Test # 2

Prof. Kushner **Name:** Master

Tutorial No. (or date and time): _____ **Student Number** _____

Tutorial Instructor _____

NOTE: All work must be shown on the paper; otherwise the mark will be zero. Whenever possible, use diagrams to illustrate your answer.

Pottsville is concerned with listeria and will therefore ban the import of Canadian lunch meats into Pottsville. What are the economic effects of such a ban.

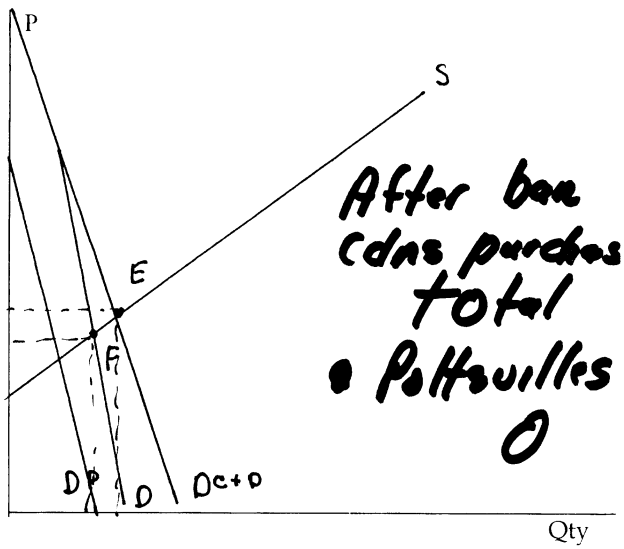
The demand and supply equations for Canadian lunch meats are given below.

$P = 100 - 2 Q_d^{C + Potts}$ (1)

$P = 10 + Q_s$ (2)

The demand by Pottsvillians prior to the ban is given by:

$P = 60 - 4 Q_d^{Potts}$ (10)



After ban Cdns purchase total - Pottsvilles 0

Solving for (1) and (2)

$100 - 2Q_d = 10 + Q$

$3Q_s = 90$

$Q_s = 30$ (3)

$P = 40$ (4)

With ban D_P, $P = P^{P+e} - P^P$

$Q_d = Q^{P+e} - Q^P$ (11)

$Q^{P+e} = \frac{100}{2} - \frac{P}{2} = 50 - \frac{P}{2}$ (9)

$Q^P = 15 - \frac{P}{4}$ (10a)

$Q = (50 - \frac{P}{2}) - (15 - \frac{P}{4}) = 50 - \frac{P}{2} - 15 + \frac{P}{4} = 35 - \frac{2P}{4} + \frac{P}{4} = 35 - \frac{P}{4}$ (12)

Solving for (2) and (12) $P = 10 + (35 - \frac{P}{4}) = 45 - \frac{P}{4}$

$P + \frac{P}{4} = 45$ $\frac{5}{4}P = 45$ $P = 36$ (13)

13 into (2) $36 = 10 + Q_s$, $Q_s = 26$ (14)

To obtain original purchases by Canadians, det. Q_d^P

at $P = 40$, $40 = 60 - 4Q_d^P$ $Q_d^P = 5$

$\therefore Q_d^e = 20 - 5 = 15$

After ban, $Q_d^e = 0$, $\therefore Q_d^P = 26$

Original price 40 /

New price 36 /2

Original purchases by ~~Canadians~~ 25 /

Purchases by Canadians after ban 26 /

Original output 30 /

New output 26 /2

Original purchases by Pottsvillians 5 /

Purchases by Pottsvillians after ban 0 /

10

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Pottsville is concerned with listeria and will therefore ban the import of Canadian lunch meats into Pottsville. What are the economic effects of such a ban.

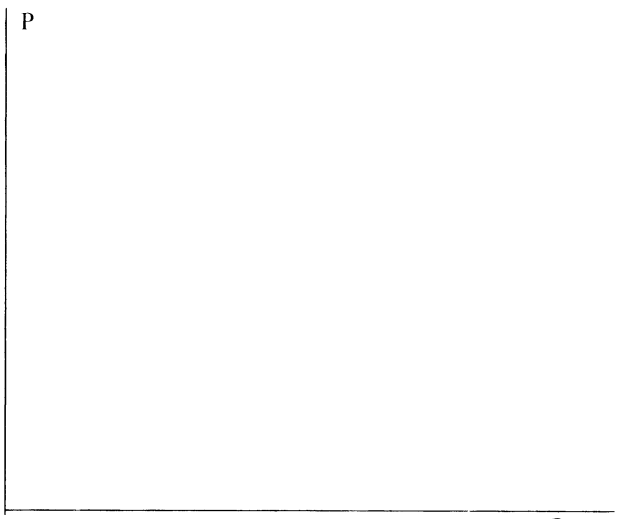
The demand and supply equations for Canadian lunch meats are given below.

