1. External Economies. Consider the case of external economies. When is it possible that a country will be better off without trade? Please support your answer with diagrams.

2. Monopolistic Competition.

(a) Complete the diagram (labeling and curves) to show how the Japanese market equilibrium is determined.
(b) Why does curve b) slope downward?
(c) Suppose that Japan begins auto trade, and Japan is able to successfully export cars worldwide. How will this change the market equilibrium in the Japanese market?
(d) How will the opening of trade affect consumers? Describe fully.

3. Protection.

Home’s demand curve for wheat is $D=100 - 20P$
Its supply curve is $S=20 + 20P$

(a) Derive and graph home’s import demand schedule. What would home’s price of wheat be in the absence of trade?
(b) Now add Foreign which has demand curve $D*=80 - 20P$ $S* = 40 + 20P$

Derive and graph foreign’s export supply curve and find the price of wheat that would prevail in foreign in the absence of trade.

(c) Now allow Foreign and Home to Trade. Find and graph equilibrium under free trade. What is the world price? What is the volume of trade?
(d) Home imposes a specific tariff of 0.5 on wheat imports. Determine and graph the effects of the tariff on
   - the price of wheat in each country
   - the quantity of wheat supplied and demanded in each country
   - the volume of trade

(e) Determine the effect of the tariff on the welfare of each of the following groups:
   - Home import-competing producers
   - Home consumers
   - Home government

(f) Show graphically and calculate the terms of trade gain, the efficiency loss, and the total effect on welfare of the tariff.