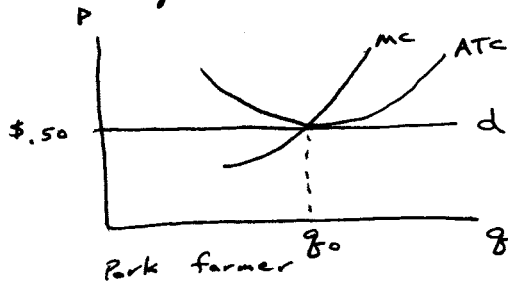
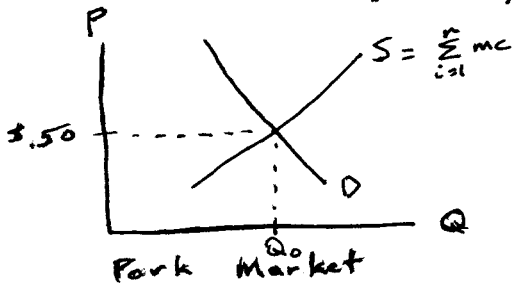
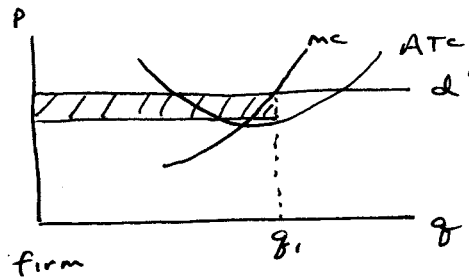
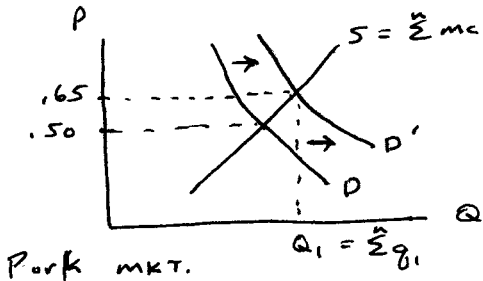


1. (a) Pork industry in pre-Athens period:



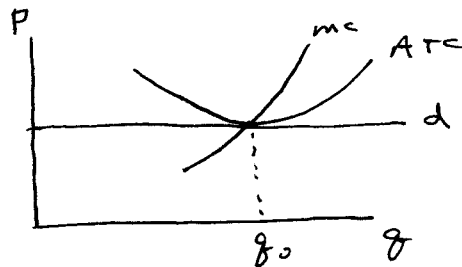
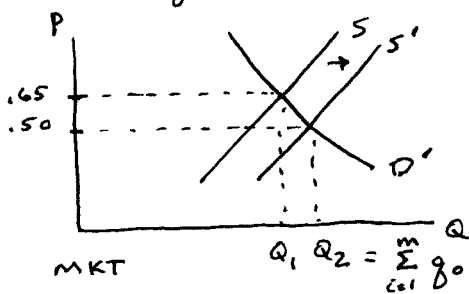
market price initially is \$.50. Typical farmer produces  $q_0$  hogs, and market output =  $\sum_{i=1}^n q_0 = Q_0$ .  
Zero economic profit, so no net entry or exit.

(b) Athens diet craze takes over:



Increase in demand for pork drives hog prices up to \$.65 in the short run. Typical farmer increases output to  $q_1$ , and market output is  $Q_1$ . Farmers earn positive economic profits in the short run. Number of farmers =  $n$ .

(c) The future: (assuming demand shift is permanent)



Economic profit attracts entry. Number of firms increases from  $n$  to  $m$ , shifting market supply curve to  $S'$ . Price falls, eventually returning to \$.50 when enough firms have entered. At that point economic profit = 0.

