

(4 pts) 1. (a) Accounting Profit (Income Statement Net Revenue)

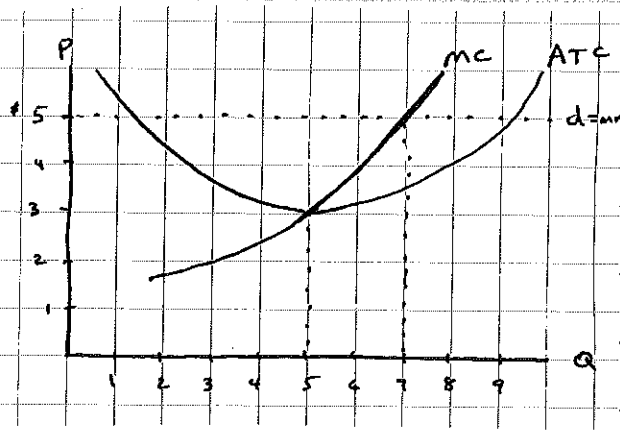
Revenues: \$1,000,000

Costs:	Wages paid to hired labor	\$ 300,000
	Utilities	\$ 20,000
	Purchased supplies	\$ 500,000
	Wages paid to herself	\$ 100,000
		<hr/>
		\$ 920,000

Net Revenue = $TR - TC = \$ 80,000$

(b) Economic Profit takes into account implicit costs in addition to explicit costs. Two elements of implicit costs in this example are the implicit rent on the building which she owns and the opportunity cost of her time. She could rent the building for \$200,000 to someone else if she didn't use it to run her own drugstore. She could work for someone else and earn \$100,000. In this case the wage that she pays herself exactly offsets the opportunity cost of her time, but the implicit rent on the building means that her economic profits are $-\$120,000$.

(4 pts) 2.

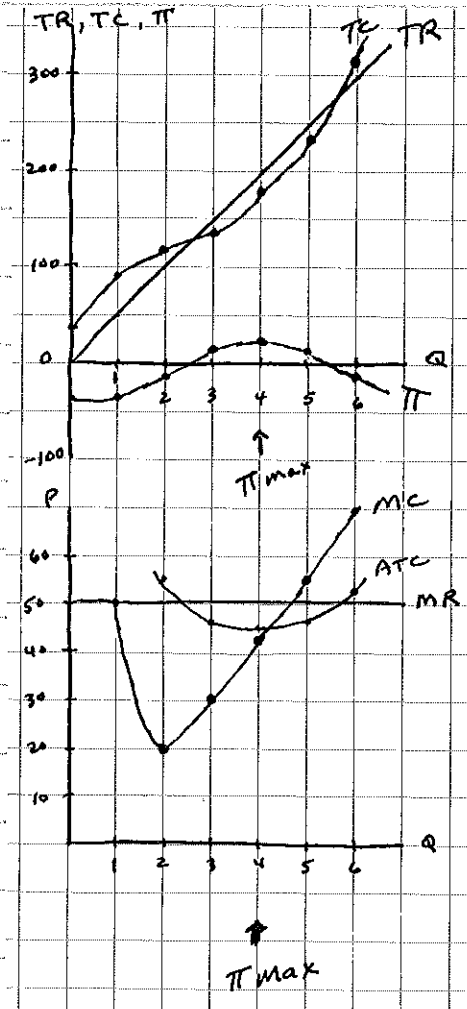


If $P = \$5$, then the difference between P and ATC is greatest where ATC is at a minimum, or where $Q = 5$. Profits are maximized, however, at the output where $MR = MC$, or $Q = 7$ in this case. So the statement is FALSE.

(6 pts) 3.

$P = \$50$ $TFC = \$40$

Output (Units)	Total Revenue (\$/unit)	Total Cost (\$/unit)	Profit (\$)	Marginal Revenue (\$/unit)	Marginal Cost (\$/unit)
0	0	40	-40	-	-
1	50	90	-40	50	50
2	100	110	-10	50	20
3	150	140	10	50	30
4	200	182	18	50	42
5	250	236	14	50	54
6	300	306	-6	50	70



(a) see diagram at right.

$Q = 4$ will maximize profit.

