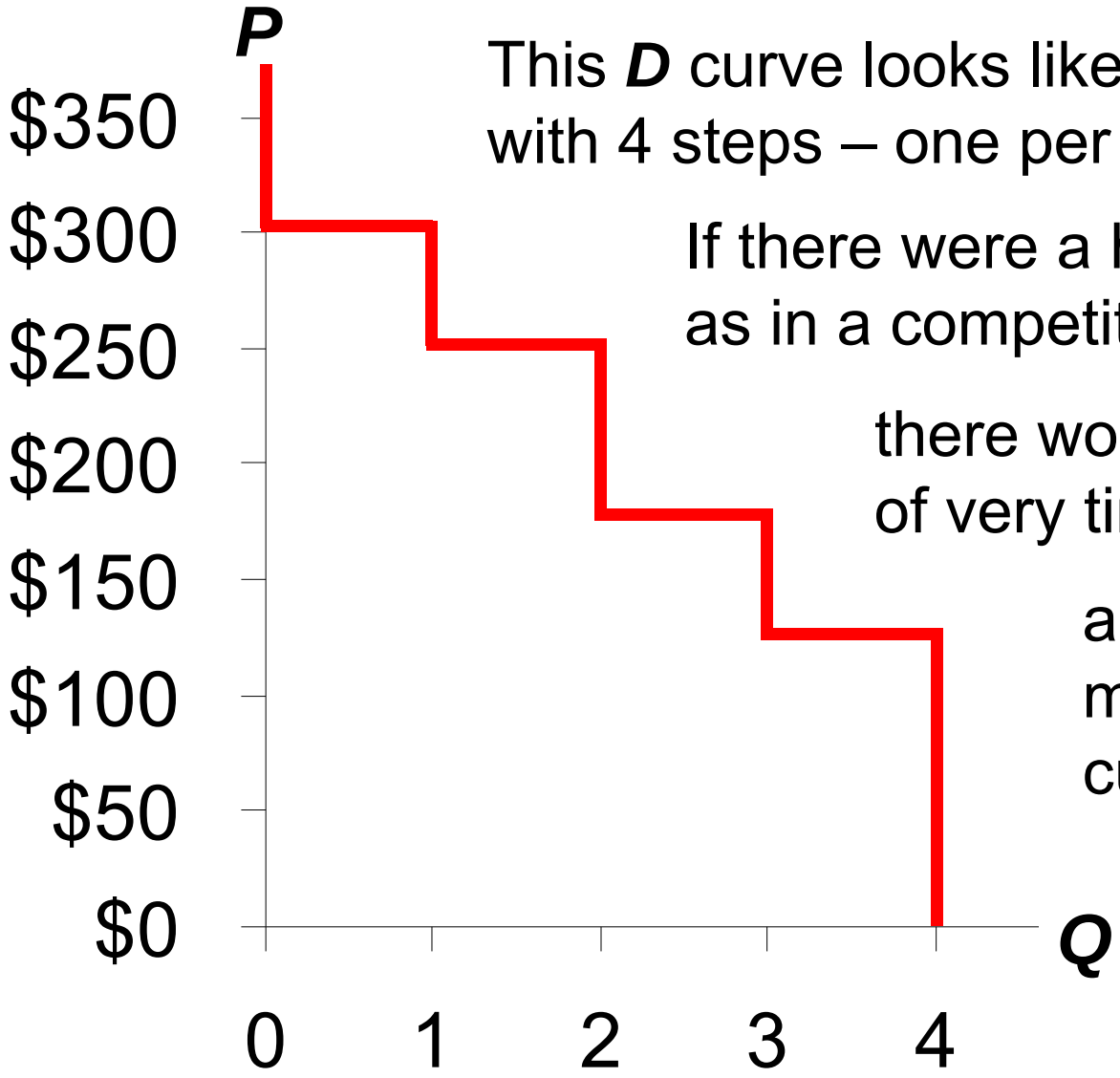
P (price of iPod)	who buys	Q^d
$301 & up	nobody	0
251 – 300	Flea	1
176 – 250	Anthony, Flea	2
126 – 175	Chad, Anthony, Flea	3
0 – 125	John, Chad, Anthony, Flea	4

WTP and the Demand Curve



P	Q^d
$301 & up	0
251 – 300	1
176 – 250	2
126 – 175	3
0 – 125	4

About the Staircase Shape…



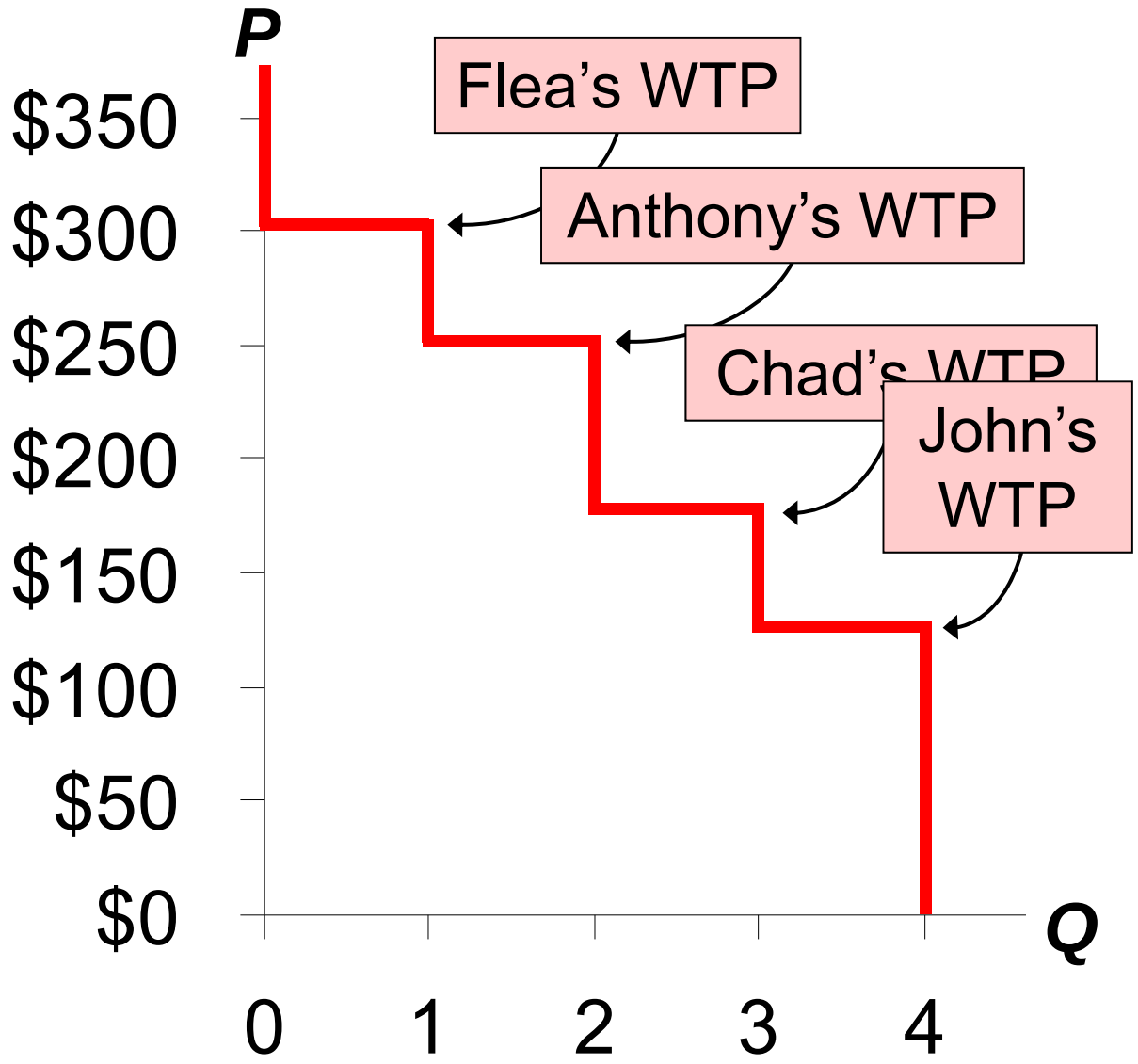
This ***D*** curve looks like a staircase with 4 steps – one per buyer.

If there were a huge # of buyers, as in a competitive market,

there would be a huge # of very tiny steps,

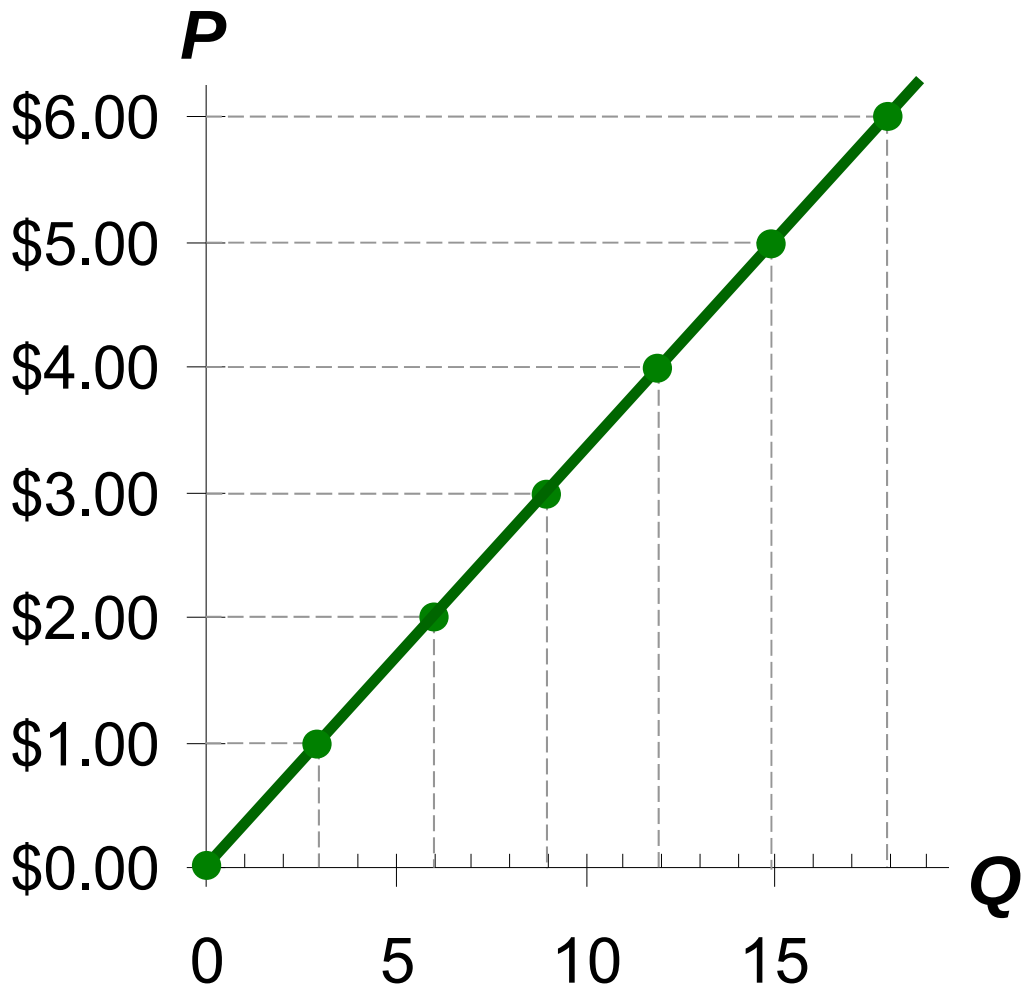
and it would look more like a smooth curve.

WTP and the Demand Curve



At any ***Q***, the height of the ***D*** curve is the WTP of the ***marginal buyer***, the buyer who would leave the market if ***P*** were any higher.

Starbucks' Supply Schedule & Curve



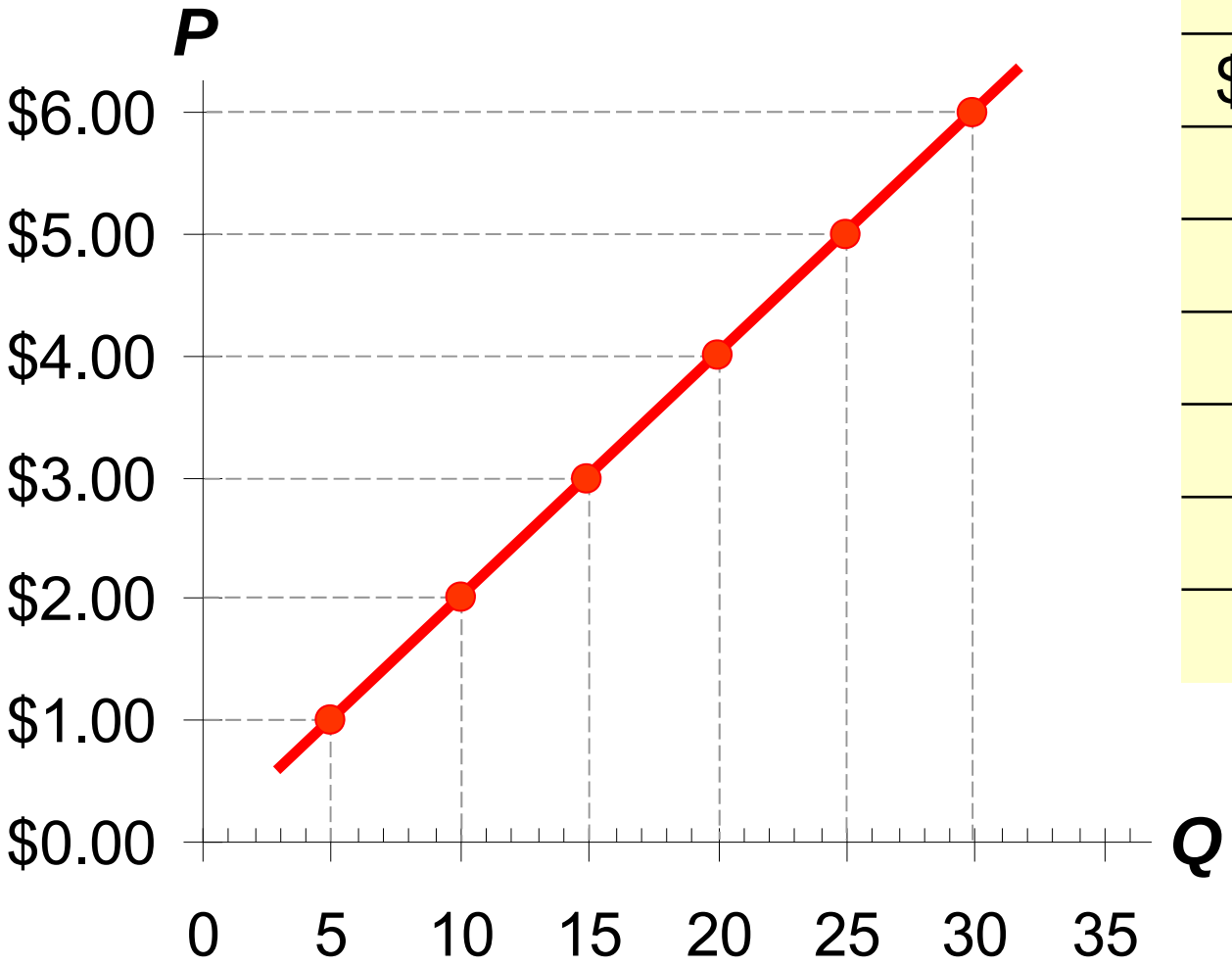
Price of lattes	Quantity of lattes supplied
$0.00	0
1.00	3
2.00	6
3.00	9
4.00	12
5.00	15
6.00	18

Market Supply versus Individual Supply

- The quantity supplied in the market is the sum of the quantities supplied by all sellers at each price.
- Suppose Starbucks and Jitters are the only two sellers in this market. (Q^s = quantity supplied)

Price	Starbucks		Jitters		Market Q^s
$0.00	0	+	0	=	0
1.00	3	+	2	=	5
2.00	6	+	4	=	10
3.00	9	+	6	=	15
4.00	12	+	8	=	20
5.00	15	+	10	=	25
6.00	18	+	12	=	30

The Market Supply Curve



P	Q^S (Market)
$0.00	0
1.00	5
2.00	10
3.00	15
4.00	20
5.00	25
6.00	30

Cost and the Supply Curve

- **Cost** is the value of everything a seller must give up to produce a good (i.e., opportunity cost).
- Includes cost of all resources used to produce good, including value of the seller's time.
- Example: Costs of 3 sellers in the lawn-cutting business.

name	*cost*
Jack	$10
Janet	20
Chrissy	35

A seller will produce and sell the good/service only if the price exceeds his or her cost.

