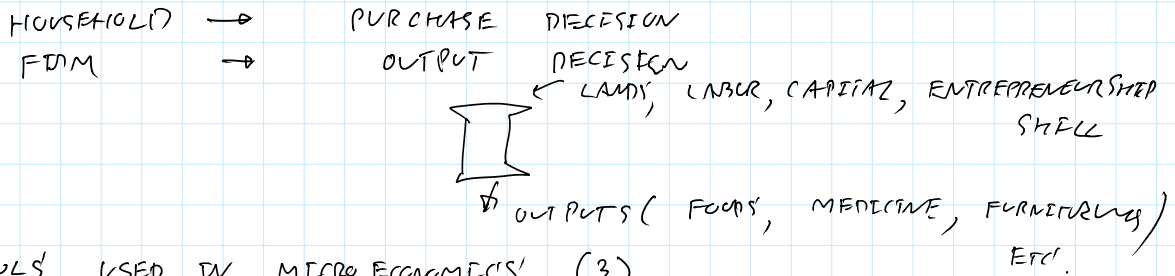


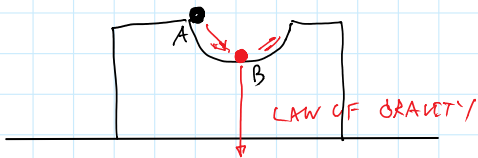
MICROECONOMICS : A STUDY OF HOW HOUSEHOLDS AND FIRMS MAKE DECISIONS.



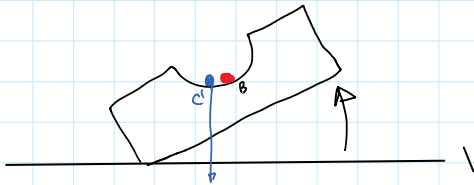
TOOLS USED IN MICRO ECONOMICS (3)

① EQUILIBRIUM ANALYSIS

EQUILIBRIUM : A STATE OR CONDITION THAT WOULD CONTINUE INDEFINITELY AS LONG AS NO OUTSIDE FACTORS **UPSET** THE EQUILIBRIUM.