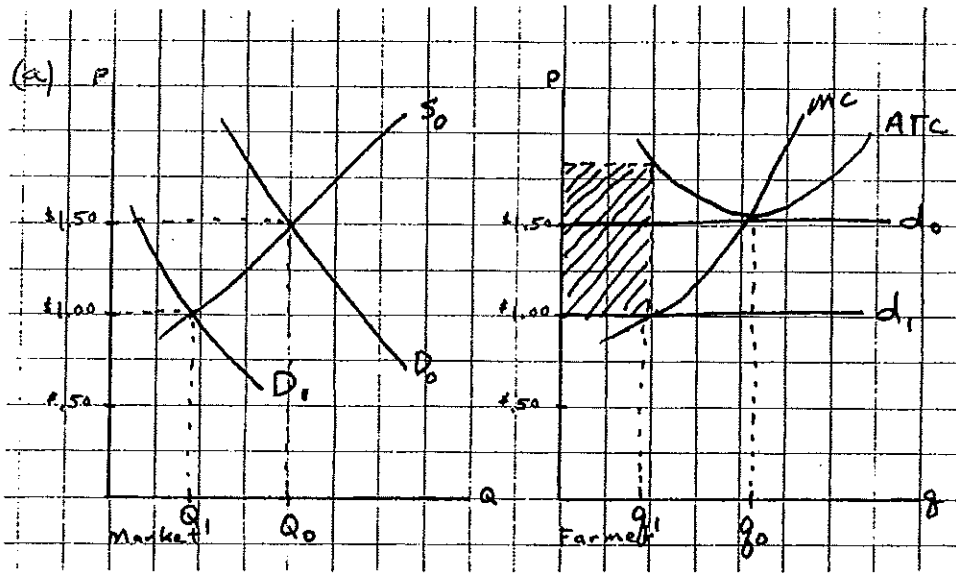
(b) see diagram at right.

$Q = 4$ will maximize profit, consistent with (a).

(c) If $TFC = \$60$, then the firm will suffer economic losses at each output. Profit

will still be maximized at $Q = 4$ or where $MR = MC$.

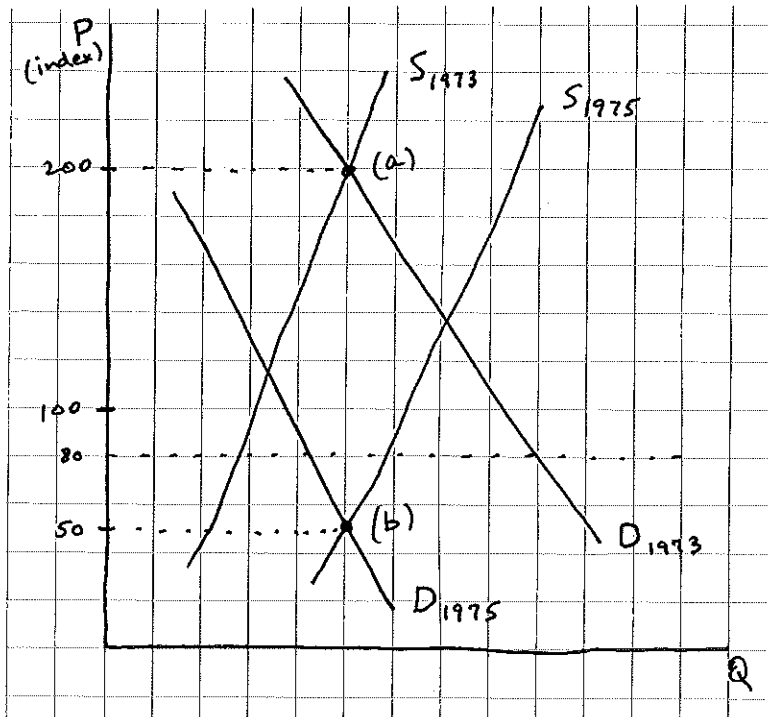
4.
(8 pts)



Initially, $Q_0 = Q_s$ at price = \$1.50/bush. Typical farmer produces q_0 and earns zero econ. profit. Then, ^{market} demand declines from D_0 to D_1 , causing market price to fall to \$1.00/bush. Typical farmer reduces output to q_1 and suffers economic losses equal to the shaded area.

- (b) Losses will cause farmers to exit from the industry, and the market supply curve will shift to the left. As that happens, the price of potatoes will rise. When the market eventually returns to long-run equilibrium, we predict:
- ① price will return to \$1.50/bushel
 - ② market output will be lower than originally
 - ③ the number of potato farmers will have declined
 - ④ long-run expected profits = zero.

5.
(4 pts)



(a) Worldwide demand for oil was strong in 1973, and supply of supertankers was slow to catch up due to the long lead time it takes to build a large ship. Hence the price of supertanker services was bid up to 200 in 1973.

(b) After the war and oil embargos in 1973, and the ensuing rise in oil prices, demand for supertanker services fell sharply. Supply of ships continued to increase, however, since many new ships were in the production pipeline. The result was a sharp drop in price to 50 by 1975.