Hence, cost is a measure of willingness to sell.

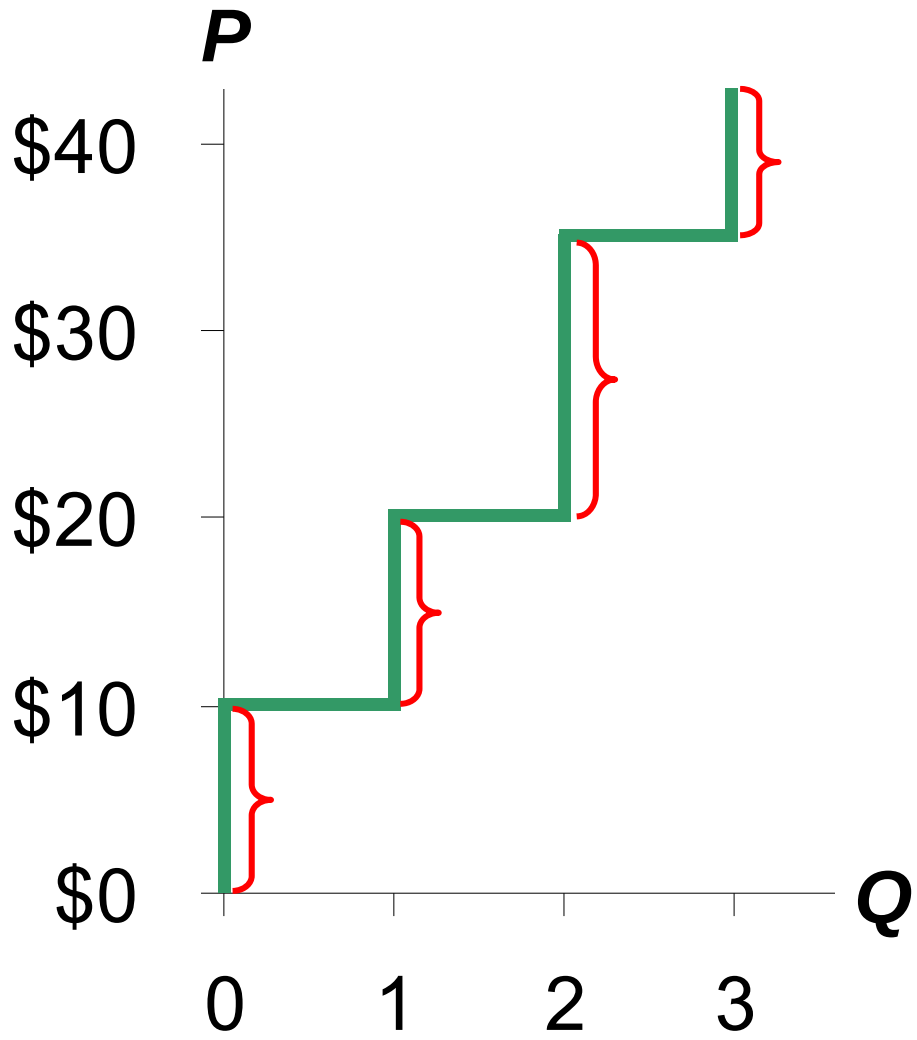
Cost and the Supply Curve

Derive the supply schedule from the cost data:

name	*cost*
Jack	$10
Janet	20
Chrissy	35

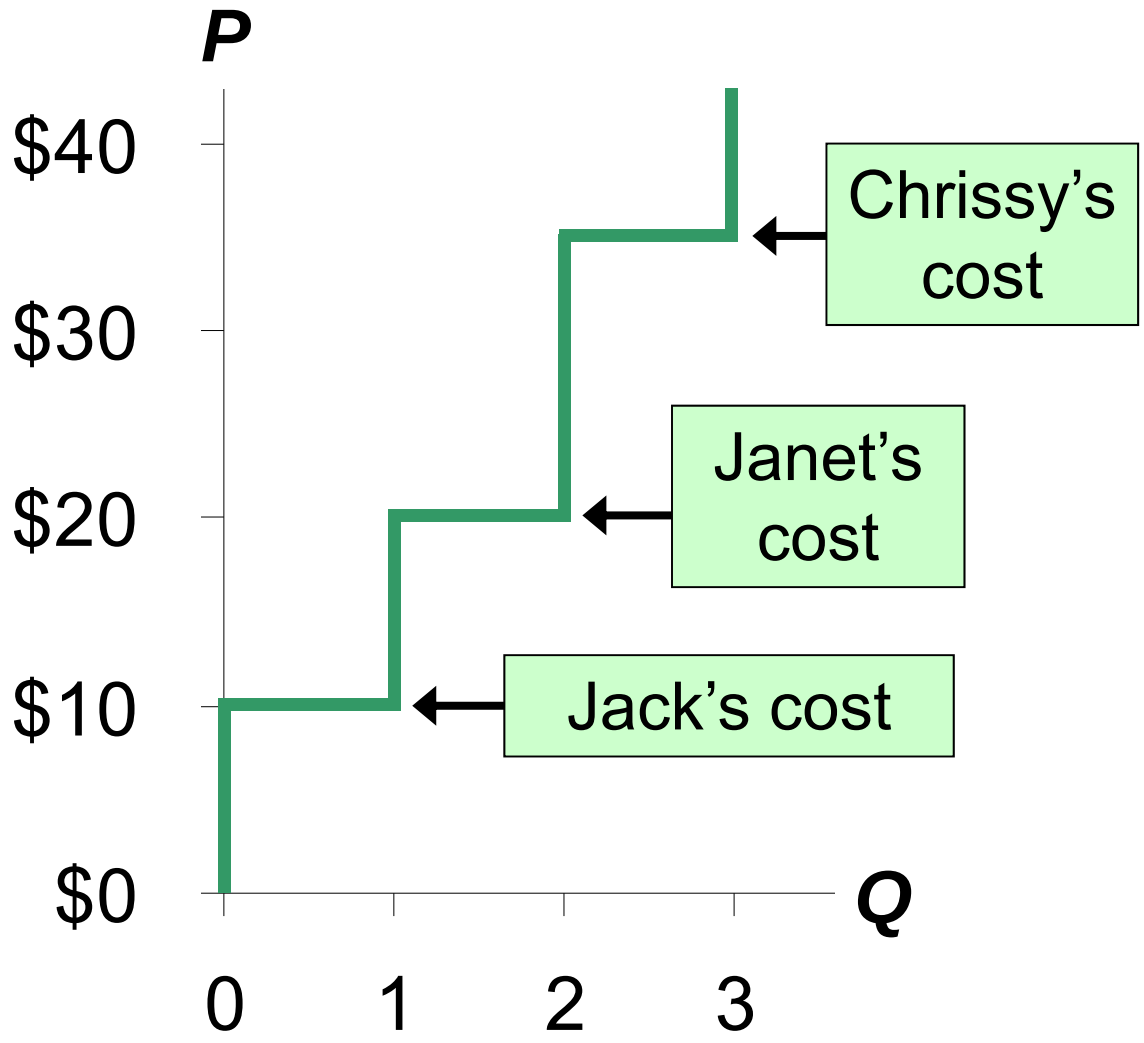
P	Q^s
$0 – 9	0
10 – 19	1
20 – 34	2
35 & up	3

Cost and the Supply Curve



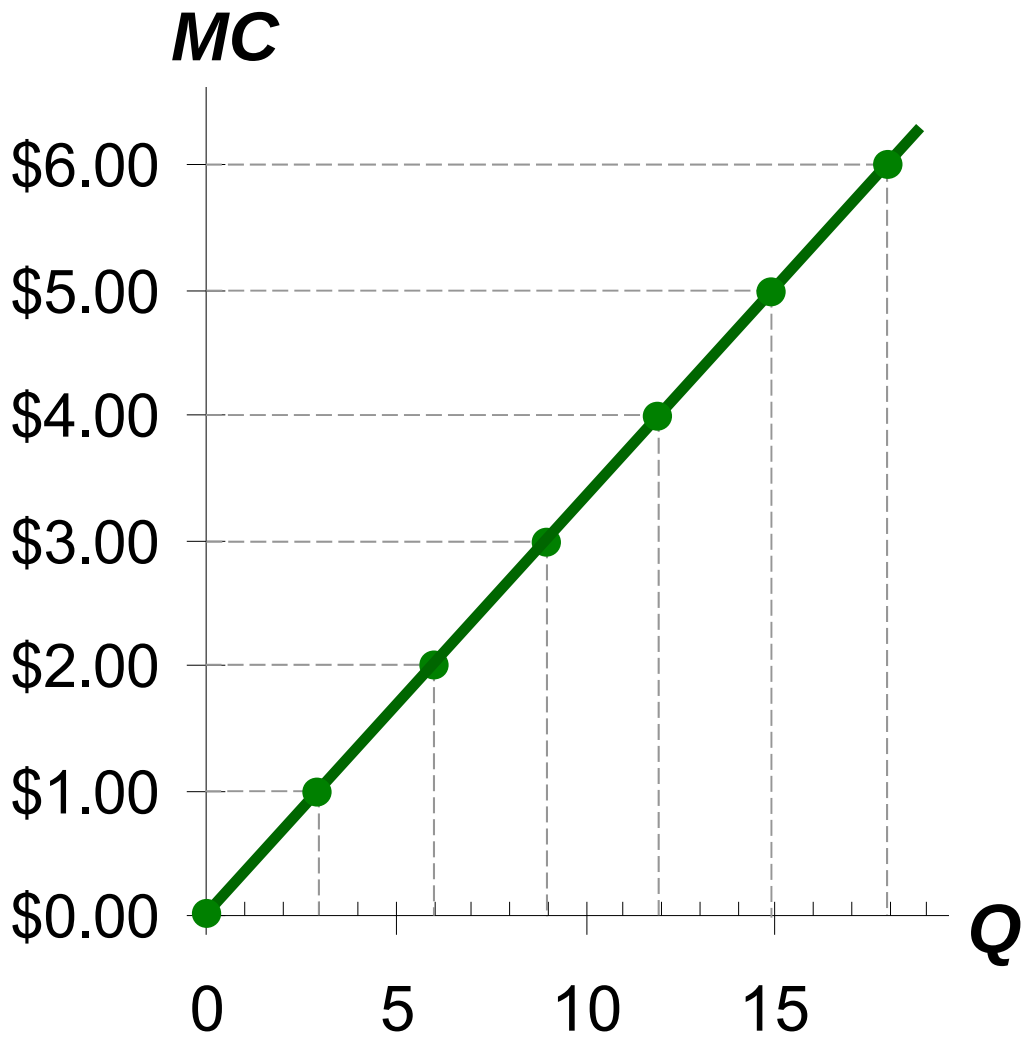
P	Q^s
$0 – 9	0
10 – 19	1
20 – 34	2
35 & up	3

Cost and the Supply Curve



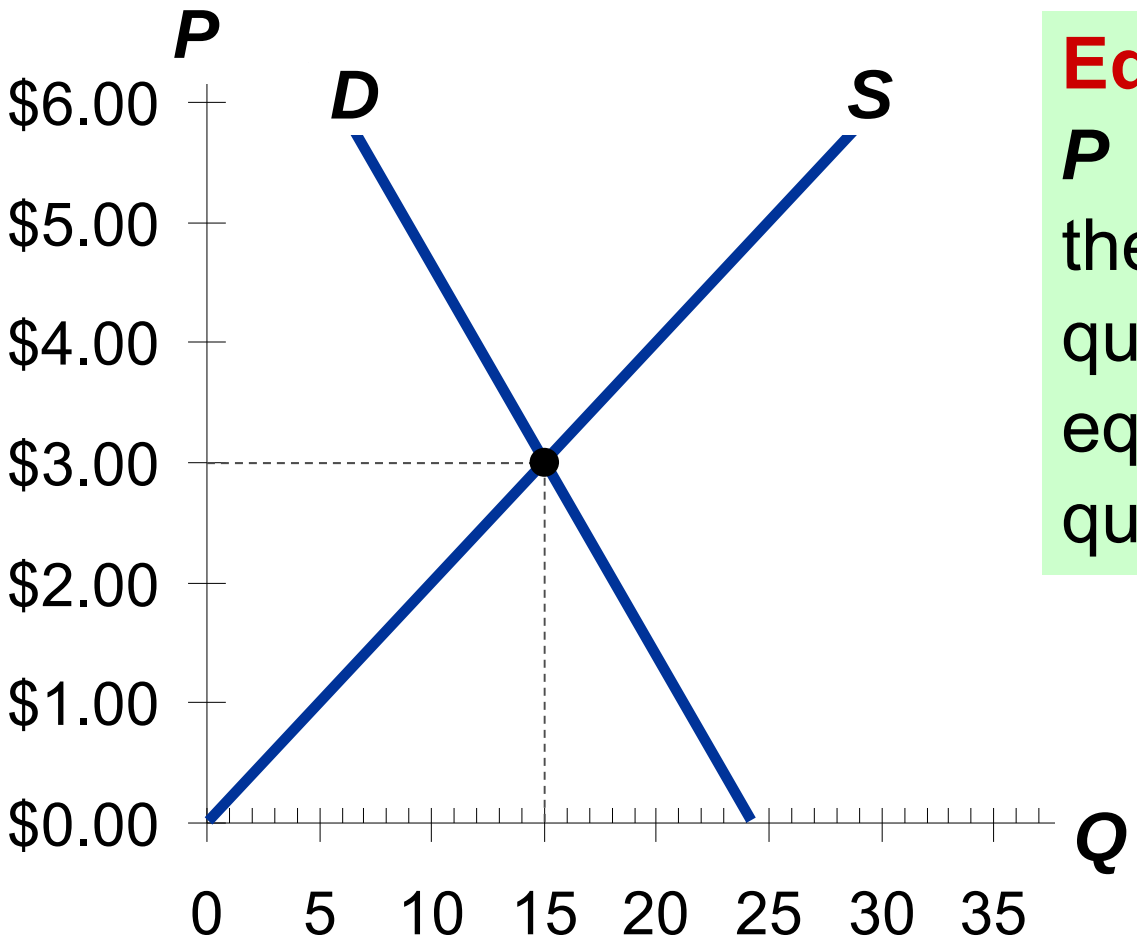
At each ***Q***, the height of the ***S*** curve is the cost of the ***marginal seller***, the seller who would leave the market if the price were any lower.

