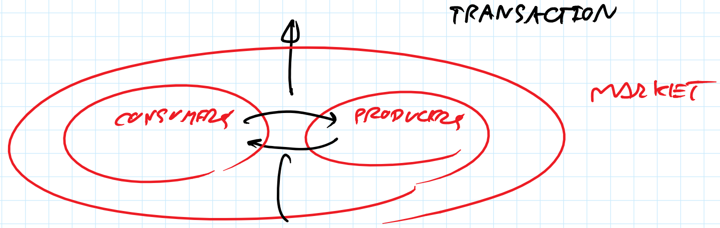
Tuesday, September 30, 2014 10:33 AM

MUTUALLY BENEFICIAL TRANSACTION



VOLUNTARY EXCHANGE

CONSUMER SURPLUS: BENEFITS / GAINS BUYERS RECEIVE WHEN BUYING GOOD OR SERVICE.

CONSUMER SURPLUS (CS) = WILLINGNESS TO PAY (WTP) − PRICE ACTUALLY PAID (P)

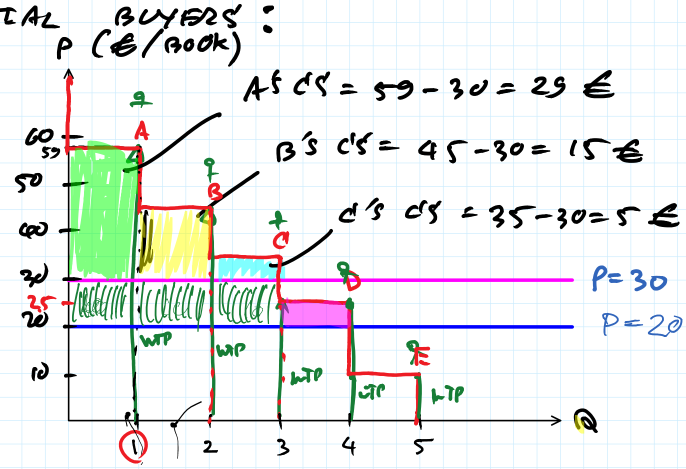
$$\boxed{CS = WTP - P}$$

WTP = MAXIMUM PRICE A BUYER IS WILLING TO PAY FOR A GOOD. WE CAN ALSO CALL IT "A RESERVATION PRICE"

LET'S CONSIDER A SECOND-HAND TEXTBOOK MARKET.

CONSIDER 5 POTENTIAL BUYERS:

BUYER	WTP (€)
A	59
B	45
C	35
D	25
E	10



A's CS = 59 − 30 = 29 €

B's CS = 45 − 30 = 15 €

C's CS = 35 − 30 = 5 €

TOTAL CS = 29 + 15 + 5 = 49 €

$$\boxed{\text{CS = AREA UNDER THE DEMAND CURVE AND ABOVE PRICE LEVEL.}}$$

SUPPOSE P FALLS TO 20 € / BOOK, WHAT WOULD HAPPEN TO THE TOTAL BENEFITS BUYERS GET?

AT P = 20, A's CS = 59 − 20 = 39 €

B's CS = 45 − 20 = 25 €

C's CS = 35 − 20 = 15 €

D's CS = 25 − 20 = 5 €

TOTAL CS = 84 €

THEN, CHANGE IN CS = NEW CS − OLD CS

= 84 − 49

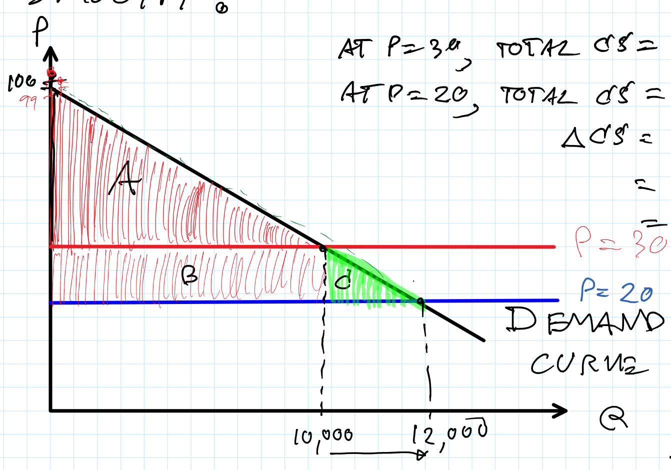
= +35

+10 A, +10 B, +10 C, +5 D

CONSUMER SURPLUS INCREASES BY 2 CHANNELS:

- PREVIOUS BUYERS (A, B, C) CAN BUY THE BOOK AT THE NEW LOWER PRICE
- NEW BUYERS (MR. D) GAINS HIS CS WHEN HE DECIDES TO BUY.

