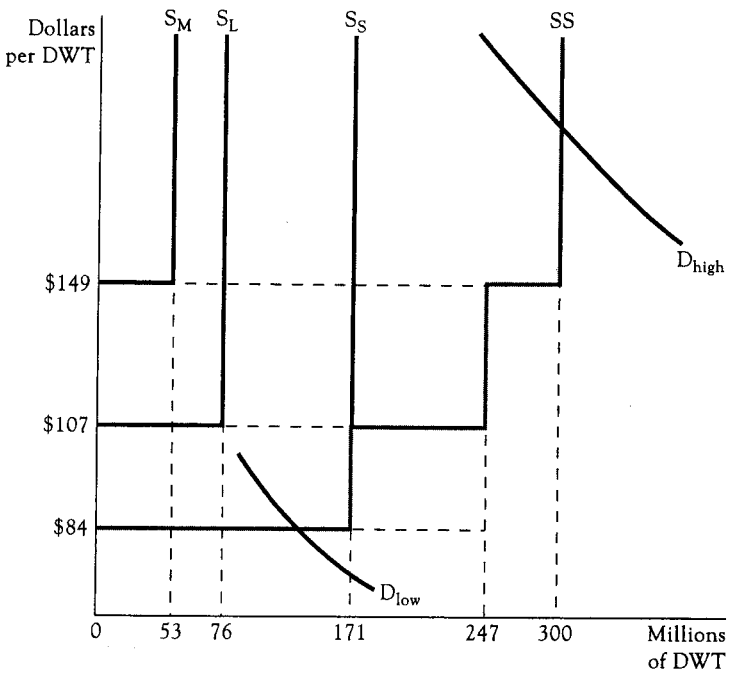
ECO 401-002 Problem Set #6 KEY Spring 2003

1.



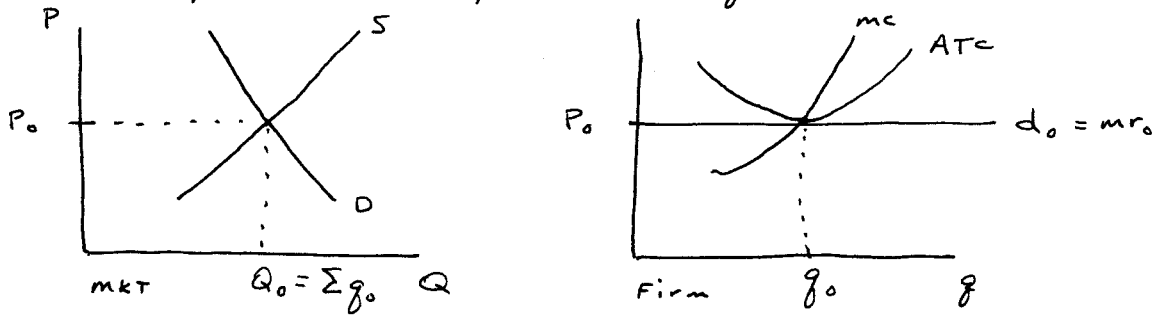
2. FALSE. Producing that output where ATC is at a minimum will maximize profit per unit, not total profit. Total profit is maximized by expanding output up to the point where MR = MC.

3. (a) automobiles - no. small number of large suppliers; differentiated product; significant barriers to entry.

(b) cable TV - no. monopoly supplier; insurmountable barriers to entry.

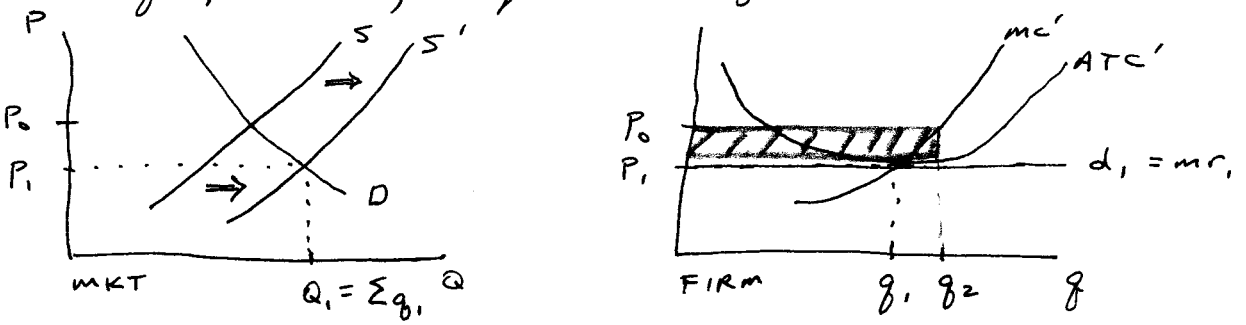
(c) soybeans - yes. large number of suppliers, each one small relative to the market; homogeneous product; insignificant entry barriers.

4. Industry is currently in LR equilibrium:



current soybean farmers are earning a normal return — zero economic profit.

If an improvement in technology causes the cost of producing soybeans to fall:

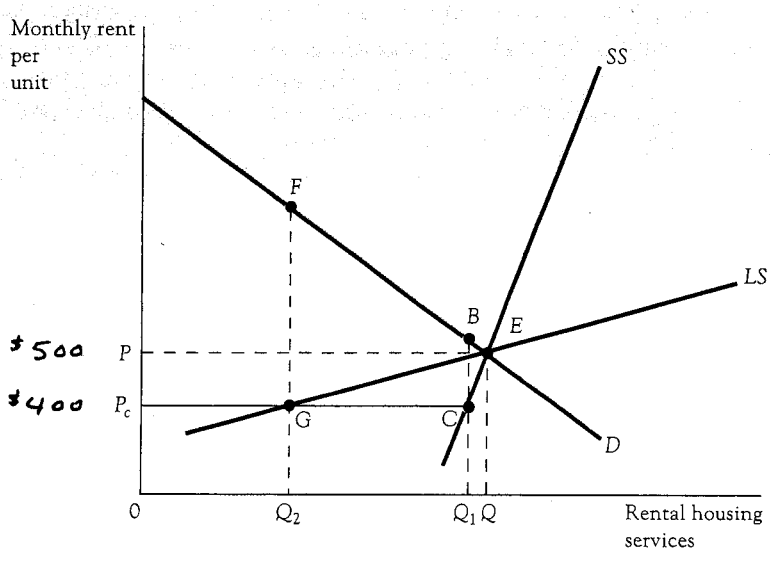


Existing soybean producers will earn positive economic profits in the short run after they adopt the new cost-reducing technology. Economic profits will attract new firms into the industry, causing the market supply curve to shift to the right and price to fall. Long-run equilibrium is restored when price falls to P_1, and economic profits are zero.

5. See p. 273 in textbook:

FIGURE 10.7

Supply Elasticity and the Deadweight Loss of Rent Control
With the rent ceiling P_c, the reduction in output in the short run is small, from Q to Q_1, along the short-run supply curve *SS*. The associated deadweight loss, triangular area *BEC*, is also small. The long-run effects of the rent ceiling are more significant. Output declines to Q_2 along the more elastic long-run supply curve *LS*. The associated deadweight loss is depicted by triangular area *FEG*.



For discussion of short-run and long-run economic distortions in the market for apartments, see Browning + Zupan, Ch. 2, pp. 27-31.