Starbucks' Supply Schedule & Curve



Quantity of lattes supplied	MC of lattes
0	$0.00
3	1.00
6	2.00
9	3.00
12	4.00
15	5.00
18	6.00

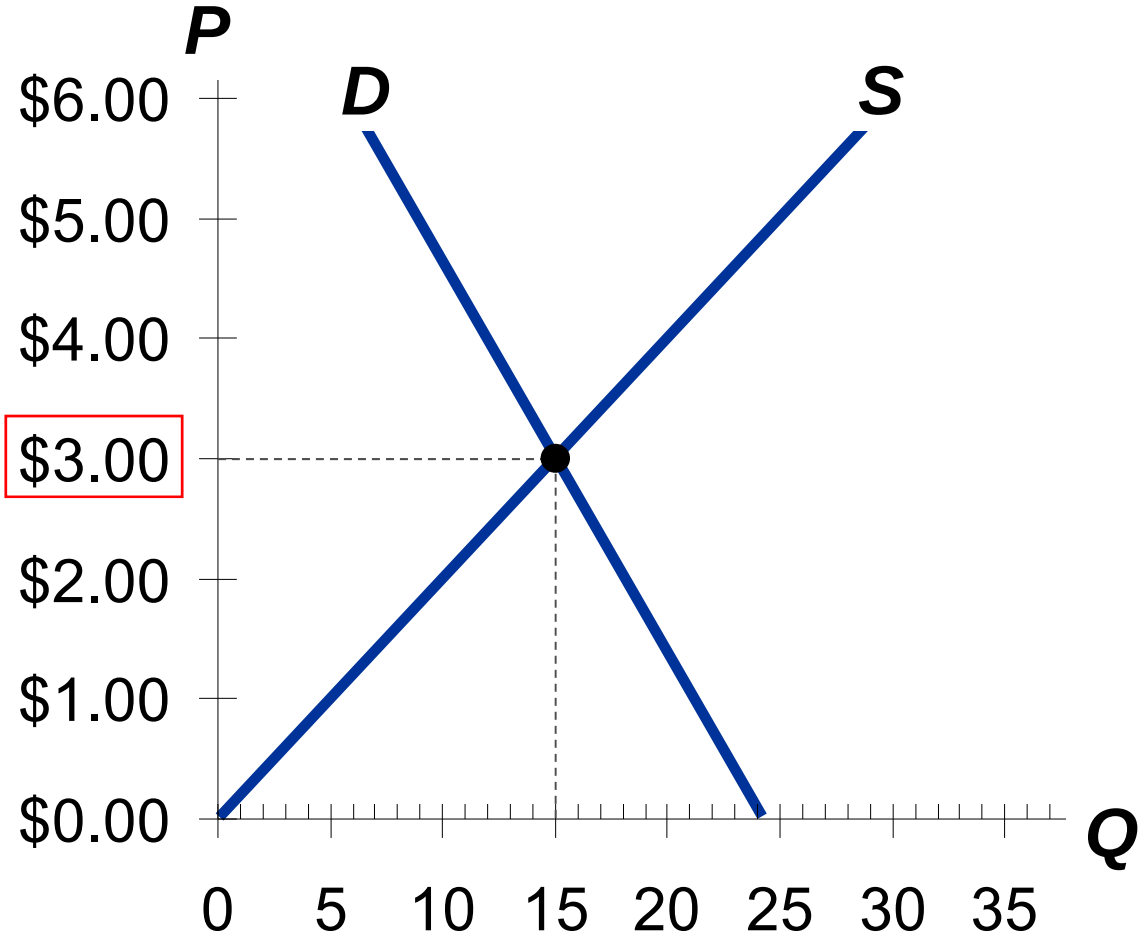
Supply and Demand Together



Equilibrium:
P has reached the level where quantity supplied equals quantity demanded

Equilibrium price:

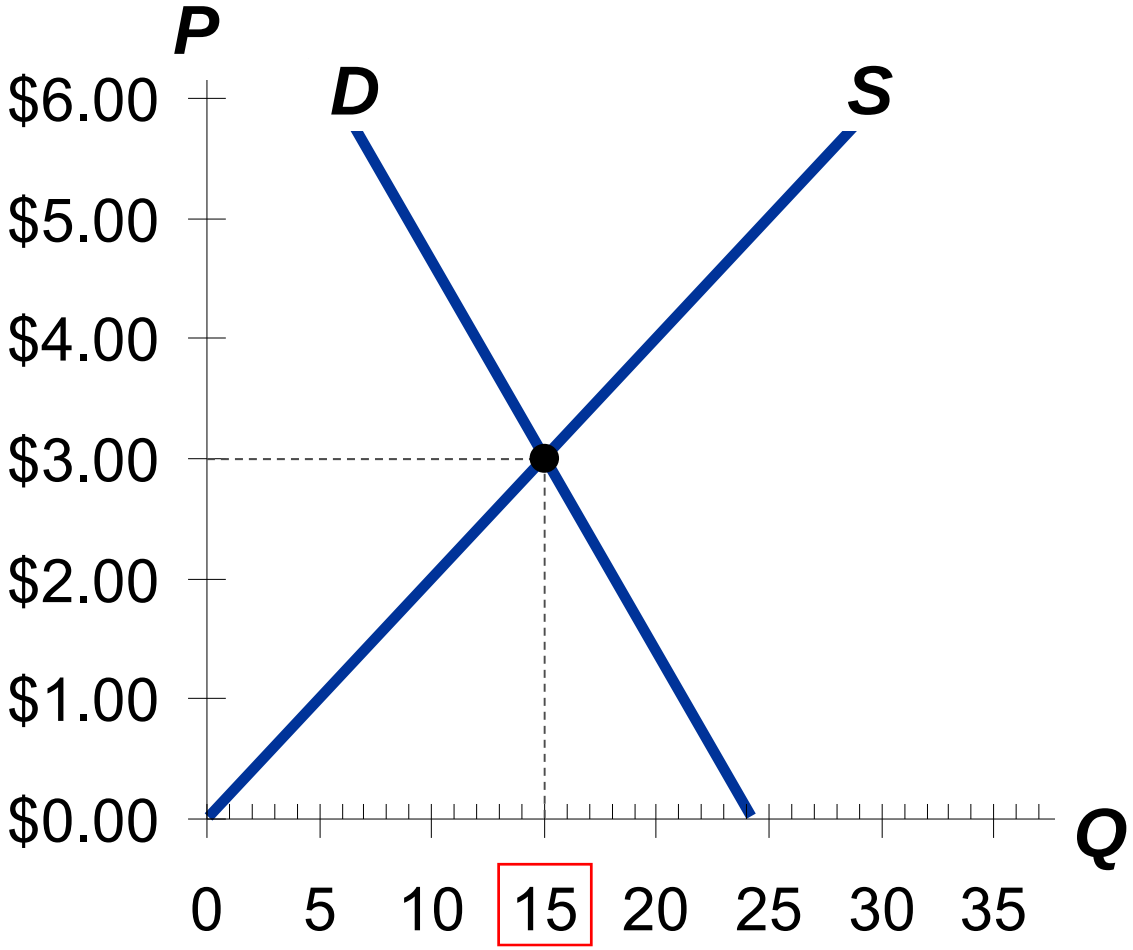
the price that equates quantity supplied with quantity demanded



P	Q^D	Q^S
$0	24	0
1	21	5
2	18	10
3	15	15
4	12	20
5	9	25
6	6	30

Equilibrium quantity:

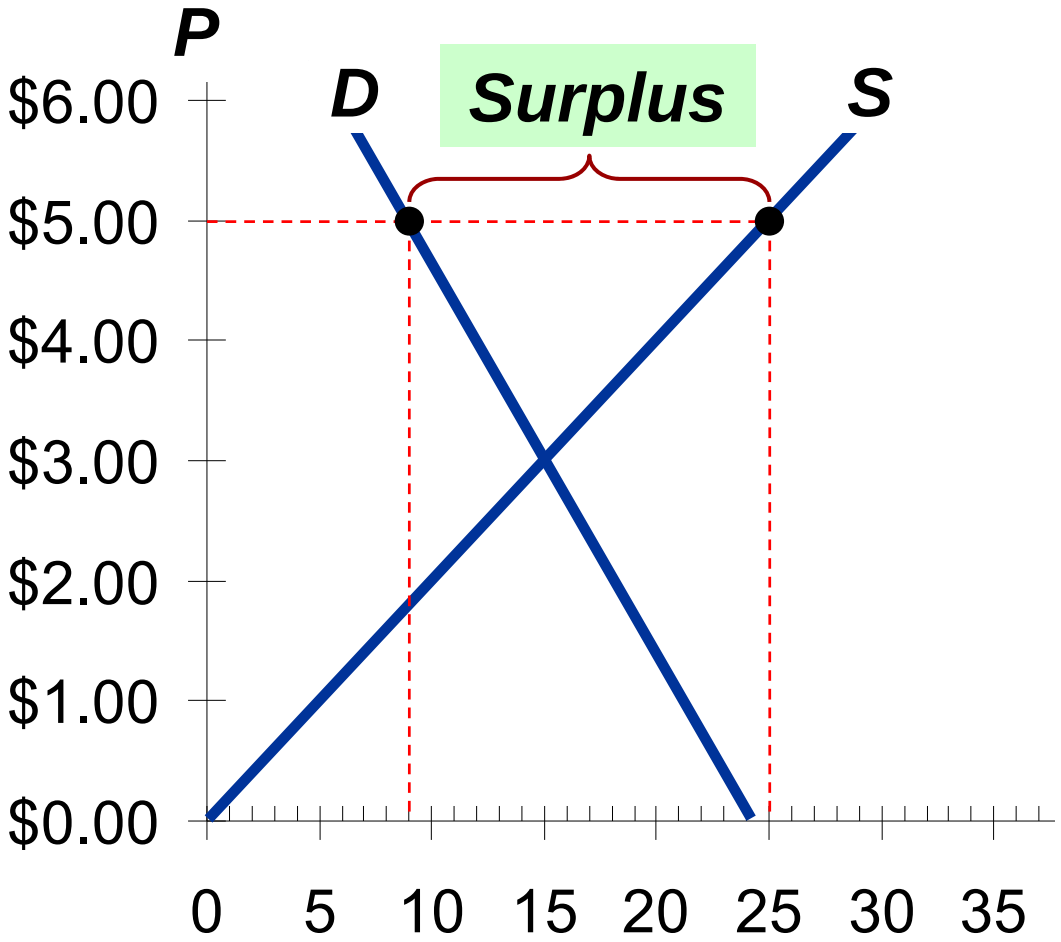
the quantity supplied and quantity demanded at the equilibrium price



P	Q^D	Q^S
$0	24	0
1	21	5
2	18	10
3	15	15
4	12	20
5	9	25
6	6	30

Surplus (a.k.a. excess supply):

when quantity supplied is greater than quantity demanded



Example:
If P = \$5,

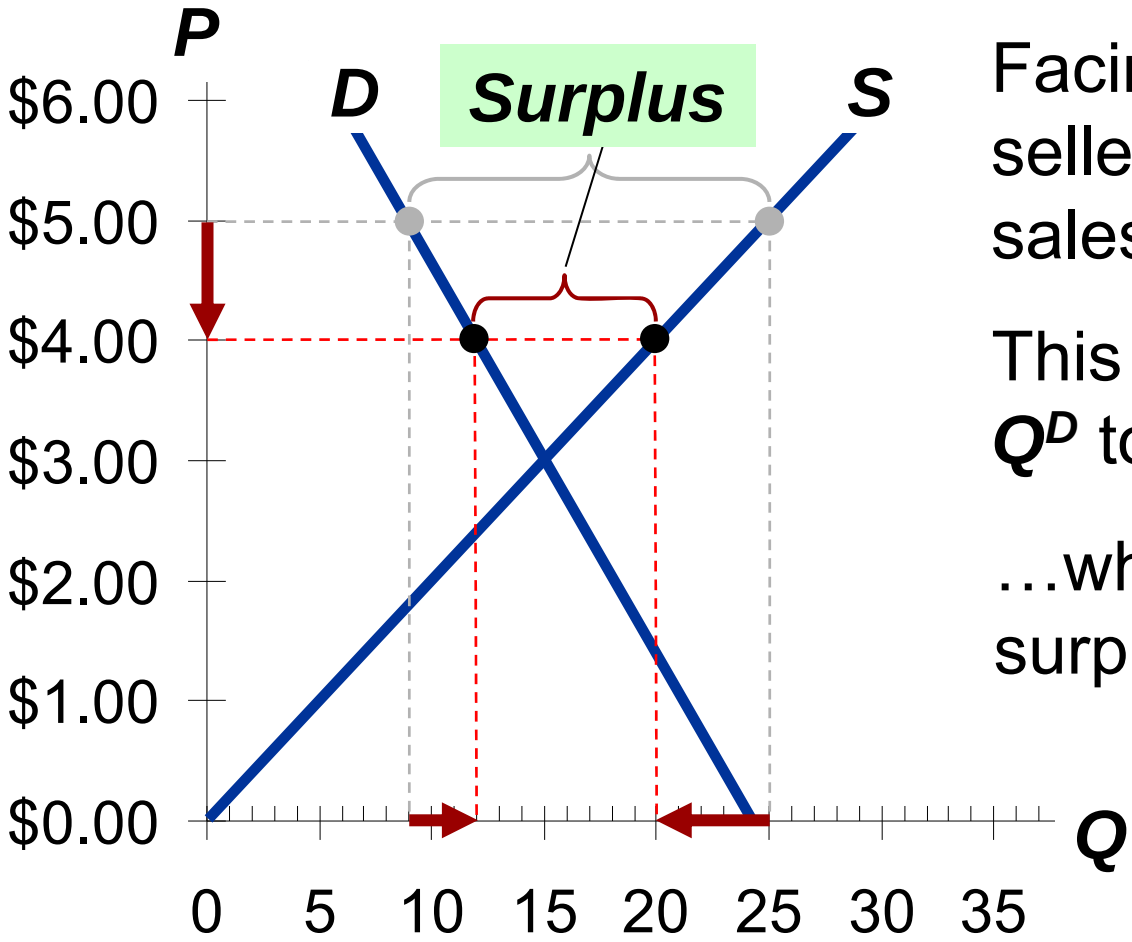
then
Q^D = 9 lattes

and
Q^S = 25 lattes

resulting in a surplus of 16 lattes

Surplus (a.k.a. excess supply):

when quantity supplied is greater than quantity demanded



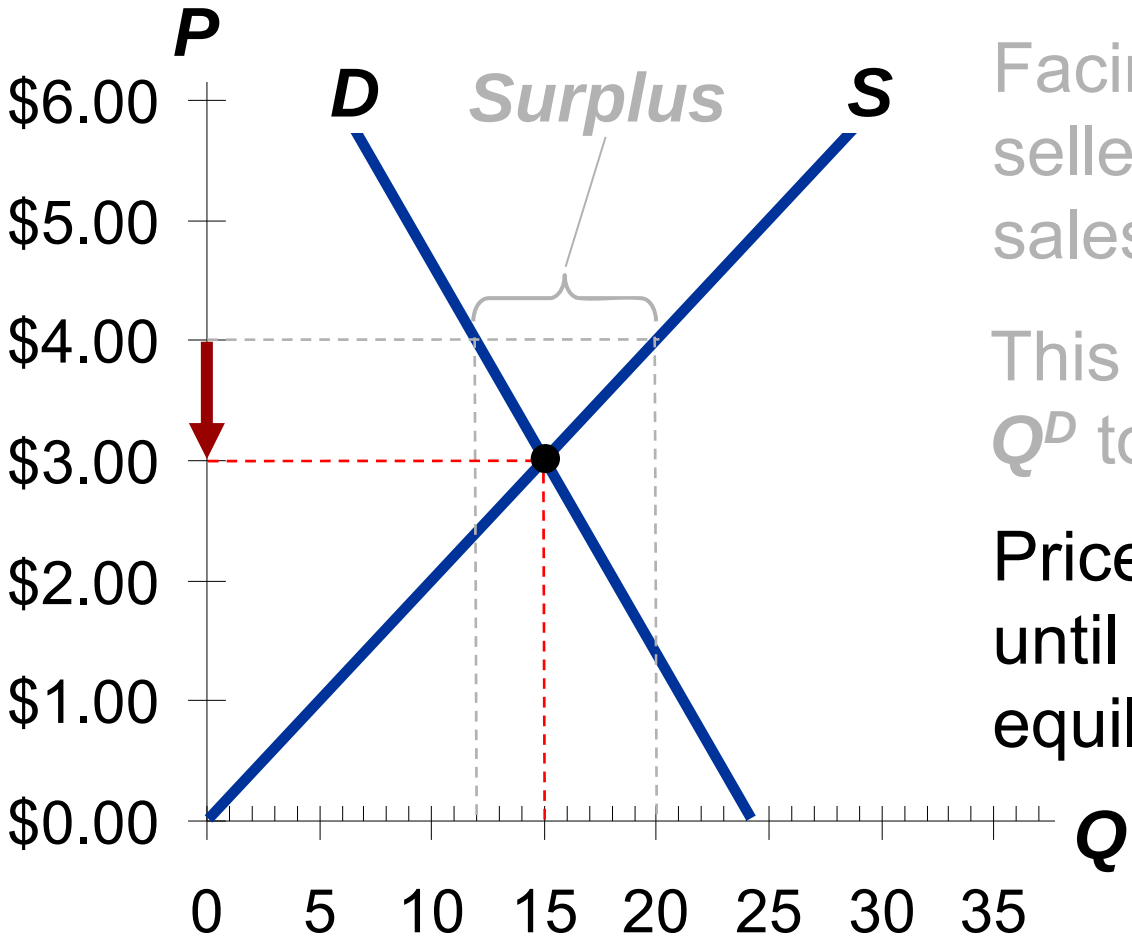
Facing a surplus, sellers try to increase sales by cutting price.

