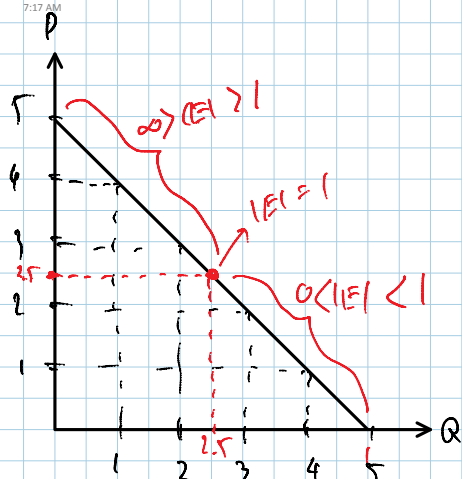
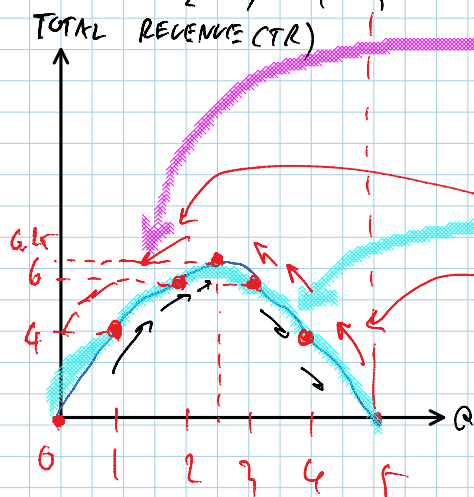




P	Q	TR = P * Q
0	5	0
1	4	4
2	3	6
3	2	6
4	1	4
5	0	0



• WHEN $\infty > |E| > 1$, $\downarrow P \rightarrow TR \uparrow$ ☺

• WHEN $0 < |E| < 1$, $\downarrow P \rightarrow TR \downarrow$ ☹

• WHEN $\infty > |E| > 1$, $\uparrow P \rightarrow TR \downarrow$ ☹

• WHEN $0 < |E| < 1$, $\uparrow P \rightarrow TR \uparrow$ ☺

WHAT DETERMINES PRICE ELASTICITY OF DEMAND

SCENARIO 1

CONSIDER INSULIN VS. FERRARI

SUPPOSE

PRICES OF THE TWO GOOD RISE BY 10%
FOR WHICH GOOD, Q^D WILL DROP THE MOST?

ANSWER

FERRARI,

LESSON

PRICE ELASTICITY OF DEMAND TENDS TO BE HIGHER FOR LUXURY GOODS THAN FOR NECESSARY GOODS.

SCENARIO 2

CONSIDER BLUE JEANS VS. CLOTHES (IN GENERAL)

Q: IF PRICES OF TWO GOODS RISE BY 10%, FOR WHICH GOOD Q^D WILL DROP THE MOST?

LESSON

PRICE ELASTICITY OF DEMAND TENDS TO BE HIGHER FOR NARROWLY DEFINED GOODS THAN FOR BROADLY DEFINED GOOD

NARROWLY DEFINED GOODS THAN FOR BROADLY DEFINED GOODS.

SCENARIO 3

CONSIDER

GASOLINE
IN THE
SHORT RUN

VS

GASOLINE
IN THE
LONG RUN

Q: IF PRICES OF GASOLINE RISE BY 10%, DOES Q^D DROP MORE IN THE SHORT RUN OR IN THE LONG RUN?

A: IN THE LONG RUN

- NOT MUCH THING YOU CAN DO IN THE SHORT RUN OTHER THAN TAKE BUS OR CARPOOL.
- IN THE LONG RUN, PEOPLE CAN BUY SMALLER CARS OR LIVE CLOSER TO THE PLACE WHERE THEY WORK.

LESSON

PRICE ELASTICITY OF DEMAND IS HIGHER IN THE LONG RUN THAN IN THE SHORT RUN.

SCENARIO 4

CONSIDER BREAKFAST CEREAL VS. (SUN-BLOCK) SUNSCREEN

Q: IF PRICE OF BOTH ↑ BY 10%, WHICH GOOD Q^D WILL DROP THE MOST?

A. BREAKFAST CEREAL

LESSON:

PRICE ELASTICITY OF DEMAND IS HIGHER WHEN CLOSE SUBSTITUTES ARE AVAILABLE.

SCENARIO 5

TOOTHPECK

VS.

HOUSING LOANS
(PAYMENT / MONTH)

ISSUE

SHARE OF INCOME SPENT ON THE GOODS

TOOTHPECK → VERY TINY SHARE OF INCOME SPENT ON IT, PERHAP 0.001%..