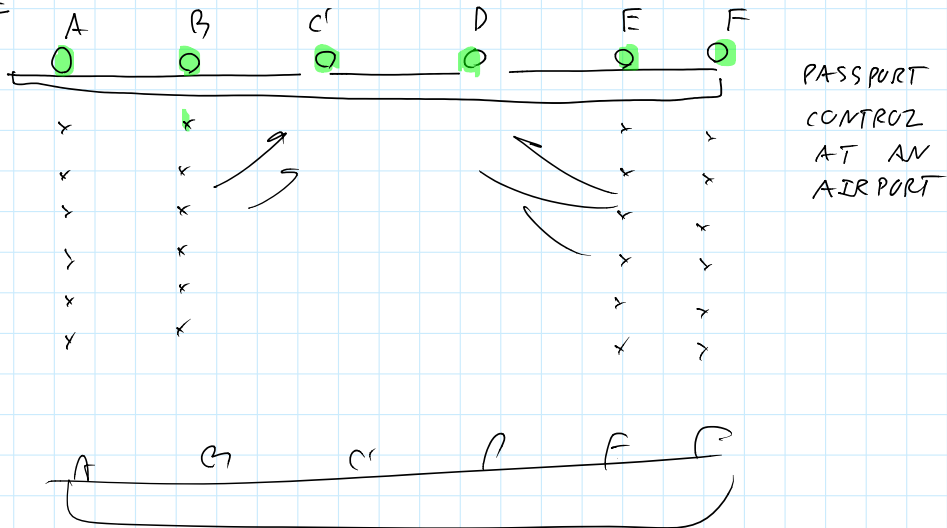


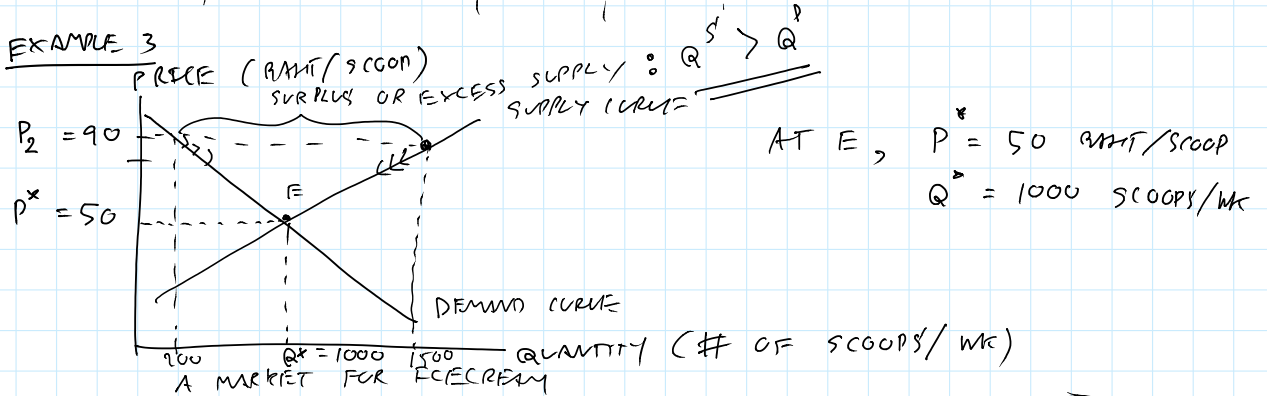
A BALL AT POINT B IS IN AN "EQUILIBRIUM" (WHY?)



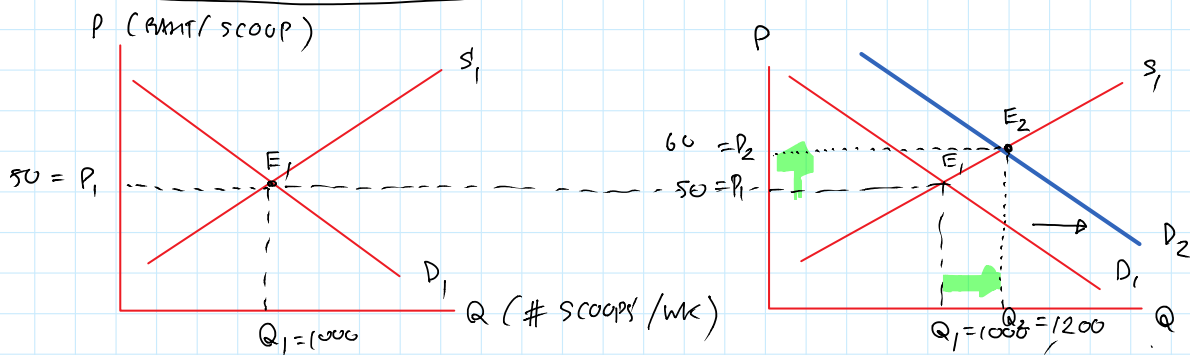
- A BALL AT POINT B IS "NO LONGER" IN AN EQUILIBRIUM.
- A BALL AT POINT C IS "IN AN EQUILIBRIUM".

EXAMPLE 2





COMPARATIVE STATICS ANALYSES (BEFORE-AND-AFTER ANALYSES)



$P_1 = 50$
 $Q_1 = 1000$

MARKET OUTCOME

SUPPOSE THAT WEATHER BECOMES HOTTER...

OUTCOME $P \uparrow$ FROM P_1 TO P_2
 $Q \uparrow$ FROM Q_1 TO Q_2 .

CONSTRAINED OPTIMIZATION

THE CONSTRAINT YOU ARE FACING

MAKE THE BEST USE OF YOUR AVAILABLE RESOURCES

CONSIDER A BUYER ...

- THIS GUY HAS 1000 AMT/WEEK
- HE WOULD LIKE TO BUY FOODS AND CLOTHES.
- PRICE OF FOODS = 50 AMT/UNIT
- PRICE OF CLOTHES = 100 AMT/UNIT

HIS OBJECTIVE: MAXIMIZE HIS SATISFACTION FROM PURCHASE
 HIS CONSTRAINT: THE BUDGET OF 1000 AMT/WK.

HCS CONSTRAINT ;

THE BUDGET OF 1000 BRLT/WK.

