

International Economics 2024

Home assignment 6: Answers

(a)

Home is labor rich, Foreign is labor poor: $600/400 > 600/500$

Home is capital poor, Foreign is capital rich: $400/600 < 500/600$

Food is labor intensive: $5/3 > 4/4$

Cars are capital intensive: $4/4 > 3/5$

(b)

To find outputs:

Labor market equilibrium: $600 = 5F + 4C$

Capital market: $400 = 3F + 4C$

Hence, outputs are $F=100$, $C=25$. The relative supply of food is $F/C=4$

To find the autarky price you need to find the intersection of relative supply and relative demand:

$$P^F/P^C = 1.1 - (0.075) * 4$$

Hence, $P^F/P^C = 0.8$

(c)

To find outputs:

Labor market equilibrium: $600 = 5F + 4C$

Capital market: $500 = 3F + 4C$

Hence, outputs are $F=50$, $C=87.5$. The relative supply of food is $F/C=50/87.5$

To find the autarky price you need to find the intersection of relative supply and relative demand:

$$P^F/P^C = 1.1 - (0.075) * 50/87.5$$

Hence, $P^F/P^C = 1.06$

(d)

With trade the outputs in both countries are the same as above and hence the relative supply $F/C = (50+100)/(87.5+25) = 1.33$

To find the trade relative price of F:

$$P^F/P^C = 1.1 - (0.075) * 1.33$$

Hence, $P^F/P^C = 1$