HOUSING LOANS → LARGE SHARE OF INCOME SPENT ON IT.

SPENT ON IT.

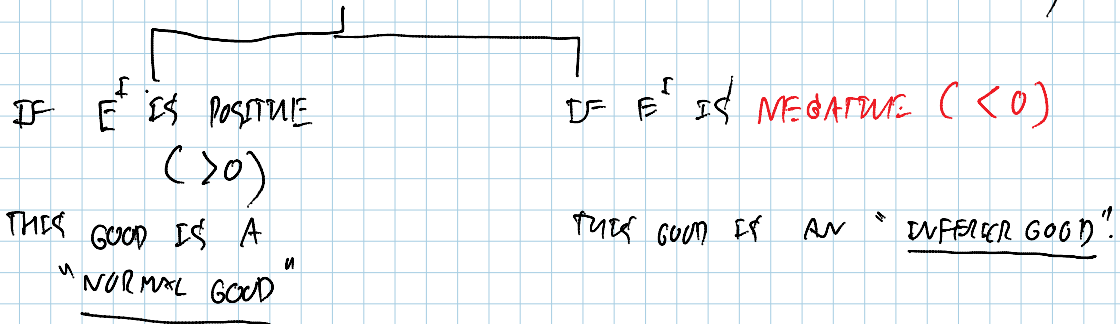
LESSON

PRICE ELASTICITY OF DEMAND IS HIGHER WHEN SPENDING ON A GOOD ACCOUNTS FOR A LARGE SHARE OF A CONSUMER'S INCOME.

SO FAR, PRICE ELASTICITY OF DEMAND IS FULLY DISCUSSED. HOWEVER WE HAVE TWO MORE:

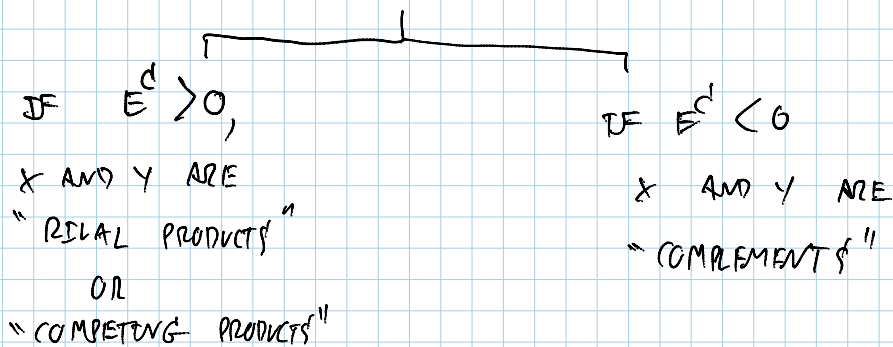
① INCOME ELASTICITY OF DEMAND

$$E^I = \frac{\% \Delta Q^D}{\% \Delta I} \quad \begin{array}{l} \text{(PERCENTAGE CHANGE IN QUANTITY DEMAND)} \\ \text{(PERCENTAGE CHANGE IN INCOME)} \end{array}$$



② CROSS-PRICE ELASTICITY OF DEMAND

$$E^C = \frac{\% \Delta Q^D_X}{\% \Delta P_Y} \quad \begin{array}{l} \text{(PERCENTAGE CHANGE IN } Q^D_X \text{)} \\ \text{(PERCENTAGE CHANGE IN } P_Y \text{)} \end{array}$$