MATHEMATICALLY,

$$\begin{array}{l} \text{MAXIMIZE } U(\text{FOODS}, \text{CLOTHES}) \\ \text{SUBJECT TO BUDGET CONSTRAINT} \end{array}$$

$$\begin{array}{l} Q_{\text{FOODS}} = ? \\ Q_{\text{CLOTHES}} = ? \end{array} \longrightarrow \text{MAXIMIZE UTILITY}$$

SCARCITY \rightarrow CHOICE \rightarrow OPPORTUNITY COST (S-C-O)

= ALL RESOURCES ONE MUST GIVE UP TO ENGAGE IN ACTIVITY.

= EXPLICIT COSTS + IMPLICIT COSTS (OR HIDDEN COSTS)
 \downarrow
 OBVIOUS OUTFLOWS OF MONEY FROM YOUR POCKET

EX: AN ACTIVITY : STUDYING AT BE FOR 4 YRS

Q: WHAT ARE OPPORTUNITY COSTS OF DOING THIS ACTIVITY?

$$A: \text{ OPPORTUNITY COSTS} = \text{ EXPLICIT COSTS} + \text{ IMPLICIT COSTS}$$

EX:

- TUITION FEES
 $150,000 \times 4 = 600,000$
- ACCOMMODATION COST
 $5000 \times 48 = 240,000$
- LIVING EXPENSES

FORGONE INCOME THAT YOU COULD HAVE EARNED IF YOU DECIDE TO WORK INSTEAD!
 (EX: $19000 \times 48 = 480,000$)

PRODUCTION POSSIBILITY CURVE (PPC)

- WE USE PPC TO REPRESENT S-C-O CONCEPTS GRAPHICALLY.
- PPC SHOWS ALL POSSIBLE PRODUCTION CHOICES ONE CAN CHOOSE TO PRODUCE GIVEN HIS/HER AVAILABLE RESOURCES.

LET'S CONSIDER MR. TOM HANK. NOW HE LIVES IN A REMOTED ISLAND. HE HAS 2 PRODUCTION ACTIVITIES:

① CATCHING FISHES

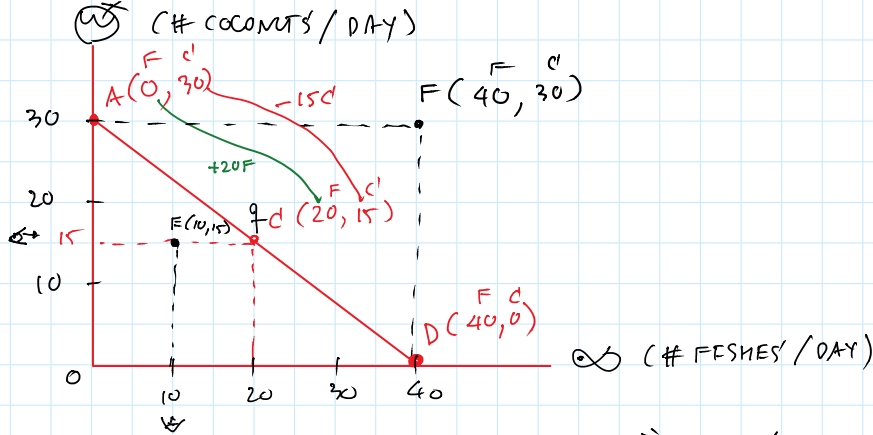


②



② GATHERING COCONUTS ☺

HE HAS 24 - 8 = 16 WORKING HOURS.



FACT #1 : LINE AD IS SO CALLED "TOM'S PRODUCTION POSSIBILITY CURVE"

FACT #2 : • ALL PRODUCTION CHOICES "INSIDE" THE PPC ARE FEASIBLE (TO PRODUCE) BUT "INEFFICIENT" ! (HE COULD DO BETTER)

• ALL PRODUCTION CHOICES "OUTSIDE" THE PPC ARE "INFEASIBLE TO PRODUCE" ! (WHY?)

• ALL PRODUCTION CHOICES "ON" THE PPC ARE BOTH FEASIBLE AND EFFICIENT. ☺

FACT #3

WHEN MR. TOM MAKES CHOICE, HE FACES WITH "TRADE-OFFS" : TO GET MORE OF FISHES, SOME COCONUTS MUST BE RELEASSED VICE VERSA.

FACT #4 : OPPORTUNITY COST OF HAVING A FISH = $\frac{3}{4}$ UNIT OF COCONUT FORGONE.