W/ THOUSAND OF BUYERS, THE DEMAND CURVE BECOMES SMOOTH:



AT P = 30, TOTAL CS = A

AT P = 20, TOTAL CS = A + B + C

ΔCS = NEW CS − OLD CS

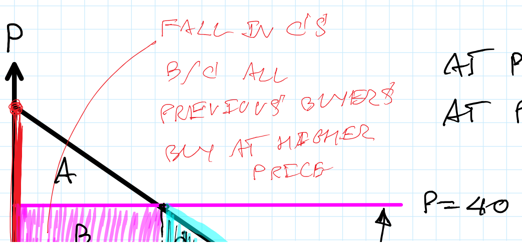
= (A + B + C) − A

= +B + C

INCREASE IN CS OBTAINED BY ALL PREVIOUS BUYERS

INCREASE IN CS GAINED BY NEW BUYERS

> "PRICE REDUCTION IS A GOOD NEWS TO BUYERS"

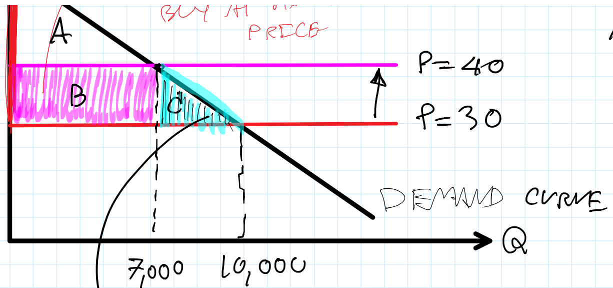


AT P = 30, CS = A + B + C

AT P = 40, CS = A

ΔCS = NEW CS − OLD CS

= A − (A + B + C)



ΔCS = NEW CS − OLD CS
= A − (A+B+C)
= ~~A~~ − ~~A~~ − B − C
= −B −C

FALL IN CS B/C SOME BUYERS LEAVE THE MARKET

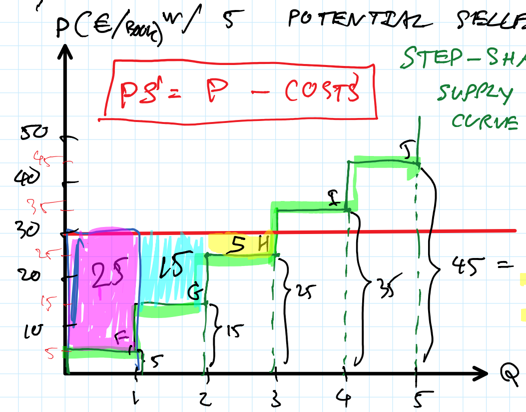
PRODUCER SURPLUS

SELLER 'S COST = THE LOWEST PRICE A SELLER MUST GET IN ORDER TO SELL HIS/HER GOOD.

EX: FOR IRIN, HER COST = 1,000 BAHT

w/ 5 POTENTIAL SELLERS

SELLERS	COSTS (€/BOOK)
FELIX	5
GEORGE	15
HELEN	25
IRIN	35
JENNY	45



45 = COST TO THE SELLER ? VERTICAL DISTANCE FROM THE GROUND TO THE ROOF OF SUPPLY CURVE

AT P= 30, WHO WILL SELL THE BOOKS ?

F, G, H WILL SELL THEIR BOOK.

