**WORKSHEET 1**

1. Find the equilibrium price and quantity in a market whose supply and demand curves

are given by P = 4Qs and P = 12 -2Qd, respectively.

2. The market for DVDs has supply and demand curves given by Qs=P/2 and Qd= 42-P, respectively.

a. How many units will be traded at a price of €35? At a price of €14? Which participants will be dissatisfied at these prices?

b. What quantity of DVDs at what price will be sold in equilibrium?

c. What is the total revenue from DVD sales?

3. Suppose a newly released study shows that battery-powered toys harm a child’s development and recommends that parents adjust their purchasing behaviour accordingly. Use diagrams to show the effect on price and quantity in each of the following markets:

a. The market for battery-powered toys.

b. The market for batteries.

c. The market for yo-yos (which do not require batteries).

4. Using diagrams, show what changes in price and quantity would be expected in the following markets under the scenarios given:

a. Crude oil: As petroleum reserves decrease, it becomes more difficult to find and recover crude oil.

b. Air travel: Worries about air safety cause travellers to shy away from air travel.

c. Rail travel: Worries about air safety cause travellers to shy away from air travel.

d. Hotel rooms in Majorca: Worries about air safety cause travellers to shy away from air travel.

e. Milk: A genetically engineered hormone enables large milk producers to cut production costs.

5. Suppose demand for seats at football games is P = 1900 - (1/50)Q and supply is fixed at Q = 90,000 seats.

a. Find the equilibrium price and quantity of seats for a football game (using algebra and a graph).

b. Suppose the government prohibits tickets scalping (selling tickets above their face value), and the face value of tickets is €50 (this policy places a price ceiling at €50). How many consumers will be dissatisfied (how large is excess demand)?

c. Suppose the next game is a major rivalry, and so demand jumps to P = 2100 - (1/50)Q. How many consumers will be dissatisfied for the big game?

6. The demand for apartments is P = 1200 - Q while the supply is P = Q units. The government imposes rent control at P = €300/month. Suppose demand grows in the market to P = 1400 - Q.

a. How is excess demand affected by the growth in demand for apartments?

b. At what price would the government have to set the rent control to keep excess demand at the same level as prior to the growth in demand?

7. Suppose demand is P = 600 - Q and supply is P = Q in the wheat market, where Q is tons of wheat per year. The EU sets a price support at P = €500/tonne and purchases any excess supply at this price. In response, as a long-run adjustment, farmers switch their crops from corn to wheat, expanding supply to P = (1/2)Q.

a. How does excess supply with the larger supply compare to excess supply prior to the farmers switching crops?

b. How much more does the EU have to spend to buy up the excess supply?

8. How would the equilibrium price and quantity change in the market depicted below if the marginal cost of every producer were to increase by €2/kilogram?

