

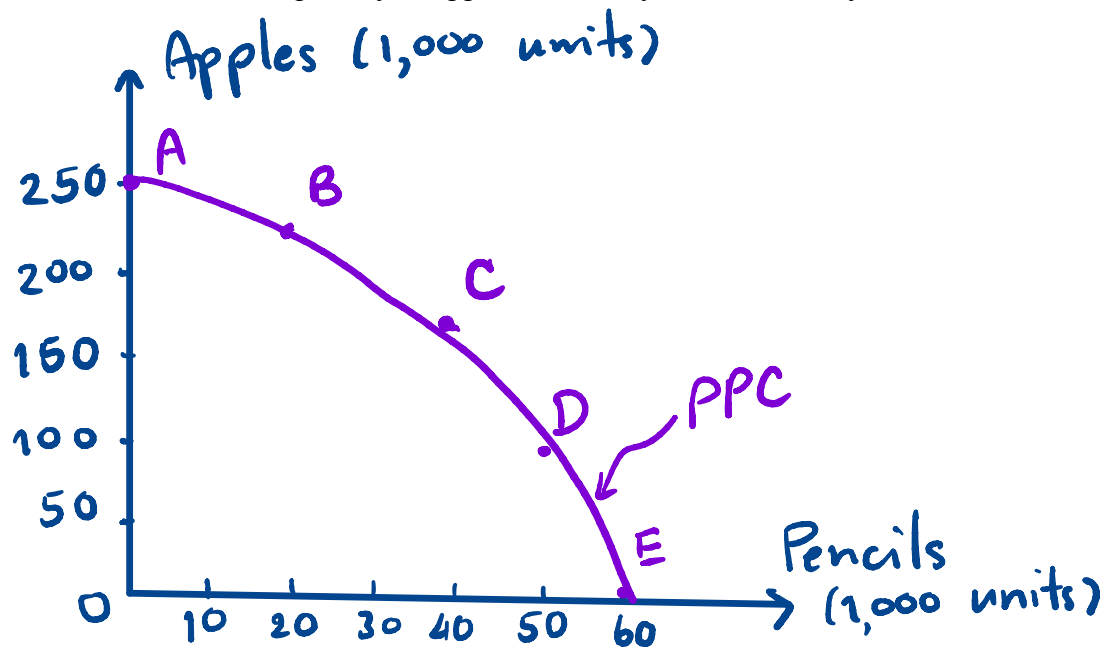
EE 211 Principles of Microeconomics

Homework Assignment #1

1. Suppose an economy can produce two consumer goods, apples and pencils. When all resources are used efficiently, the combinations of outputs that can be produced monthly are given in the table below.

Point	Apple (1000 units)	Pencil (1000 units)
A	250	0
B	225	20
C	175	40
D	100	50
E	0	60

- a. Draw the production possibility curve for this economy, where the quantity of pencils is on the x-axis and the quantity of apples is on the y-axis. Correctly label the curve.



- b. (i) What is the opportunity cost of producing the first 20,000 units of pencils (i.e., from points A to B)?

Total Opportunity cost of the first 20,000 pencils is $250,000 - 225,000 = 25,000$ apples.

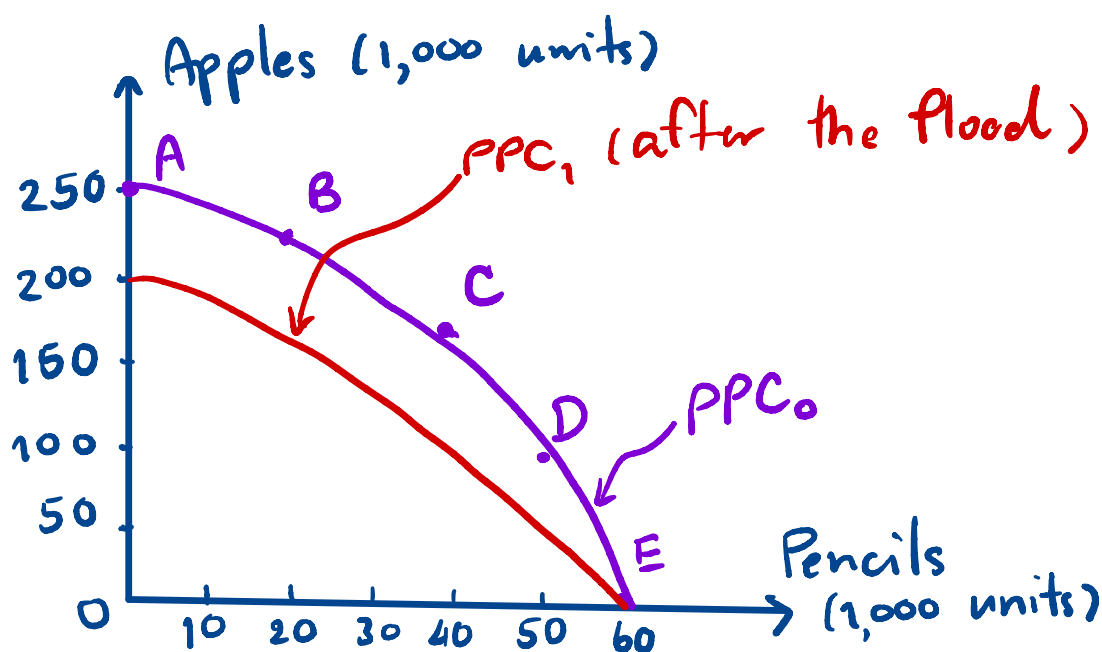
(i.e. Per-unit opp. cost = $\frac{25,000}{20,000} = 1.25$ apples).