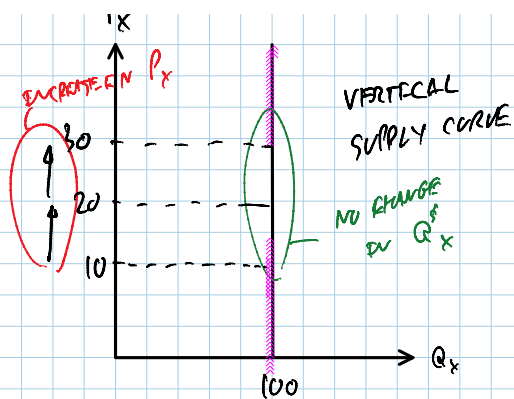


PRICE ELASTICITY OF SUPPLY

$$E^S = \frac{\% \Delta Q^S_X}{\% \Delta P_X}$$

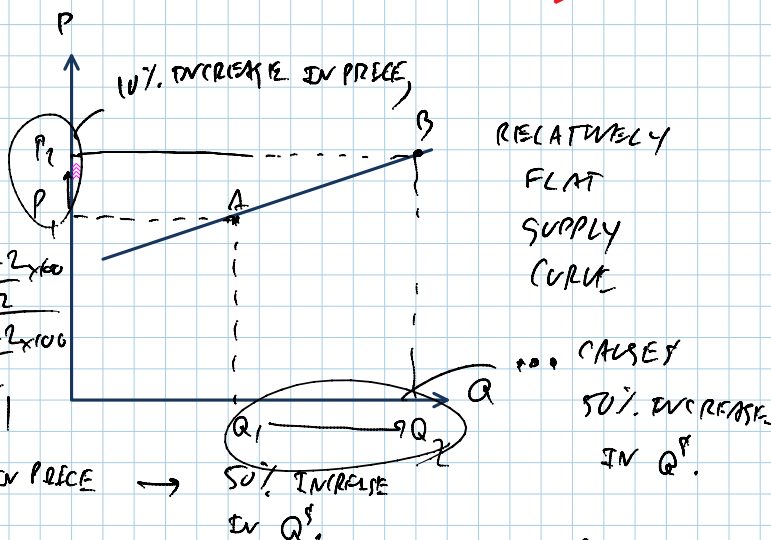
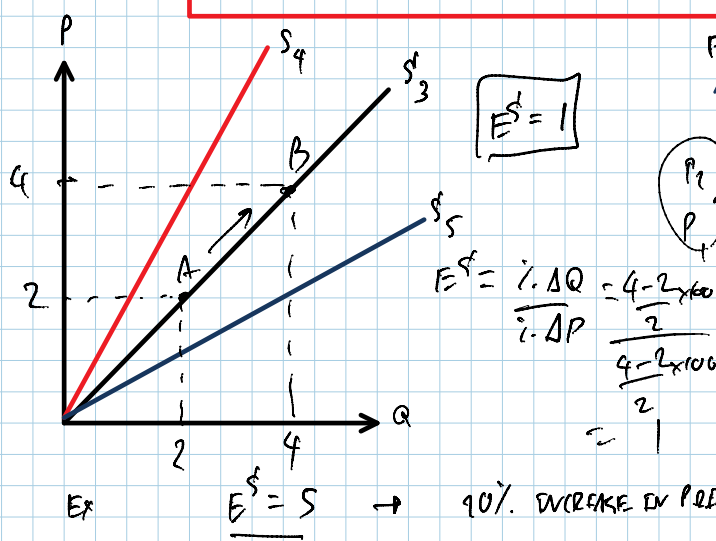
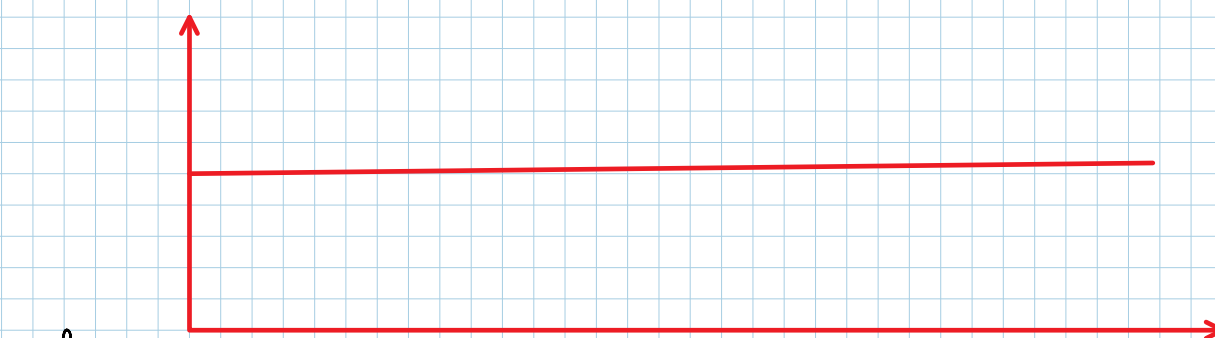
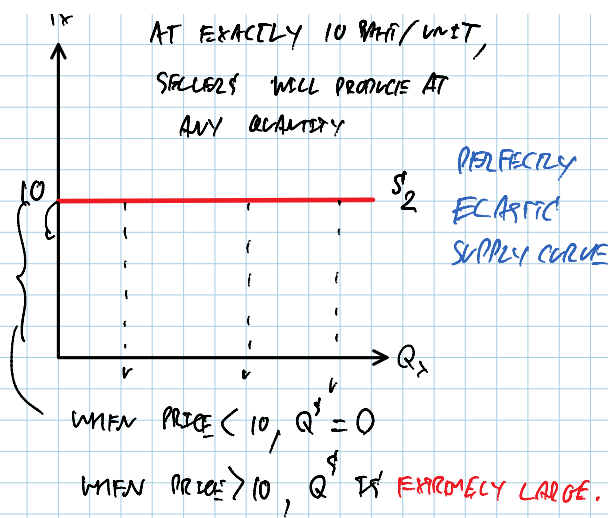
P_X S^S_X P_X