This causes Q^D to rise and Q^S to fall…

…which reduces the surplus.

Surplus (a.k.a. excess supply):

when quantity supplied is greater than quantity demanded



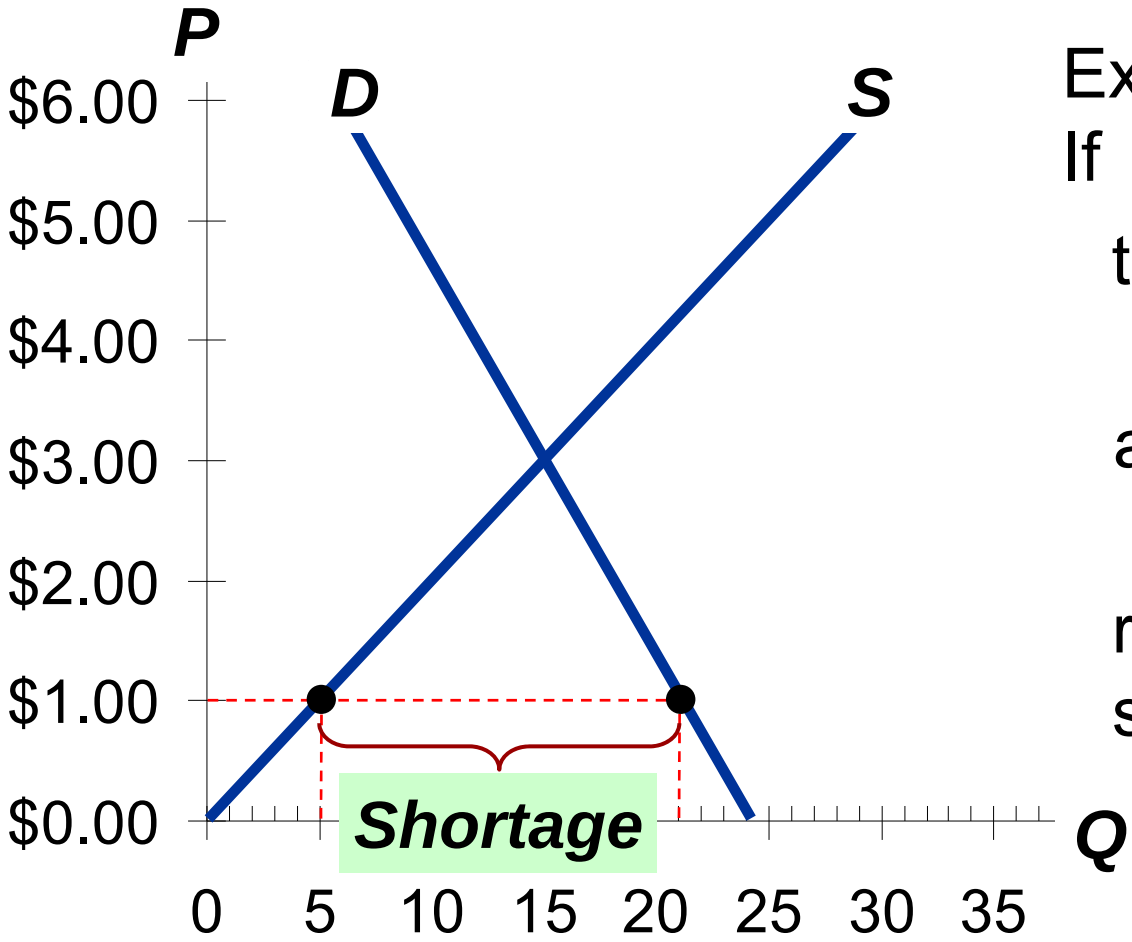
Facing a surplus, sellers try to increase sales by cutting price.

This causes Q^D to rise and Q^S to fall.

Prices continue to fall until market reaches equilibrium.

Shortage (a.k.a. excess demand):

when quantity demanded is greater than quantity supplied



Example:
If P = \$1,

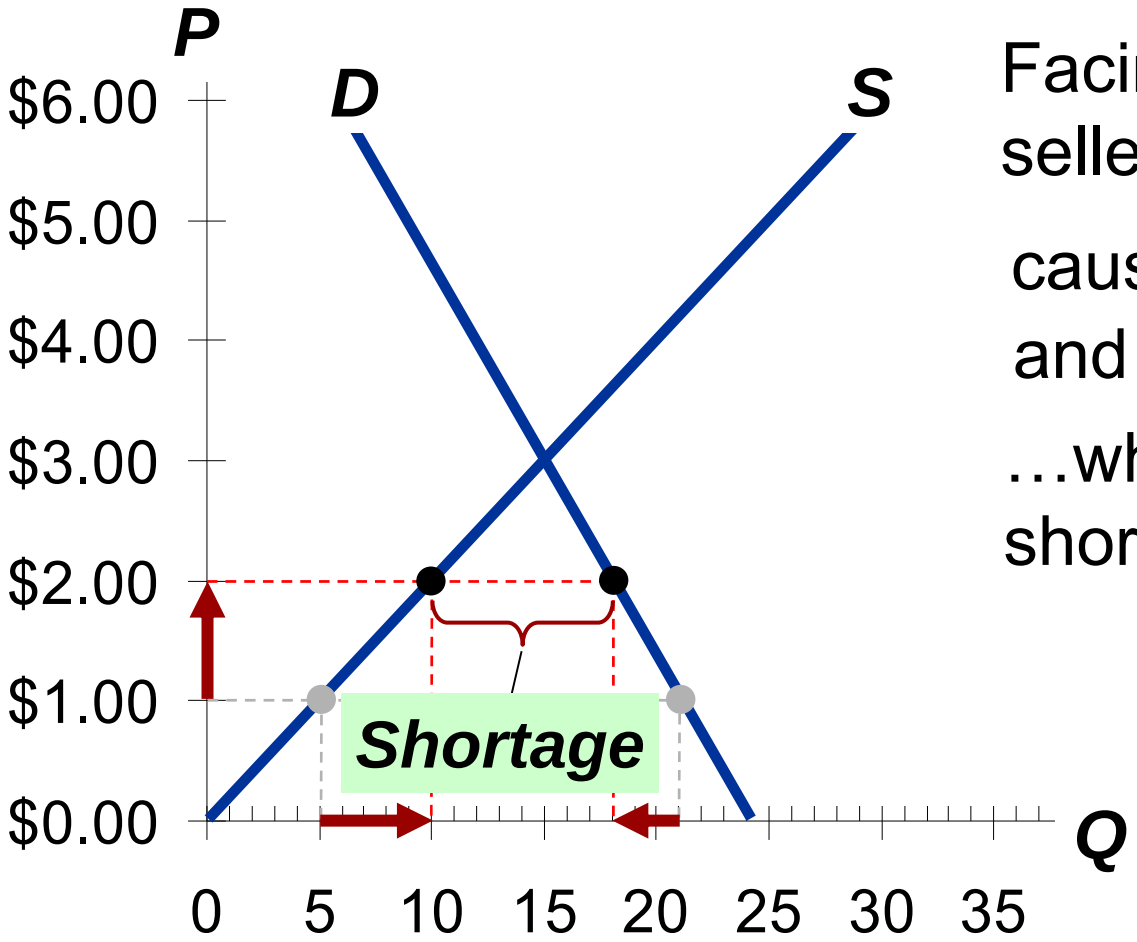
then
Q^D = 21 lattes

and
Q^S = 5 lattes

resulting in a shortage of 16 lattes

Shortage (a.k.a. excess demand):

when quantity demanded is greater than quantity supplied



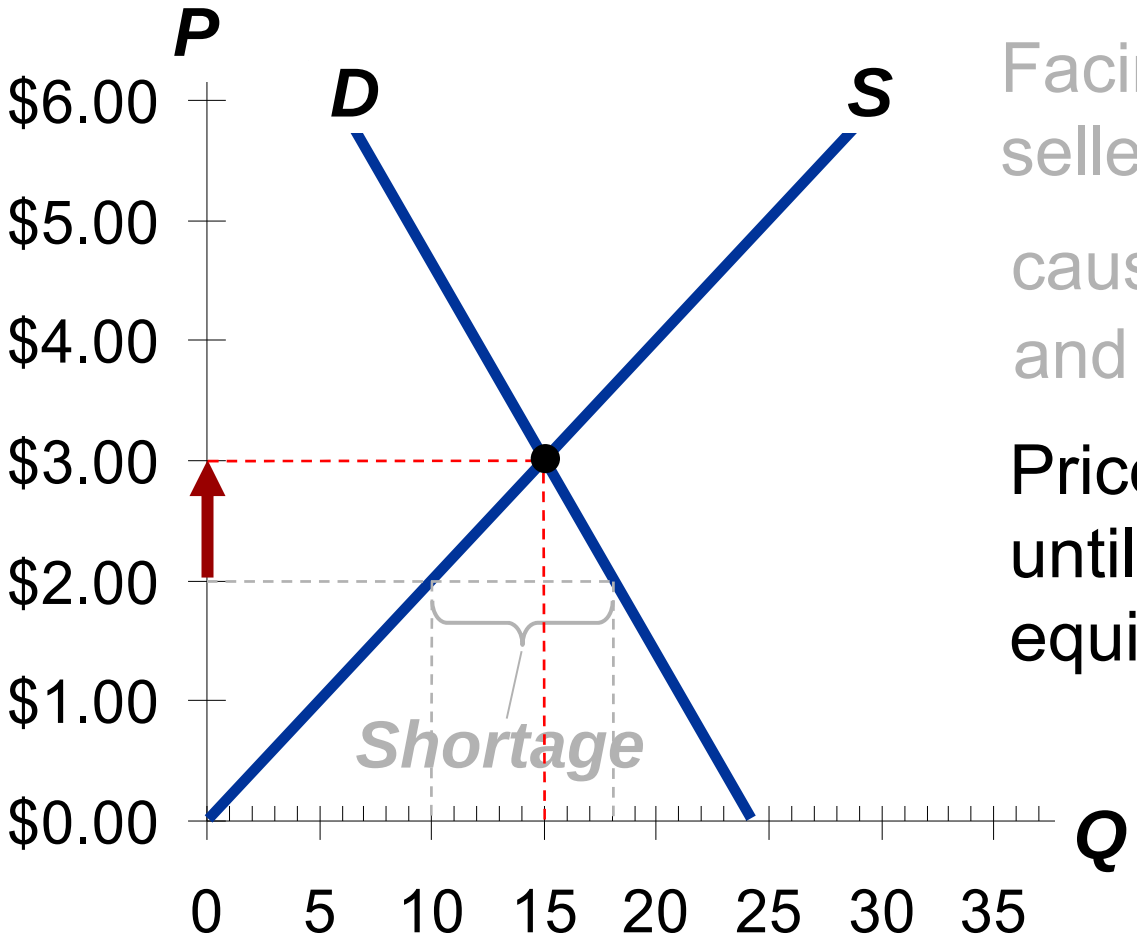
Facing a shortage, sellers raise the price,

causing Q^D to fall and Q^S to rise,

…which reduces the shortage.

Shortage (a.k.a. excess demand):

when quantity demanded is greater than quantity supplied



Facing a shortage, sellers raise the price,

causing Q^D to fall and Q^S to rise.

Prices continue to rise until market reaches equilibrium.

福利经济学第一定理

一组竞争市场所达到的

均衡分配

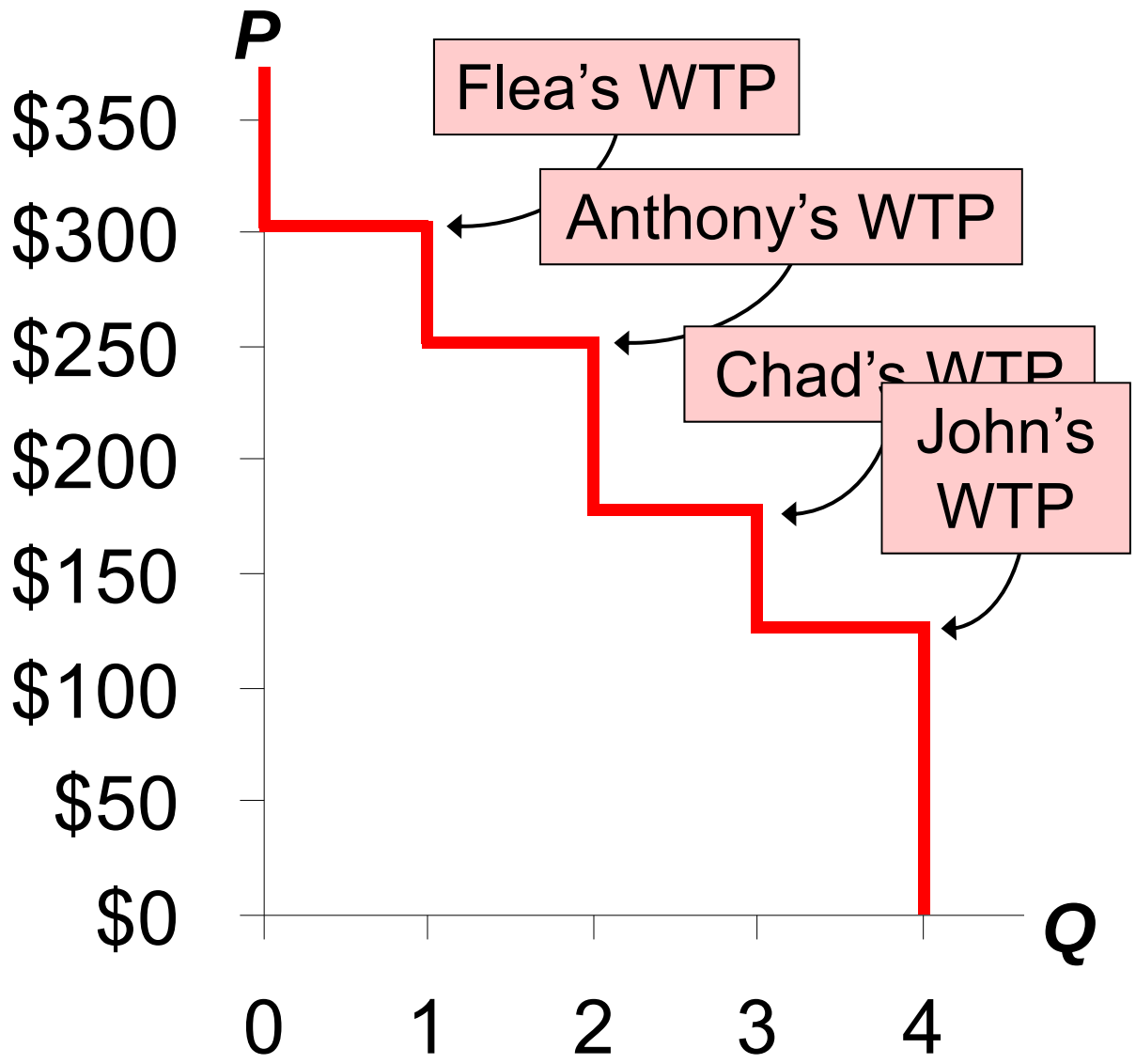
必定是最优的配置方式

如何定义"最优"?