- (ii) What is the opportunity cost of producing the next 20,000 units of pencils (i.e., from points B to C)?

Total opportunity cost of 20,000 pencils (from B to C) is 50,000 apples.

(i.e. Per-unit opp. cost = $\frac{50,000}{20,000} = 2.5$ apples.)

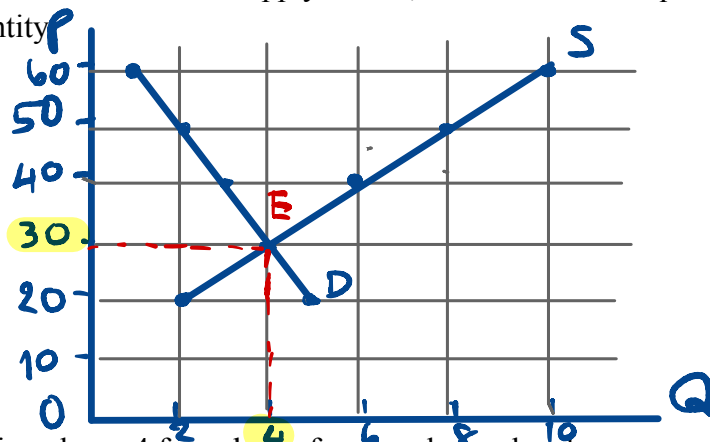
- c. Suppose a flood hits the production of apples badly, everything else remains constant. Draw another diagram to illustrate how the production possibility curve would change.



2. Consider the demand and supply schedules for Latte coffee in the following tables.

Price (Baht/1 Latte)	Quantity Demanded	Quantity Supplied	Excess demand (+) Excess Supply (-)
60	1	10	-9
50	2	8	-6
40	3	6	-3
30	4	4	0
20	5	2	3

a. Draw the demand and supply curves, and indicate the equilibrium levels of price and quantity

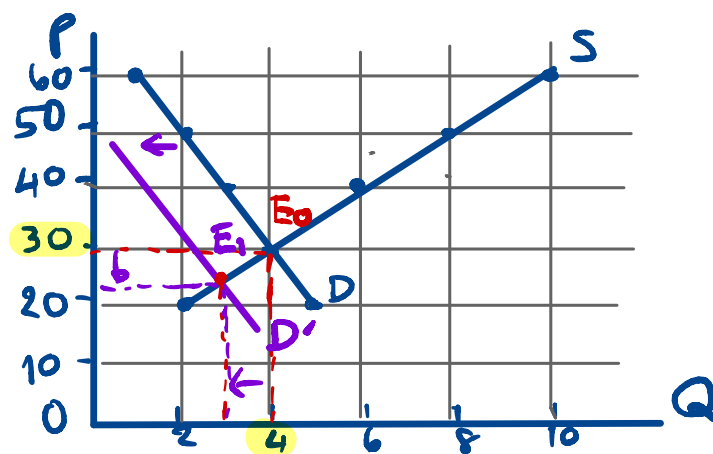


$$P_E = 30$$

$$Q_E = 4$$

b. Fill in column 4 for values of excess demand and excess supply. (see Table)

c. Suppose there is a reduction in the price of Cappuccino, which is a close substitute of Latte coffee, *ceteris paribus*. How does the demand for Latte change? Draw a graph to illustrate (no need to worry about the scale). What would happen to the equilibrium price and equilibrium quantity found in part a.?



Price of a substitute decreases
 \Rightarrow demand decreases (shifts left).

$$\Rightarrow P_E \downarrow \ \& \ Q_E \downarrow$$