F 'S PS = 30 − 5 = 25 €

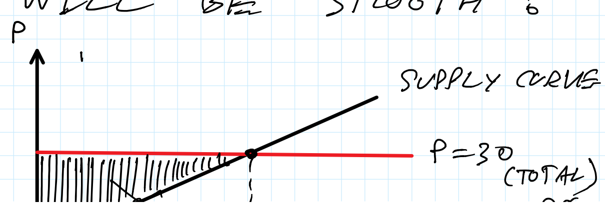
G 'S PS = 30 − 15 = 15 €

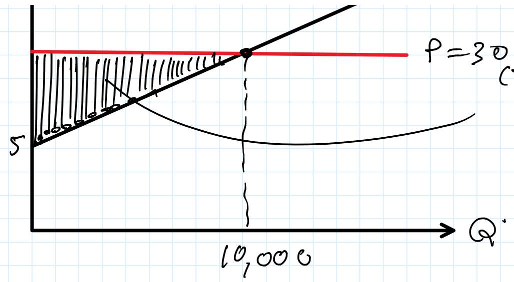
H 'S PS = 30 − 25 = 5 €

TOTAL PS = 45 €

$$\boxed{\text{PS CAN BE VIEWED AS AREA ABOVE THE SUPPLY CURVE BUT UNDER THE PRICE (LEVEL)}}$$

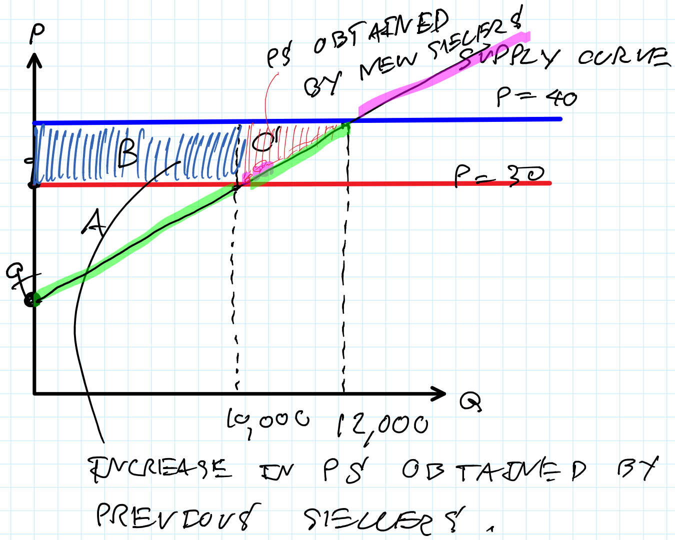
WITH THOUSAND OF SELLERS, SUPPLY CURVE WILL BE SMOOTH ?





(TOTAL) PS = AREA ABOVE THE SUPPLY CURVE AND UNDER THE PRICE LEVEL

EFFECT OF PRICE CHANGE ON PRODUCER SURPLUS



AT P = 30, PS = A

AT P = 40, PS = A + B + C

Δ PS = NEW PS − OLD PS

= (A + B + C) − A

= + B + C

(WELFARE IMPROVING)

INCREASE IN PRICE IS A GOOD NEWS FOR SELLERS AS SHOWN BY INCREASE IN PRODUCER SURPLUS (+B +C).

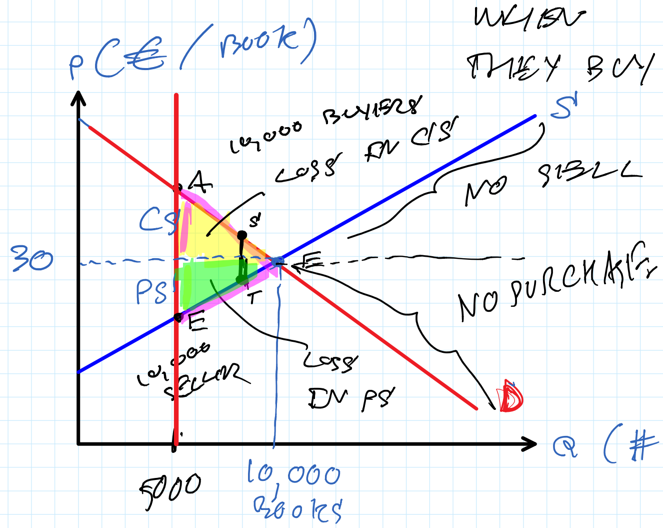
DIY: DO THE CASE WHEN PRICE FALLS.

TOTAL SURPLUS RECEIVED BY BUYERS & SELLERS

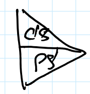
$$\boxed{\text{TOTAL SURPLUS} = \underbrace{\text{CONSUMER SURPLUS}}_{\text{BENEFITS / GAINS GAINED BY BUYERS}} + \underbrace{\text{PRODUCER SURPLUS}}_{\text{BENEFITS / GAINS RECEIVED BY SELLERS}}}$$

GAINED
BY BUYERS
WHEN
THEY BUY

BENEFITS / GAINS
RECEIVED BY
SELLER
WHEN THEY
SELL.



- AT A MARKET EQUILIBRIUM, TOTAL SURPLUS IS THE LARGEST.



= LARGEST POSSIBLE ECONOMIC PIE