Handed out Nov 30 2017 but not an in-class activity .
Just an extra example to assist in your studying!

QUESTION

The domestic demand and domestic supply curves for MP3 players in a small closed economy of perfect competition are as follows:

Supply: $P = 3Q_S + 2$ Demand: $P = -Q_D + 102$

a) Calculate the equilibrium and the value of consumer surplus (CS) and producer surplus (PS) for the MP3 player market in this small closed economy.

b) Graph the CS, PS, DWL.

Suppose that this small closed economy is open to free trade and that the world price is $62 per MP3 player. (This is like a price control of $62)

c) e) With free trade, what is the quantity supplied by domestic producers? quantity demanded by domestic consumers? import or export quantity?

d) Calculate the value of consumer surplus (CS) and producer surplus (PS).

Q8) $P = 3Q_S + 2$ $\quad P = -Q_D + 102$ \11

$3Q_S + 2 = -Q_D + 102$

$4Q_S = 100$

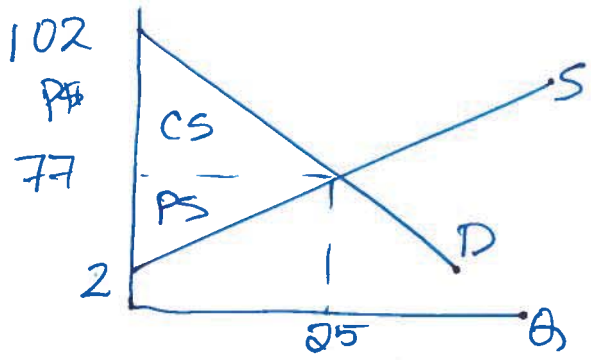
$Q_S = 25$

$P = 3(25) + 2 = 77$

a) $\therefore$ $P^* = 77$ $\quad Q^* = 25$

$CS = \frac{1}{2}bh = \frac{1}{2}(102-77)(25) =$ 312.5

$PS = \frac{1}{2}bh = \frac{1}{2}(77-2)(25) =$ 937.50



b) $62 = 3Q_S + 2$ $\quad 62 = -Q_D + 102$

$60 = 3Q_S$ $\quad Q_D = 40$

$Q_S = 20$

c) X/M defined by Q_S vs Q_D

$Q_D = 40$
$Q_S = 20$ $\Rightarrow \therefore$ 20 MP3 MPORED

Q8 a)

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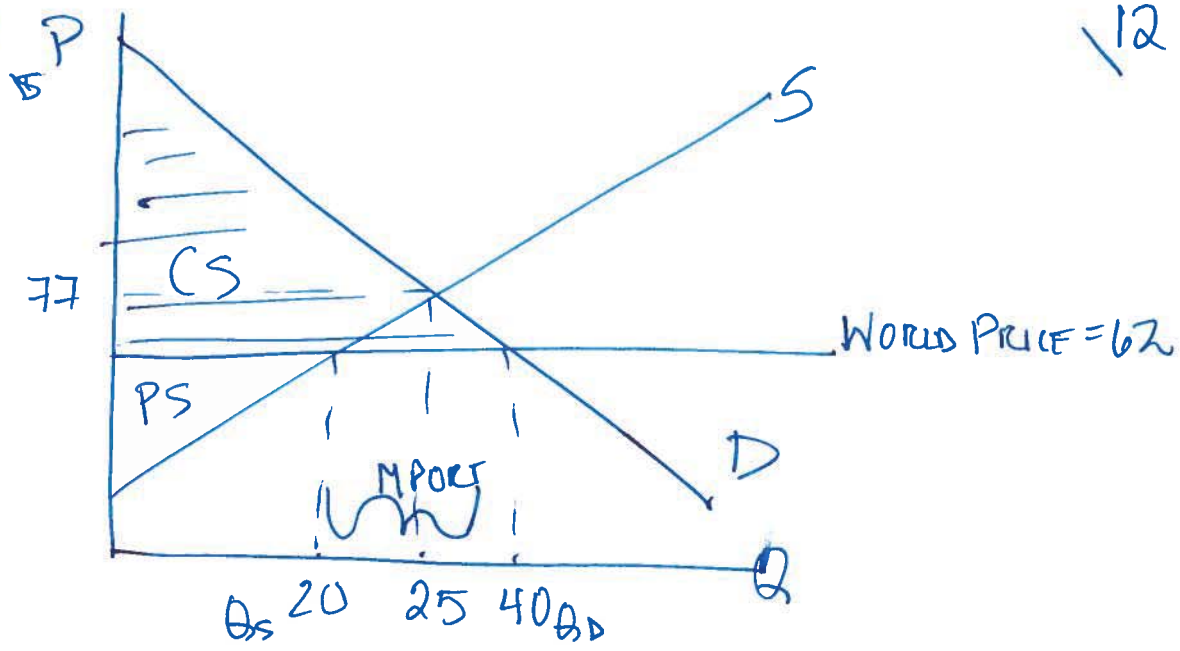

$CS = 1/2\ (102 - 62)(40) = 800$

$PS = 1/2\ (62 - 2)(20) =$ 600

CONSUMER GAIN
PRODUCERS LOSE
} WITH 62$ WORLD PRICE & FREE TRADE