- To answer this, we use consumer and producer surplus as measures of society's well-being, and we consider whether the market's allocation is *desirable:*
  - *Efficiency:* maximizing total surplus
  - *Equality:* fair distribution of social surplus among market participants

  (Policymakers also care about *equality*, though our focus here is on efficiency.)

WTP and the Demand Curve



At any ***Q***, the height of the ***D*** curve is the WTP of the ***marginal buyer***, the buyer who would leave the market if ***P*** were any higher.

Consumer Surplus (CS)

Consumer surplus is the amount a buyer is willing to pay minus the amount the buyer actually pays:

$$CS = WTP - P$$

name	*WTP*
Anthony	$250
Chad	175
Flea	300
John	125

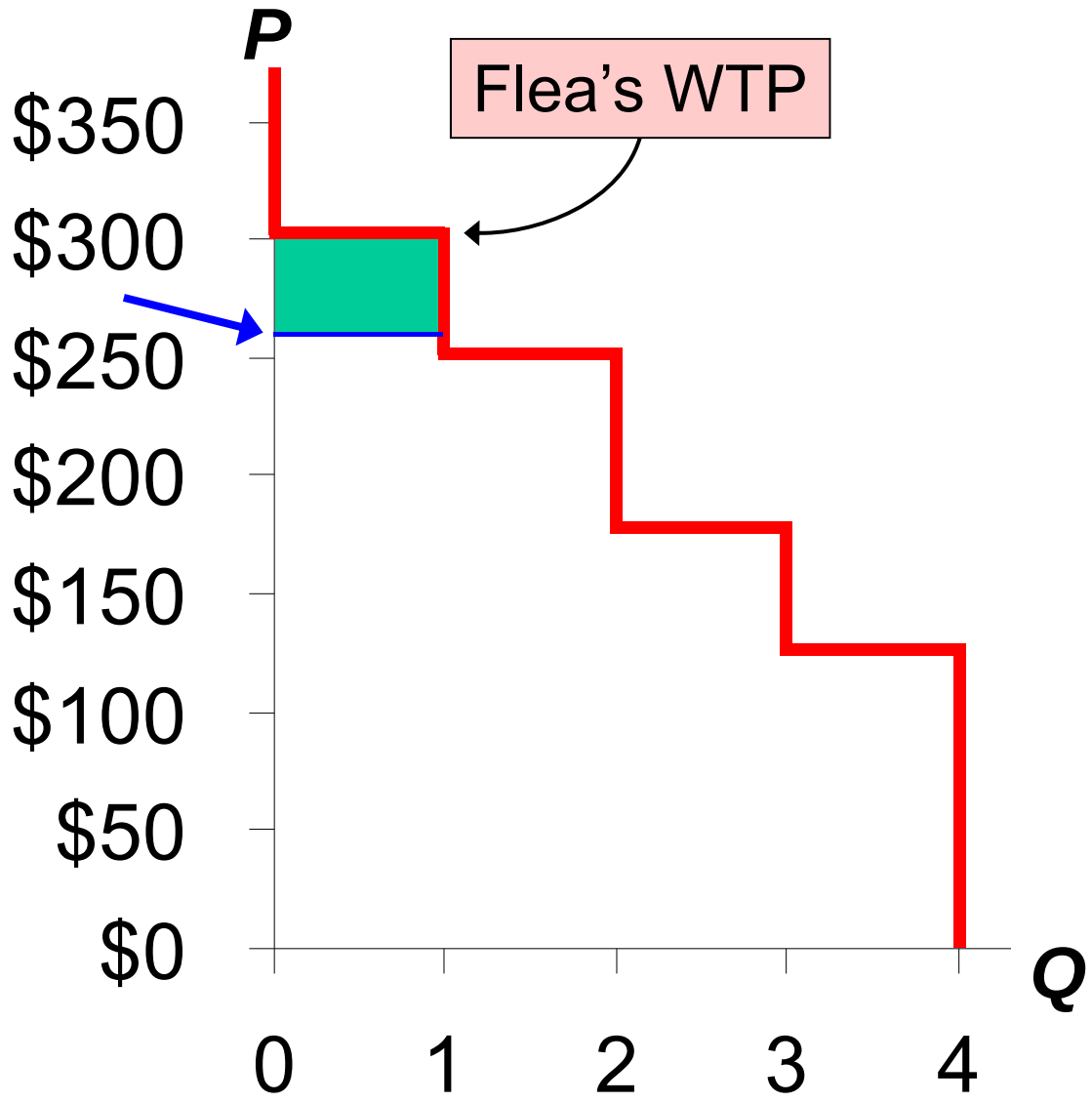
Suppose ***P*** = $260.

Flea's CS = $300 – 260 = $40.

The others get no CS because they do not buy an iPod at this price.

Total CS = $40.

CS and the Demand Curve

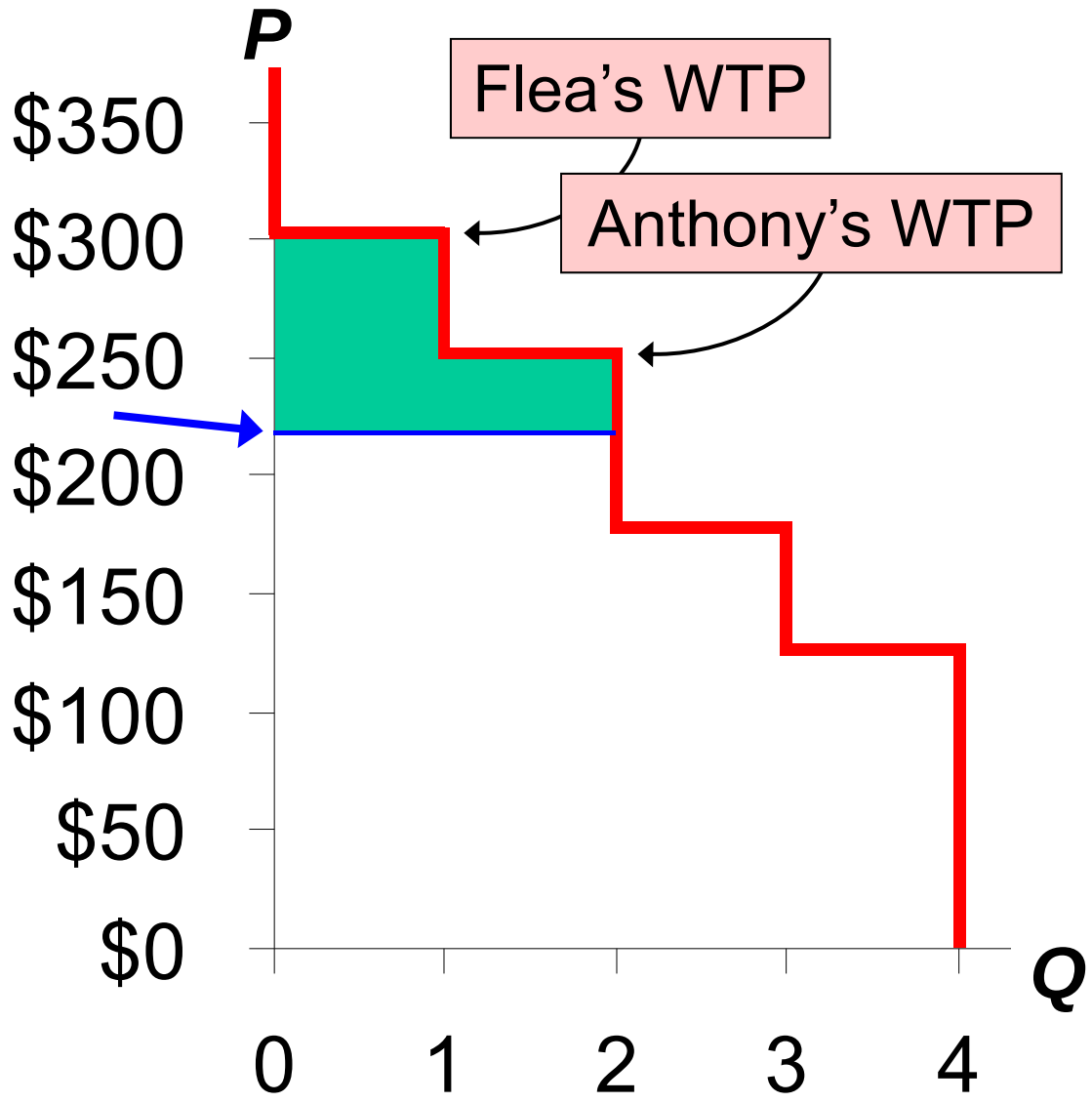


P = $260

Flea's CS =
$300 – 260 = $40

Total CS = $40

CS and the Demand Curve



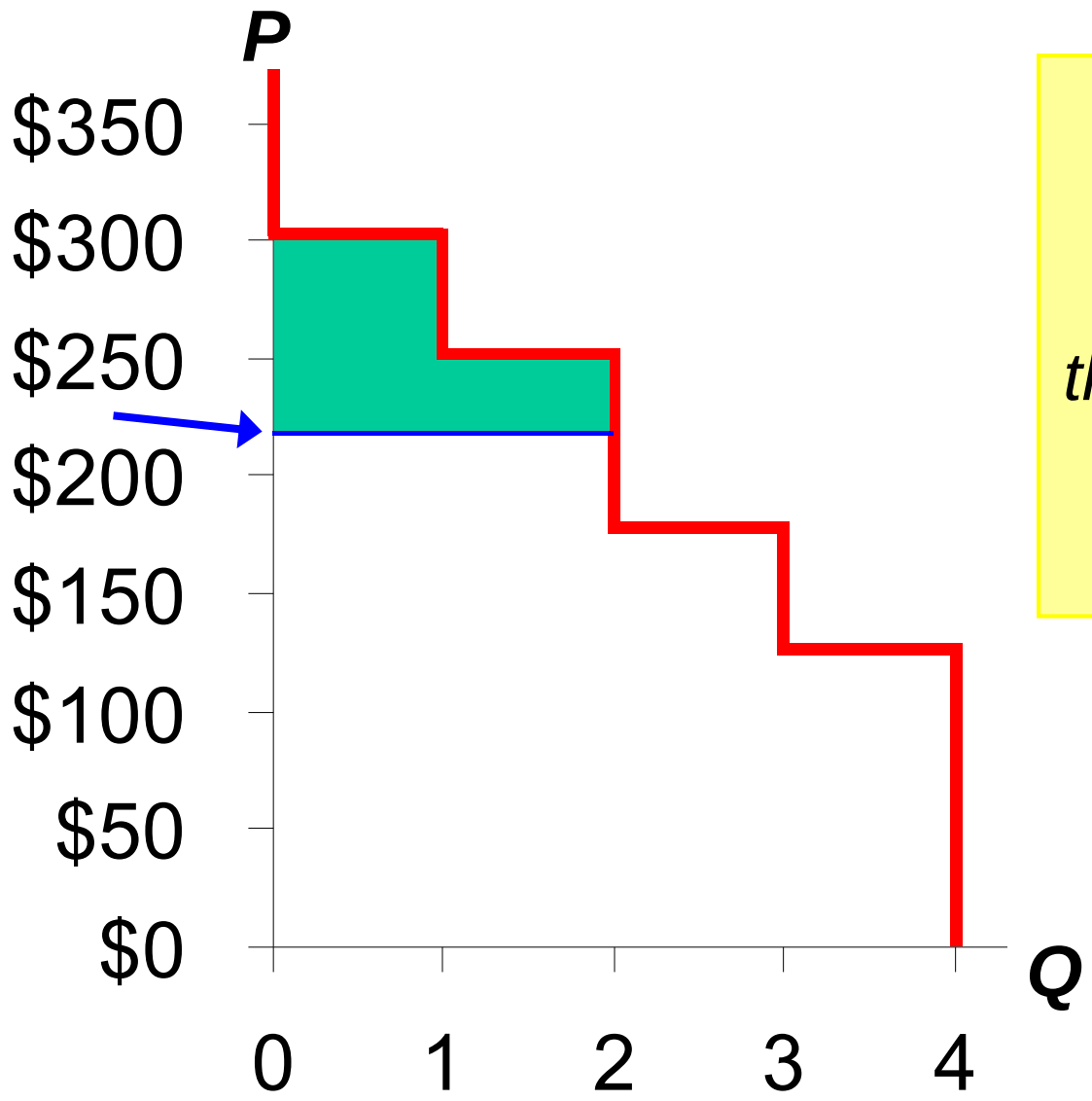
Instead, suppose ***P*** = $220

Flea's CS = $300 – 220 = $80

Anthony's CS = $250 – 220 = $30

Total CS = $110

CS and the Demand Curve



The lesson:

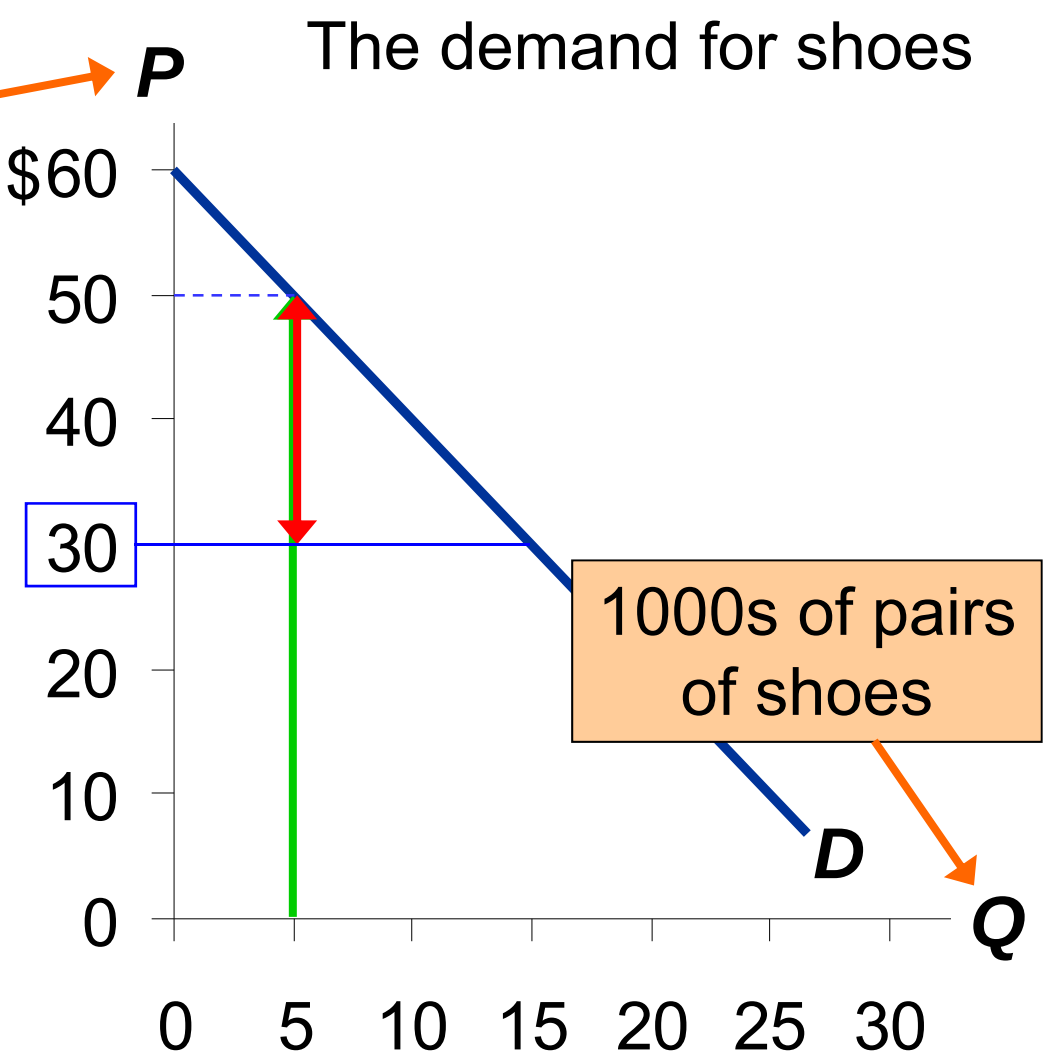
Total CS equals the area under the demand curve above the price, from 0 to ***Q****.*

CS with Lots of Buyers & a Smooth D Curve

At ***Q*** = 5(thousand), the marginal buyer is willing to pay $50 for pair of shoes.