AT EXACTLY 10 BARS/UNIT



$$E^s = \frac{\% \Delta Q_x^s}{\% \Delta P_x} = \frac{0\%}{\text{ANY}\%} = 0$$

4 SUPPLY IS PERFECTLY PRICE-INELASTIC

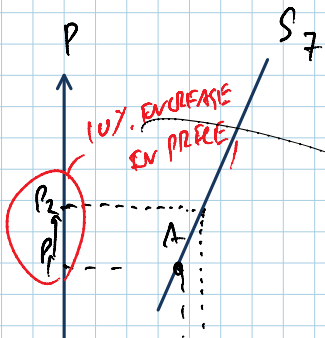


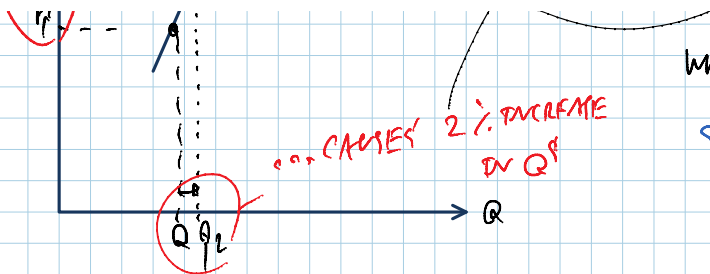
SUPPLY IS PRICE ELASTIC: $E^s = \frac{\% \Delta Q}{\% \Delta P} = \frac{50\%}{10\%} = 5 \Rightarrow E^s > 1$

$\% \Delta Q > \% \Delta P$

$$E^s = \frac{\% \Delta Q}{\% \Delta P} = \frac{2\%}{10\%} = \frac{1}{5} = 0.2 < 1$$

WHEN $E^s < 1$, SUPPLY IS PRICE-INELASTIC

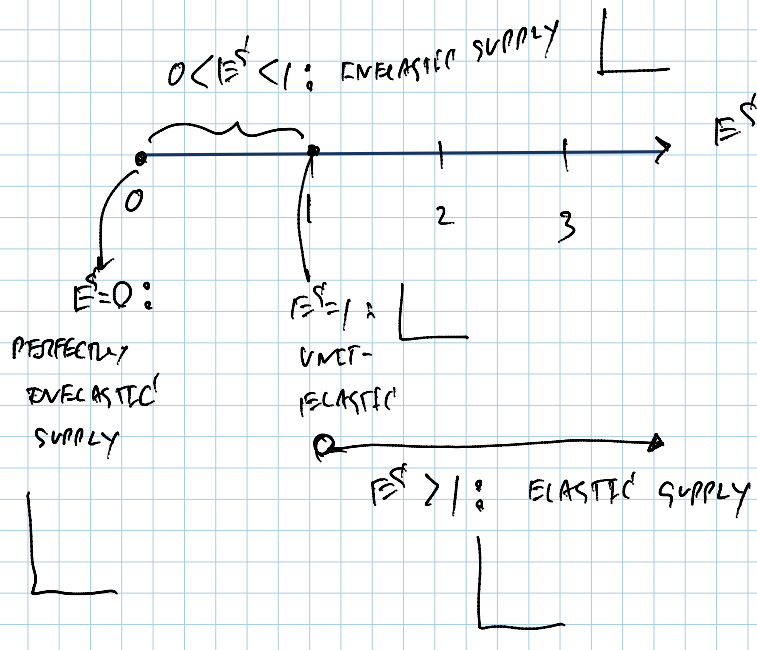




WHEN $E^S < 1$, SUPPLY IS PRICE-INELASTIC:
SELLERS ARE NOT MUCH RESPONSIVE
TO A CHANGE IN PRICE.

• PRICE ELASTICITY OF SUPPLY

$$E^S = \frac{\% \Delta Q^S}{\% \Delta P^S} \quad + \quad \text{OR} \quad \frac{(+)}{(-)}$$



• PRICE ELASTICITY OF SUPPLY DEPENDS ON

- AVAILABILITY OF INPUTS USED TO PRODUCE OUTPUT.
- SPARE CAPACITY
- TIME THAT SELLERS USE TO EXPAND THEIR PRODUCTION