

ECON 364

EX 1 FALL 09

(#)

	H	F (*)
T	6	3
C	2	3

$$L = \bar{L}^* = 30$$

(1)

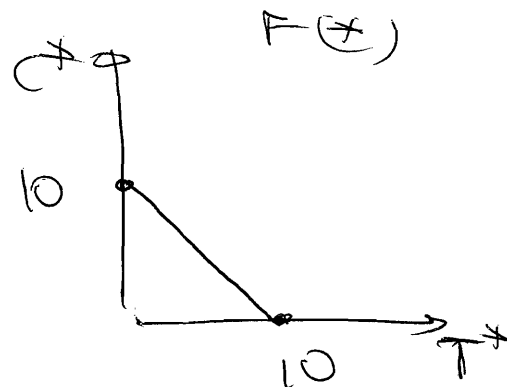
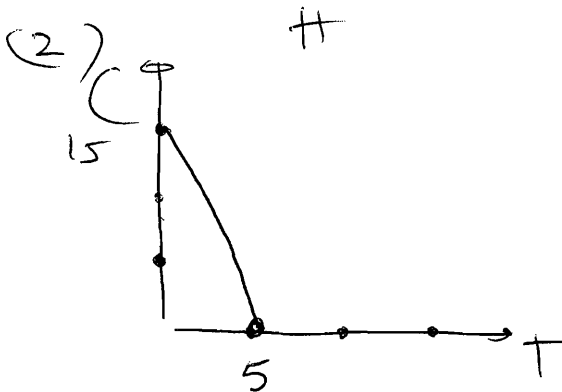
$$T = \frac{1}{6} L_T$$

$$C = \frac{1}{2} L_C$$

$$\Rightarrow L_T = 6T$$

$$\Rightarrow L_C = 2C$$

$$\bar{L} = \boxed{30} = L_T + L_C = \boxed{6T + 2C}$$



(3)

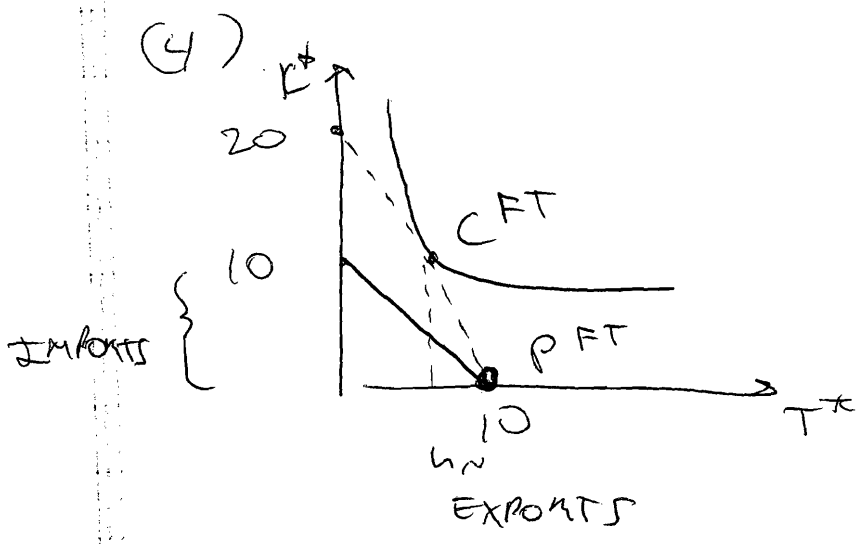
$$\left(\frac{P_T}{P_C} \right)^A = 3$$

$$\left(\frac{P_T}{P_C} \right)^{A^*} = 1$$

Foreign has a comparative advantage in textiles since

$$\frac{3}{6} < \frac{3}{2}$$

Free trade : $\frac{P_T}{P_C} = 2$



FOREIGN
EXPORTS TEXTILES

HOME
EXPORTS CARS

(5) FOREIGN:
UNDER FT PRODUCES ONLY TEXTILES.

PROFIT MAX \Rightarrow

$$\frac{W^*}{P_T^*} = MPL_T^* = \frac{1}{a_T^*} = \frac{1}{3}$$

CALCULATION OF REAL WAGE IN TERMS OF CARS (NOT PRODUCED)

$$\frac{W^*}{P_C^*} = \frac{W^*}{P_T^*} \cdot \frac{P_T^*}{P_C^*} = \frac{2}{3}$$

\downarrow
 $\frac{1}{3}$

FT PRICES GIVEN $\left(\frac{P_T}{P_C}\right)^{FF} = 2$

(6) ASSUME $p_T = 1$ SINCE FT PRICES

$$\frac{p_T}{p_C} = 2 \Rightarrow \boxed{p_C = \frac{1}{2} p_T} = \boxed{\frac{1}{2}}$$

WE NEED TO CALCULATE WAGES AT HOME & IN FOREIGN

FROM (5) $\frac{w^*}{p_T^*} = \frac{1}{3} \Rightarrow w^* = \frac{1}{3} p_T^* = \frac{1}{3}$