Suppose ***P*** = $30.

Then his consumer surplus = $20.



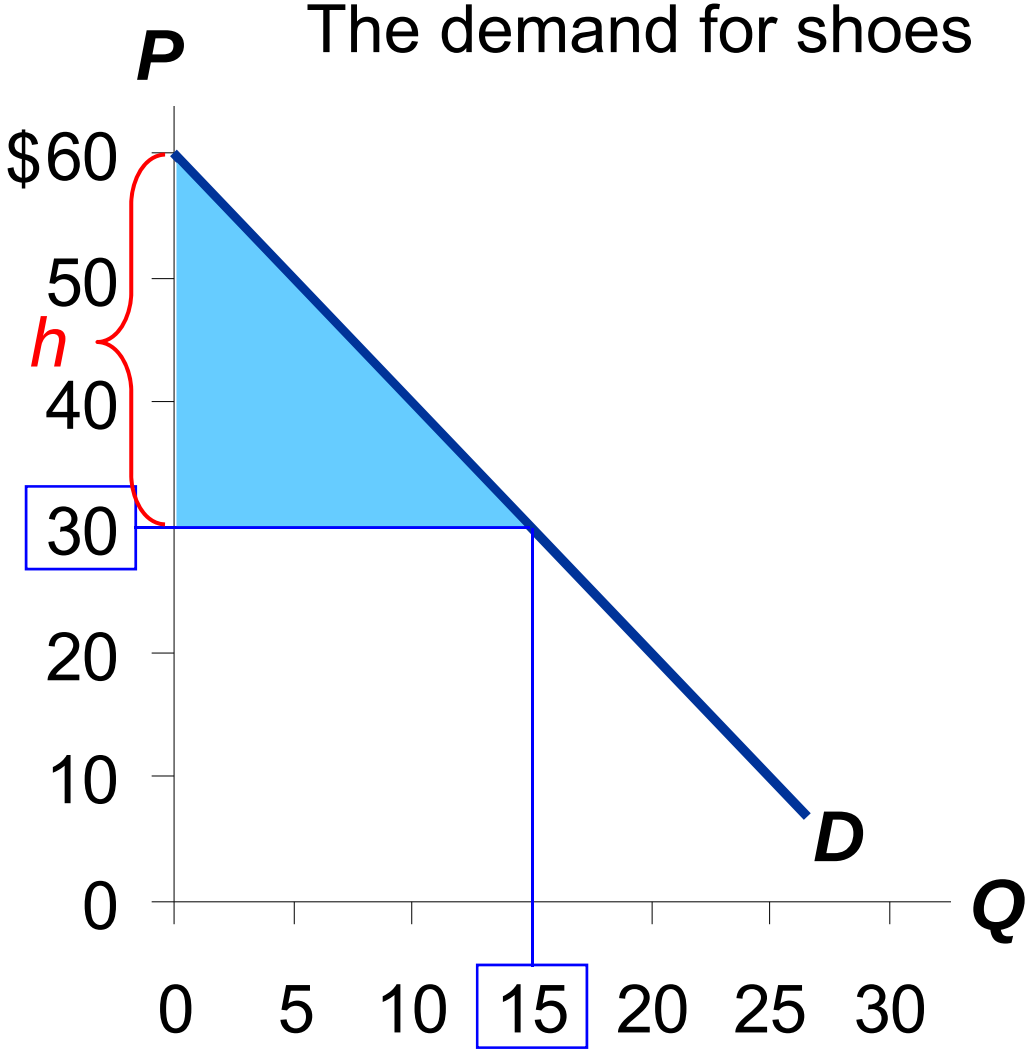
CS with Lots of Buyers & a Smooth D Curve

CS is the area b/w ***P*** and the ***D*** curve, from 0 to ***Q***.

Recall: area of a triangle equals ½ x base x height

Height = $60 – 30 = $30.

So,
CS = ½ x 15 x $30
= $225.

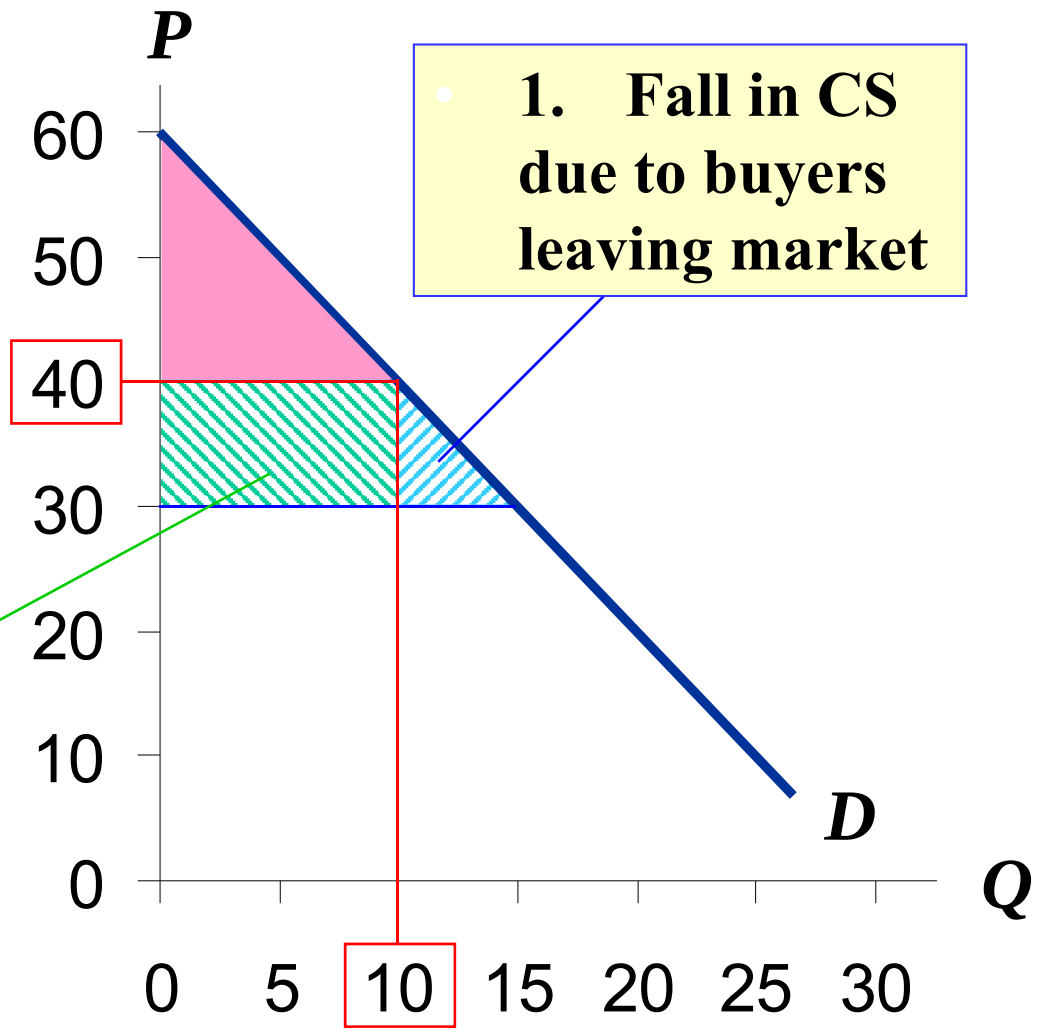


How a Higher Price Reduces CS

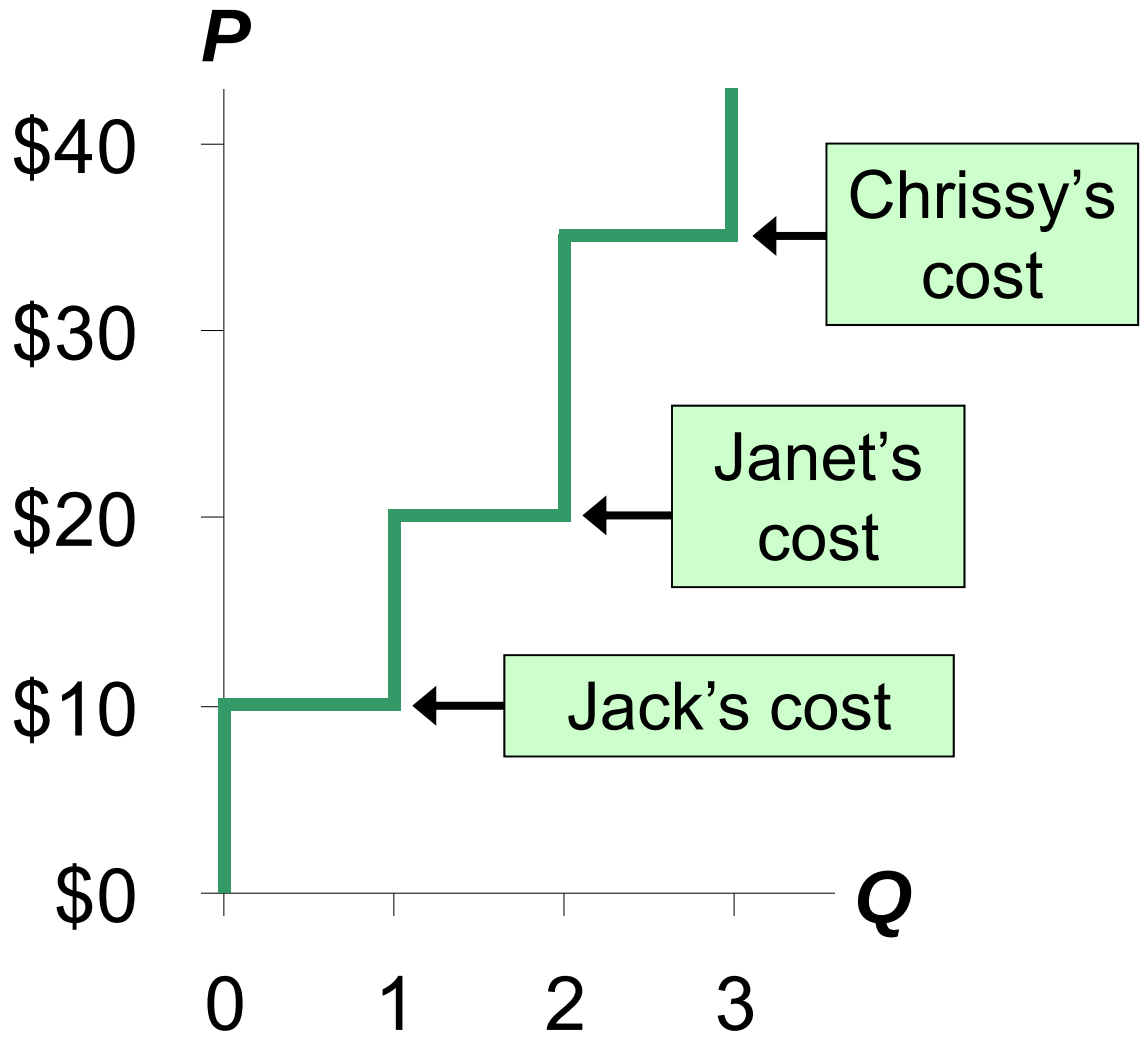
If ***P*** rises to \$40,

CS = ½ x 10 x \$20
= \$100.

Two reasons for the fall in CS.

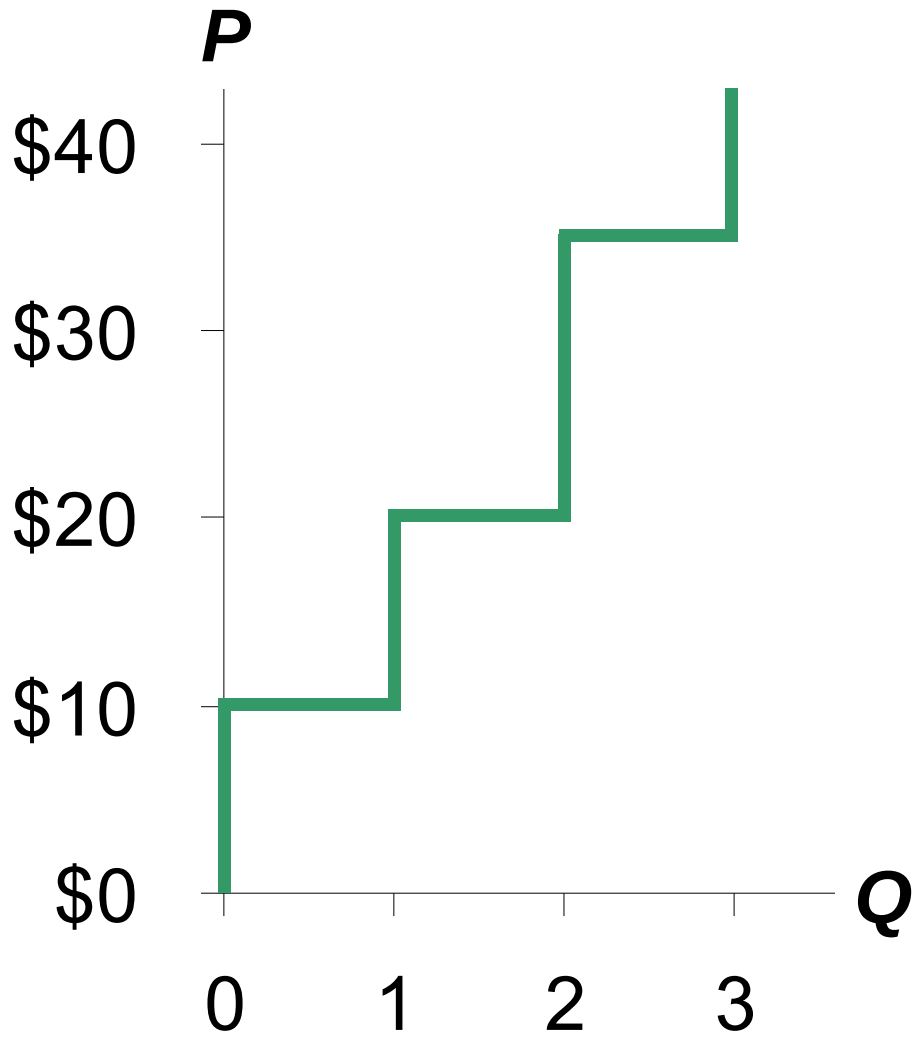


Cost and the Supply Curve



At each ***Q***, the height of the ***S*** curve is the cost of the ***marginal seller***, the seller who would leave the market if the price were any lower.