$P = 100 - 2 Q_d^{C + Potts}$ (1)

$P = 10 + Q_s$ (2)

The demand by Pottsvillians prior to the ban is given by:

$P = 80 - 4 Q_d^{Potts}$ (10)



Mult hem, D_d, $D = D_{P+C} - D_P$

$Q_d = Q_{P+C} - Q_P$

$Q_{P+C} = 50 - \frac{P}{2}$

$Q_P = 20 - \frac{P}{4}$

$Q = \left(50 - \frac{P}{2}\right) - \left(20 - \frac{P}{4}\right) = 30 - \frac{P}{4}$ (12)

Solving for (12) and (2) $P = 10 + (30 - \frac{P}{4}) = 40 - \frac{P}{4}$

$\frac{5}{4}P = 40$ $P = \$32$ (14)

(14) in (2) $32 = 10 + Q$ $Q = 22$

To det. Q_d^P, $P = 80 - 4Q_d^P$

$40 = 80 - 4Q_d^P$

$Q_d^P = 10$

$\therefore Q_{dc} = 30 - 10 = 20$

Original price 40 1

New price 32 2

Original purchases by Pottsvillians 10 1

Purchases by Canadians after ban 20 1

(22)

Original output 30 1

New output 22 2

Original purchases by Canadians 20 1

Purchases by Pottsvillians after ban 10 1

ECONOMICS 2P23
TEST # 2

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Fall 2008

Name: MASTER

Student No: _____

Tutorial Time: _____

Tutorial No: _____

The demand and supply for bananas on the Island of Pottsville are given by the following equations:

$P = 100 - Q_d^{Potts}$ (1)
$P = 10 + Q_s^{Potts}$ (2)

$Q_s^{Potts} = P - 10$

The Island is under a trade embargo. If the embargo were lifted, foreign firms would be allowed to see bananas to the Island's consumers. The supply curve of foreign firms is given by:

$P = 20 + Qs^{Foreign}$ (3)

$Q_s^{FOREIGN} = P - 20$

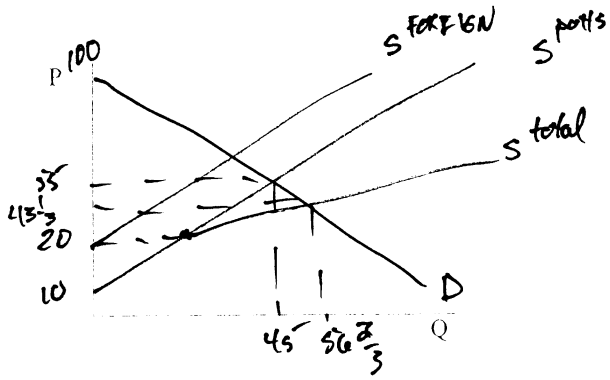
What are the economic effects of lifting the embargo to allow foreign firms to sell to islanders? Illustrate your answer.

Initially,

$100 - Q_0 = 10 + Q_0$

$Q_0 = 45$

$P_0 = 55$



$Q_s^{total} = [P - 10] + [P - 20]$

$= 2P - 30$

$\therefore$ new equilibrium,

$P = 100 - [2P - 30]$

$P = 130 - 2P$

$P_1 = 43\frac{1}{3}$

$Q_1 = 100 - 43\frac{1}{3}$

$= 56\frac{2}{3}$

$\therefore 43\frac{1}{3} = 10 + Q_s^{Potts}$

$\therefore Q_s^{Potts} = 33\frac{1}{3}$

$\therefore Q_s^{FOR} = 56\frac{2}{3} - 33\frac{1}{3} = 23\frac{1}{3}$

Original price	55 (2)	Original output	45 (1)
New price	$43\frac{1}{3}$ (2)	New output	$56\frac{2}{3}$ (1)
After trade, sales by local firms	$33\frac{1}{3}$ (2)	by foreigners	$23\frac{1}{3}$ (2)