→ THEN $\boxed{AC_C^*} = a_C^* \cdot w^* = 3 \cdot \frac{1}{3} = \boxed{1}$
 AT HOME ONLY CARS ARE PRODUCED & BECAUSE OF CONST. RETURNS TO SCALE TECHNOLOGY

$$\boxed{AC_C = p_C = \frac{1}{2}}$$

ALTERNATIVE EXPLANATION:
 ONLY CARS PRODUCED \Rightarrow

$$\frac{w}{p_C} = MPC_C = \frac{1}{2}$$

$$w = \frac{1}{2} p_C^{1/2} = \frac{1}{4}$$

OK

→ $\boxed{AC_C} = a_C \cdot w = 2 \cdot \frac{1}{4} = \boxed{\frac{1}{2}}$

NEW SCENARIO :

$$Q_T^* = 2$$

So

	H	F*
T	6	2
C	2	3

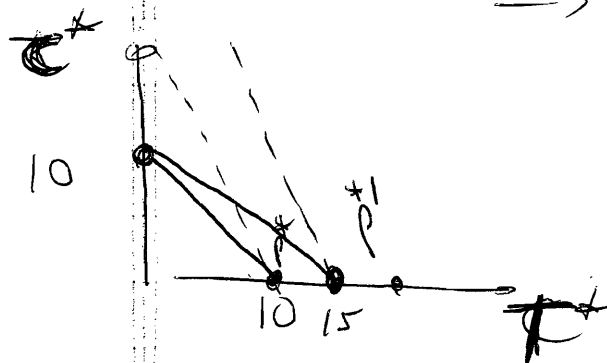
(6) YES BOTH COUNTRIES WILL CONTINUE TO TRADE SINCE: THE COMP. ADVANTAGE CONTINUES TO BE THE SAME (JUST STRONGER)

F* HAS A CA IN TEXT
 H " " " " CARS

(7) AT OLD FT PRICES $\frac{P_T}{P_C} = 2$,

FOREIGN CONTINUES TO SPECIALIZE IN TEXTILES \Rightarrow WORLD SUPPLY OF TEXT ~~DOUBLES~~ \uparrow BY 50%. SINCE DEMAND FOR TEXT FROM FOREIGN \uparrow BUT LESS \Rightarrow EXCESS SUPPLY OF TEXT IN WORLD

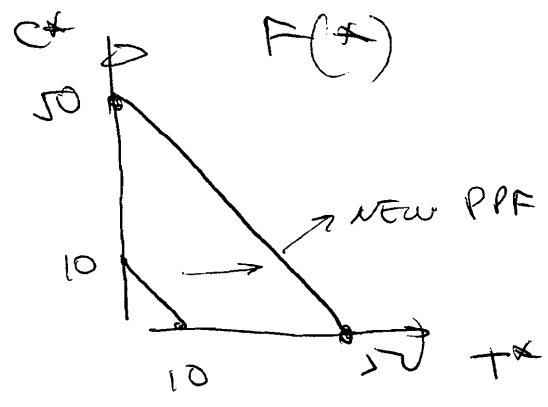
GOES FROM 10 TO 15 UNITS



$$\Rightarrow \frac{P_T}{P_C} \downarrow$$

III

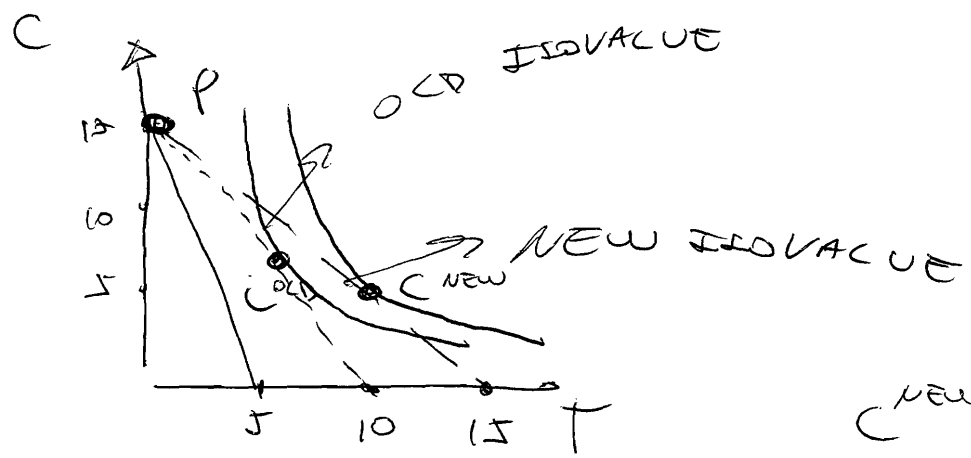
	H	F*	
T	6	3	$\bar{L} = 30$
C	2	3	$\bar{L}^* = 150$



NOT
NEEDED

(1) NEW FT PRICES $\frac{P_T}{P_C} = 1$

THIS IS BETTER FOR HOME!



C^{NEW} IS
AT A HIGHER
INDIF. CURVE
THAN C^{OLD}

(2) FOREIGN WILL EXPORT TEXTILES
BECAUSE HOME WILL EXPORT
CAR & IMPORT TEXTILES
(SEE DIAG. ABOVE)

(3)

SINCE AFTER IMMIGRATION NEW ^{FREE TRADE} PRICES COINCIDE WITH AUTARKY PRICES

⇒ WORKERS HAVE THE

SAME LEVEL OF SATISFACTION

AS IN AUTARKY (THERE ARE NO GAINS FROM TRADE IN THIS CASE)

i.e.

$$\left(\frac{w^*}{p_T^*} \right)^{FT\ NEW} = 1/3 = \left(\frac{w^*}{p_T^*} \right)^{A^*}$$

$$\left(\frac{w^*}{p_C^*} \right)^{FT\ NEW} = 2/3 = \left(\frac{w^*}{p_C^*} \right)^{A^*}$$

NOT NEEDED

THEREFORE THEY ARE WORSE OFF THAN IN THE OLD

FREE TRADE SITUATION WHERE:

THEY HAD GAINS FROM TRADE :

NOT NEEDED

$$\left(\frac{w^*}{p_T^*} \right)^{FT\ OLD} = \frac{1}{3} = \left(\frac{w^*}{p_T^*} \right)^{A^*} = 1/3$$

$$\left(\frac{w^*}{p_C^*} \right)^{FT\ OLD} = 2/3 > \left(\frac{w^*}{p_C^*} \right)^{A^*} = 1/3$$