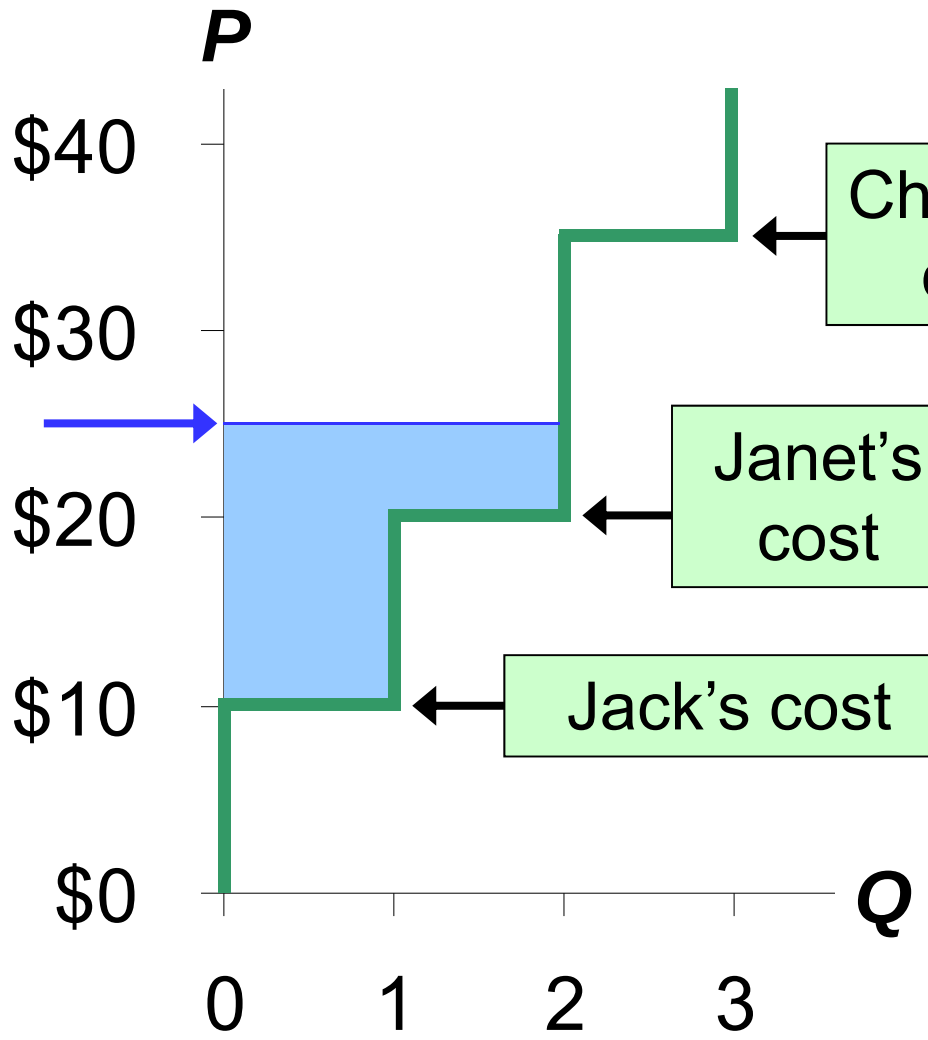
Producer Surplus



PS = ***P*** – cost

Producer surplus (PS): the amount a seller is paid for a good minus the seller's cost

Producer Surplus and the S Curve



PS = ***P*** – cost

Suppose ***P*** = $25.

Jack's PS = $15

Janet's PS = $5

Chrissy's PS = $0

Total PS = $20

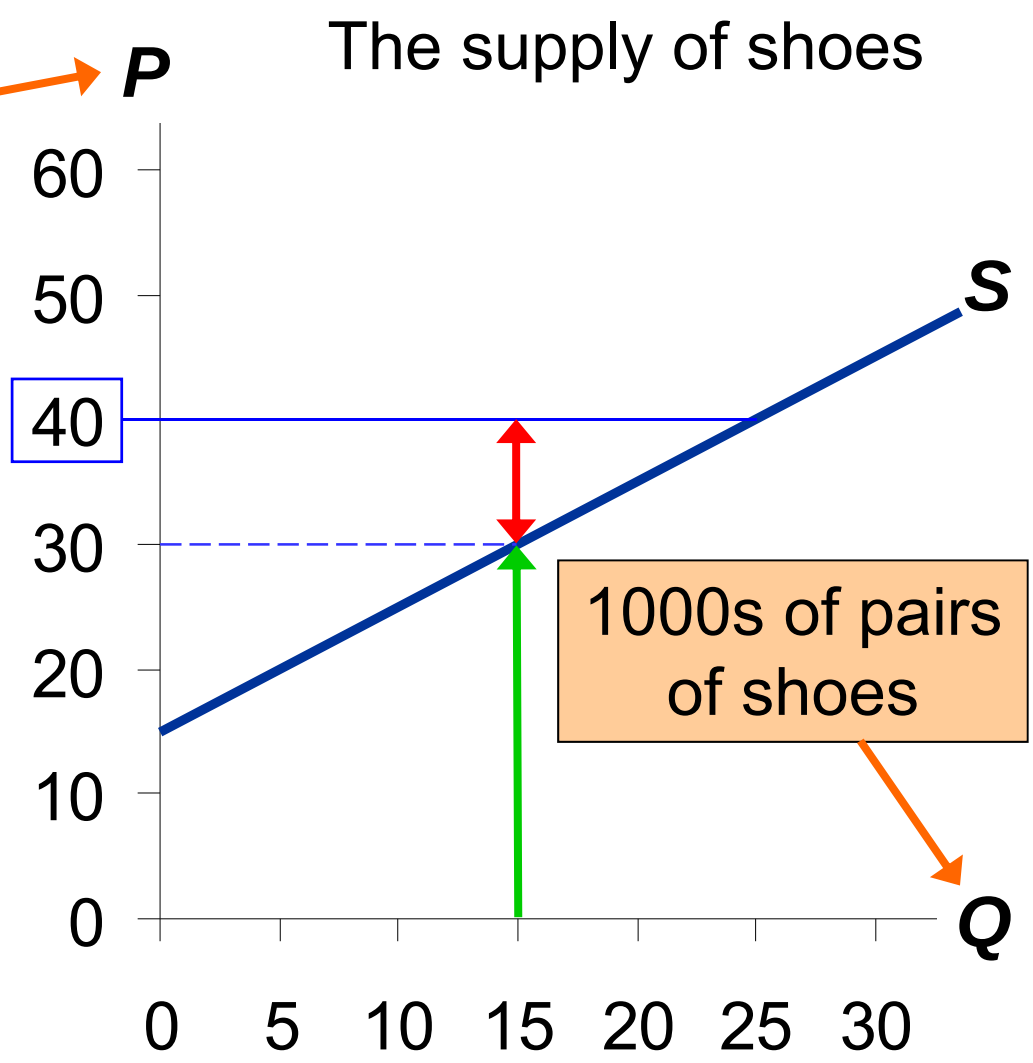
*Total PS equals the area above the supply curve under the price, from 0 to **Q**.*

PS with Lots of Sellers & a Smooth S Curve

Suppose ***P*** = $40.

At ***Q*** = 15(thousand), the marginal seller's cost is $30,

and her producer surplus is $10.



PS with Lots of Sellers & a Smooth S Curve

PS is the area b/w ***P*** and the ***S*** curve, from 0 to ***Q***.

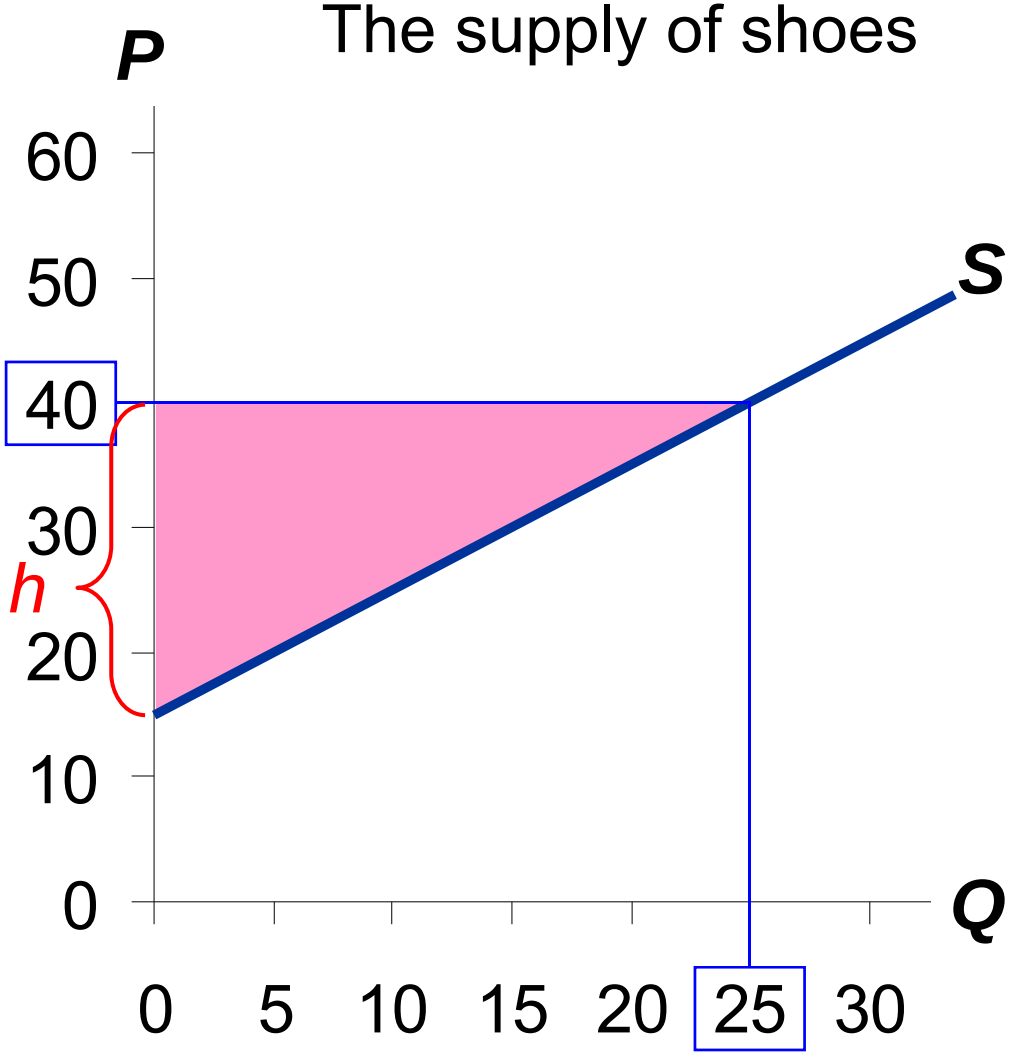
The height of this triangle is $40 – 15 = $25.

So,

PS = ½ x *b* x *h*

= ½ x 25 x $25

= $312.50



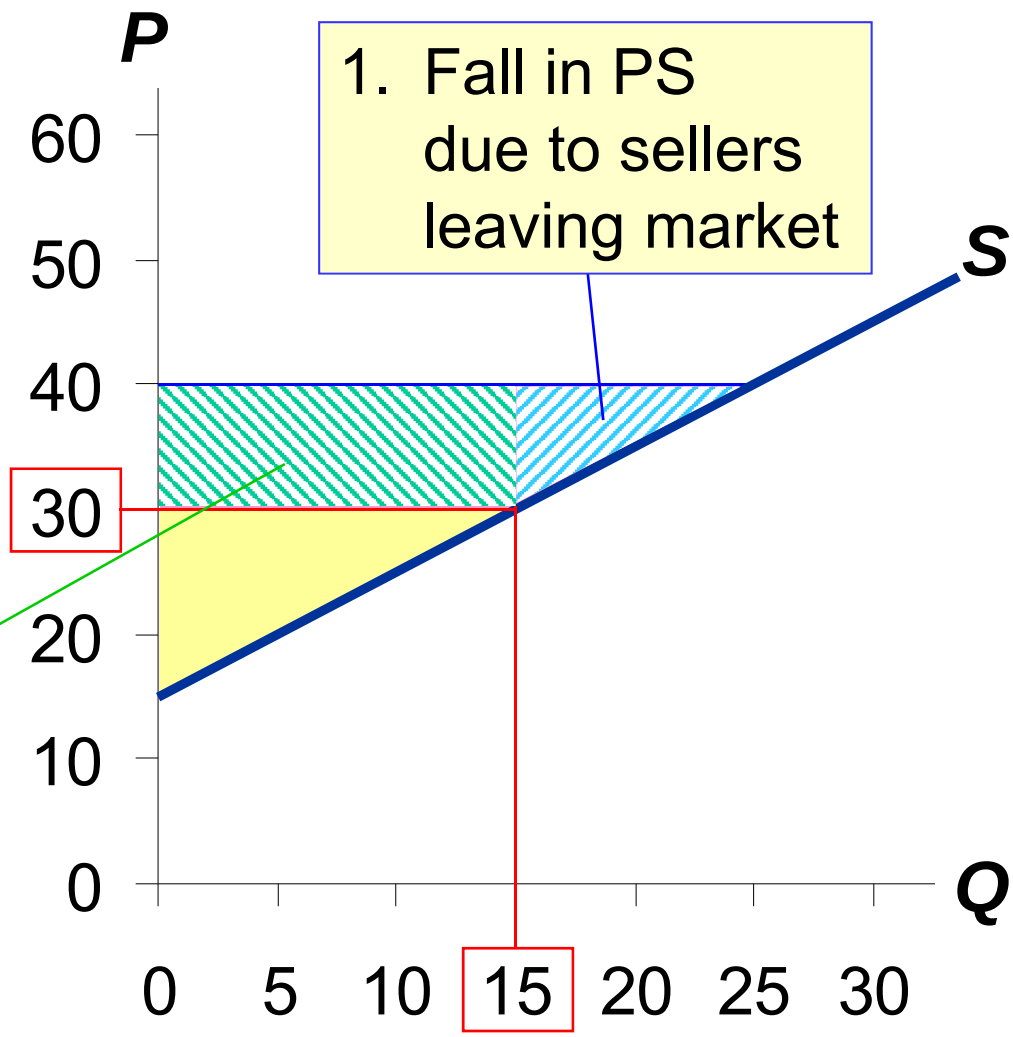
How a Lower Price Reduces PS

If ***P*** falls to \$30,

PS = ½ x 15 x \$15

= \$112.50

Two reasons for the fall in PS.



Evaluating the Market Equilibrium

Market eq'm:

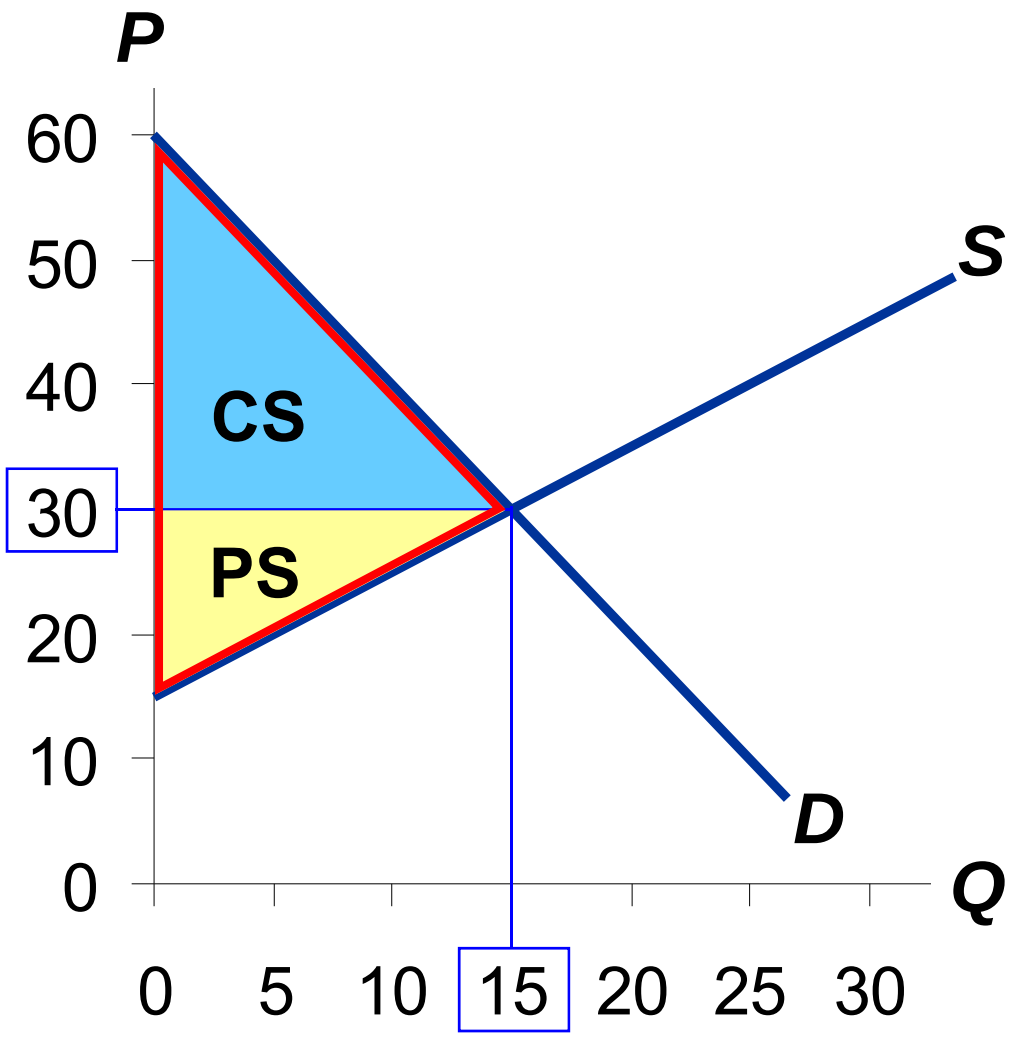
P = $30

Q = 15,000

Total surplus

= CS + PS

Is the market eq'm efficient (maximizing total surplus)?