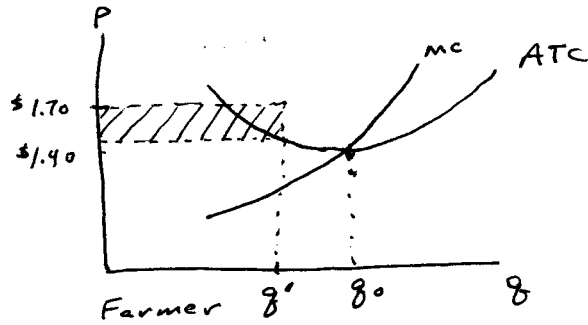
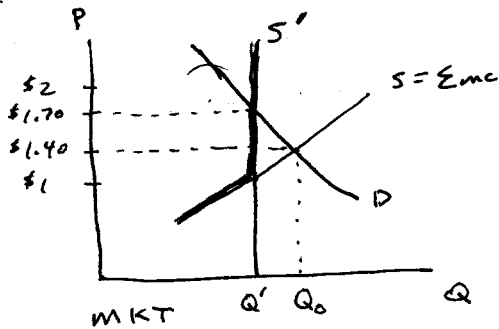
2. (a) personal computers - NO. There are only a handful of large sellers, and the product is differentiated.
- (b) lettuce - YES, it meets all the characteristics.
- (c) cable TV - NO. There is only one seller in the Lexington market. (For some customers, satellite TV is a close substitute.)
- (d) retail clothing stores - NO. This industry meets all the requirements except homogeneous product. Retail clothing is a differentiated product sector.

3. Marginal revenue = \$200 and is constant, because this market is perfectly competitive. Choose output where  $MR = MC$ , or produce 52 alligators. We can't determine what profits are without knowing TC or ATC.

4. The firm's short-run supply curve is its marginal cost curve above the minimum point on its average variable cost curve. The market supply curve is the horizontal summation of individual firms' supply curves. If short-run marginal cost curves slope upward to the right, then the market supply curve will also. Short-run marginal cost curves slope upward to the right because of the law of diminishing returns.

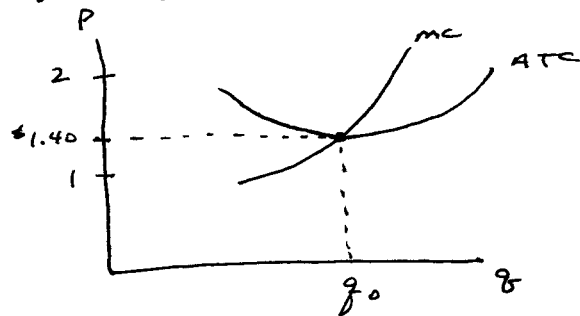
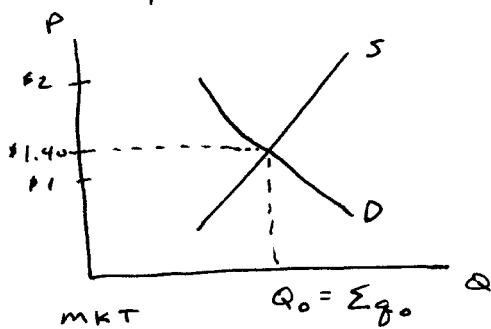
BONUS:

5. (a) Current situation:



Quota system reduces market output from  $Q_0$  to  $Q'$ . This causes market price to rise to \$1.70. Farmer grows  $q'$ , which is the limit he can grow under the quota system. If unconstrained, the farmer would like to grow more tobacco. At price = \$1.70 and output =  $q'$ , farmer earns positive economic profit. Market supply in absence of quota system would be  $S$ . With quota system in place it is  $S'$ .

(b) Long-run equilibrium after quota system is disbanded:



Quota system is disbanded. Farmers expand output and market price falls. When price falls to level of minimum ATC, farmers earn zero economic profit. LR equilibrium is characterized by  $P = \min ATC$  and  $\Sigma q_0 = Q_0$ , where the number of farmers is just sufficient to produce the market output.