

Homework #2 - due Tuesday, February 18th in class

Show your work. If your answers involve more than one page, please staple them together before submitting them.

This problem concerns trade in washing machines between Korea and America.

The four relevant supply and demand curves for washing machines are given as follows:

Demand in America: $P = 100 - Q$

Supply in America: $P = 20 + 3Q$

Demand in Korea: $P = 90 - 3Q$

Supply in Korea: $P = 10 + (1/2)Q$.

1. Without trade, what is the equilibrium price in America? What is the equilibrium price in Korea?
2. If trade is allowed between the two countries, who will be the exporter and who will be the importer? How do you know?
3. Derive the Excess Supply curve for Korea and the Excess Demand curve for America. Write the algebraic expressions for the two curves and construct a three-panel diagram (like the ones drawn in class) that shows America, Korea, and the Trade Sector.
4. With trade in washing machines between Korea and America, what will be the equilibrium world price? How many machines will be exported and shipped across the Pacific Ocean?
5. Suppose that America places a \$10 per washing machine tariff on imports. After imposition of the tariff, what will be the price of washing machines in America? What will be the price of washing machines in Korea?