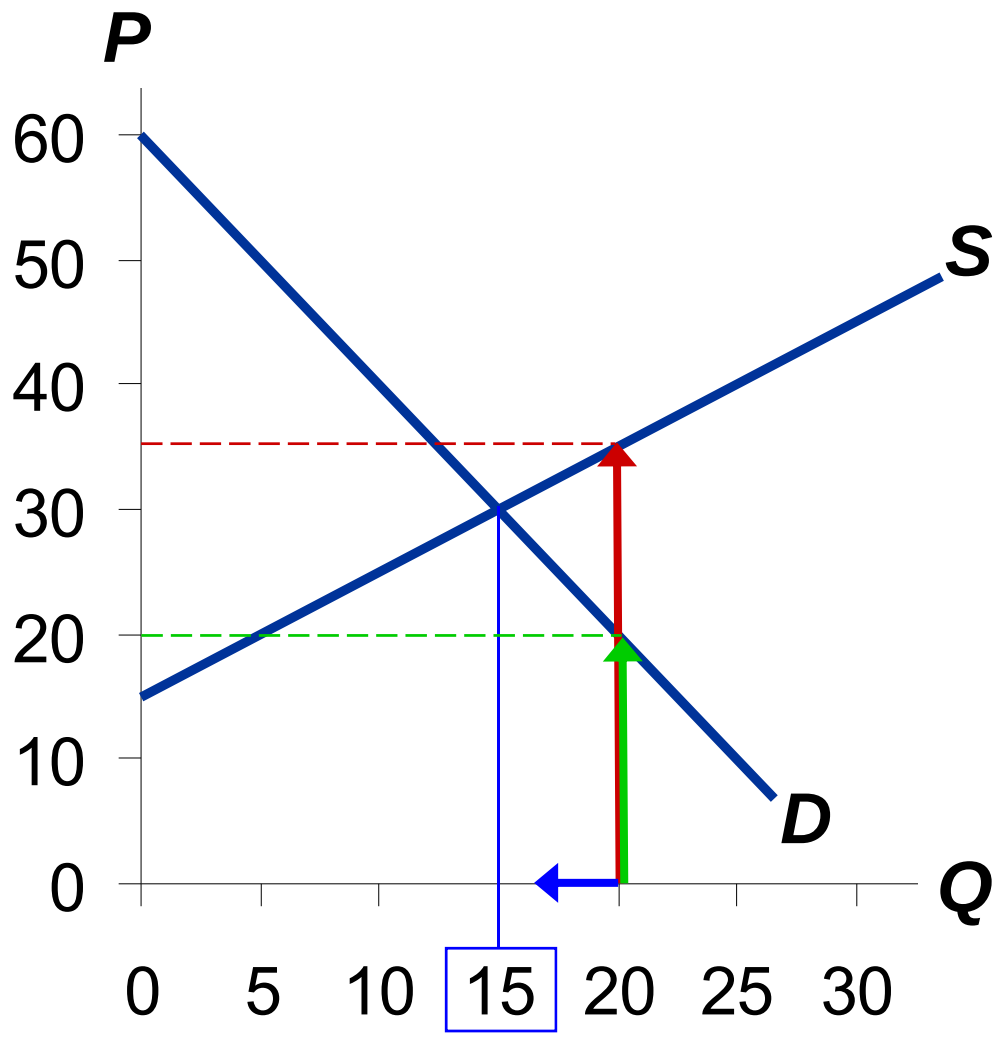
Does Eq'm *Q* Maximize Total Surplus?

At **Q** = 20,
cost of producing
the marginal unit
is $35

value to consumers
of the marginal unit
is only $20

Hence, can increase
total surplus
by reducing **Q**.

*This is true at any **Q** greater than 15.*



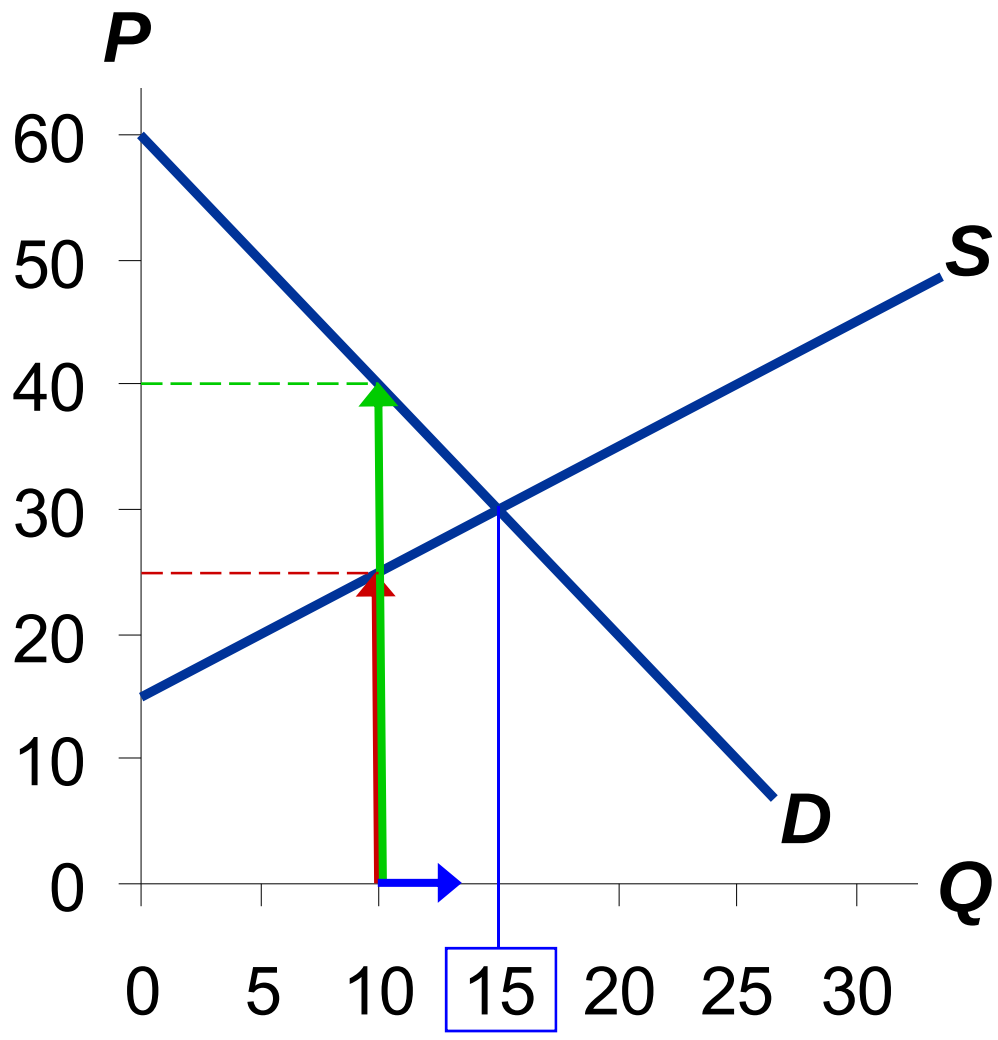
Does Eq'm *Q* Maximize Total Surplus?

At ***Q*** = 10,
cost of producing
the marginal unit
is $25

value to consumers
of the marginal unit
is $40

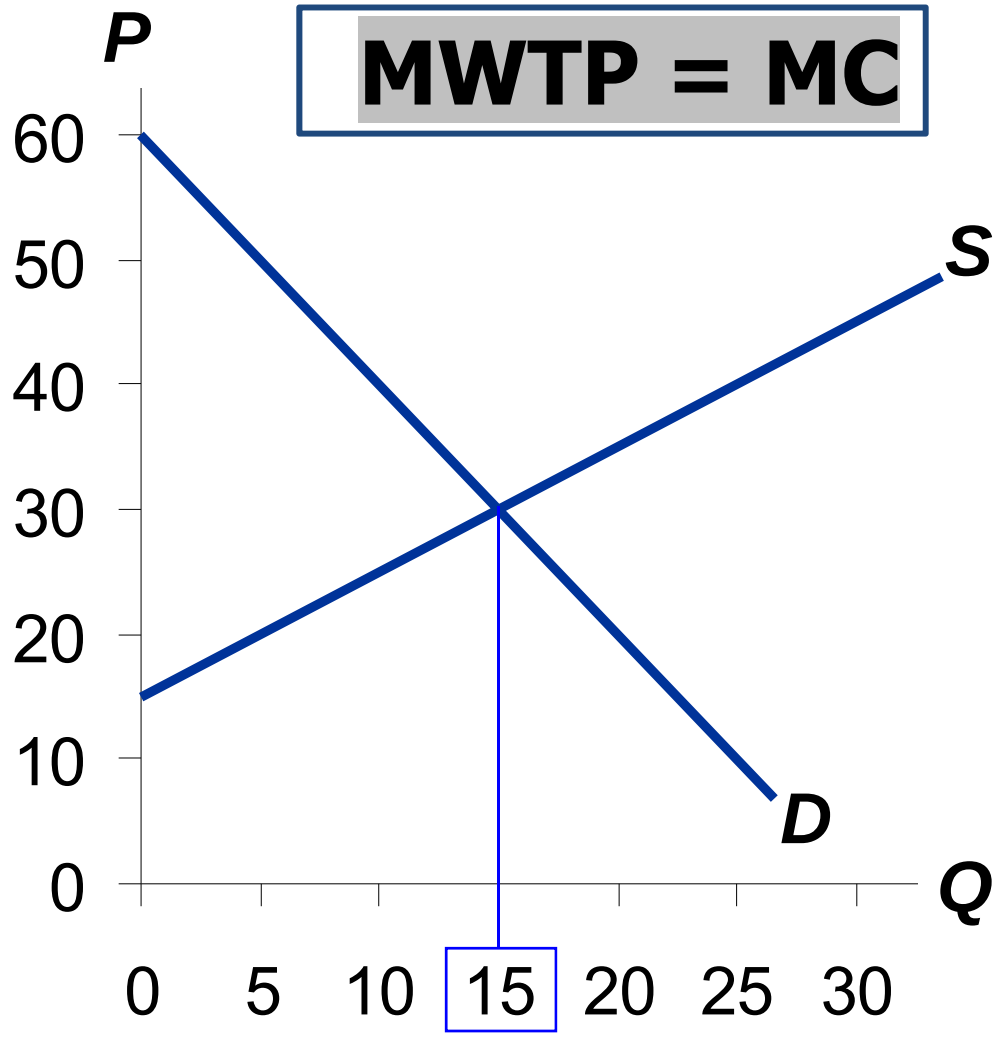
Hence, can increase
total surplus
by increasing ***Q***.

*This is true at any **Q** less than 15.*



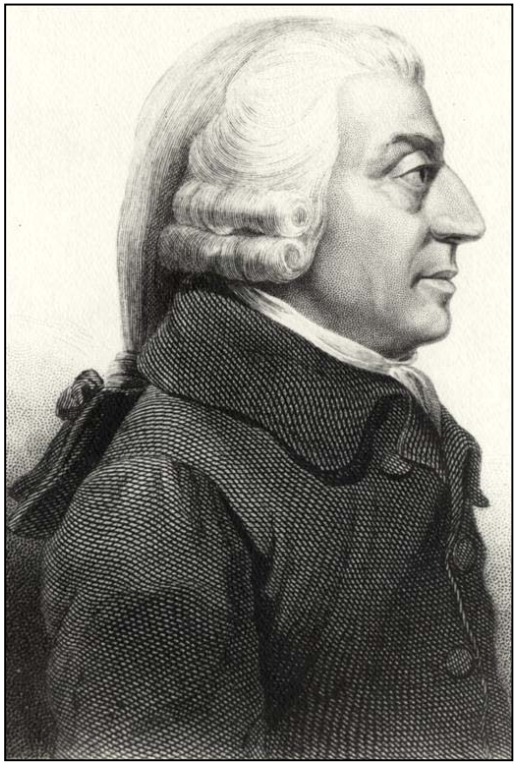
Does Eq'm *Q* Maximize Total Surplus?

The market eq'm quantity maximizes total surplus: At any other quantity, can increase total surplus by moving toward the market eq'm quantity.



Adam Smith and the Invisible Hand

Passages from *The Wealth of Nations*, 1776

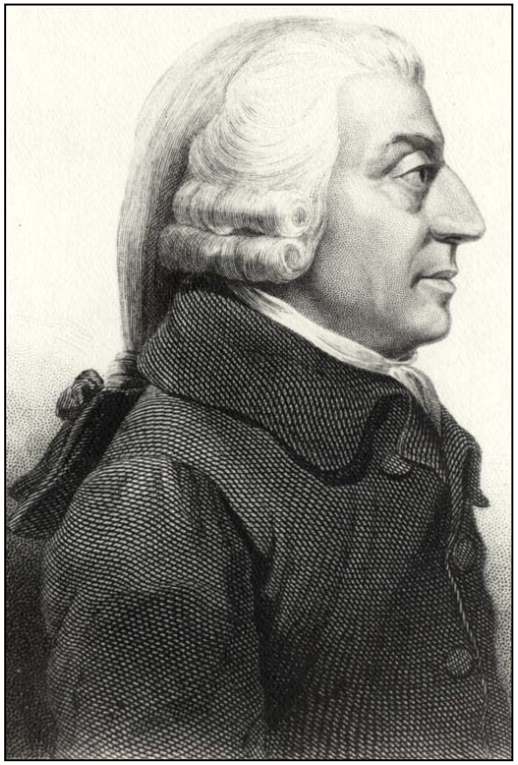


Adam Smith, 1723-1790

"Man has almost constant occasion for the help of his brethren, and it is vain for him to expect it from their benevolence only. He will be more likely to prevail if he can interest their self-love in his favor, and show them that it is for their own advantage to do for him what he requires of them…
It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest….

Adam Smith and the Invisible Hand

Passages from *The Wealth of Nations*, 1776



Adam Smith, 1723-1790

"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.
Nor is it always the worse for the society that it was no part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it."

Important Note

- We derived these lessons assuming:
  - Markets are perfectly competitive, no buyer or seller has *market power*—the ability to affect the market price
  - No *externalities*, that affect bystanders. (example: pollution)
  - No government regulations
  - Markets participants are fully knowledgeable about their preferences and cost schedules
- We'll examine how public policy may improve on the market outcome in such cases in following lectures.
- Despite the possibility of market failure, the analysis in this chapter applies in many markets, and the invisible hand remains extremely important.