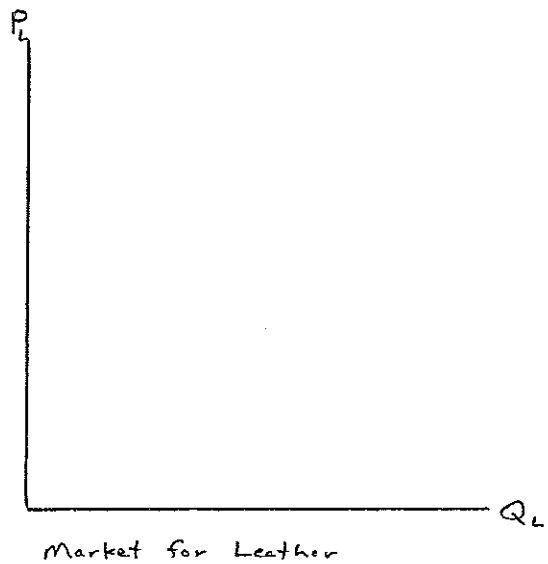
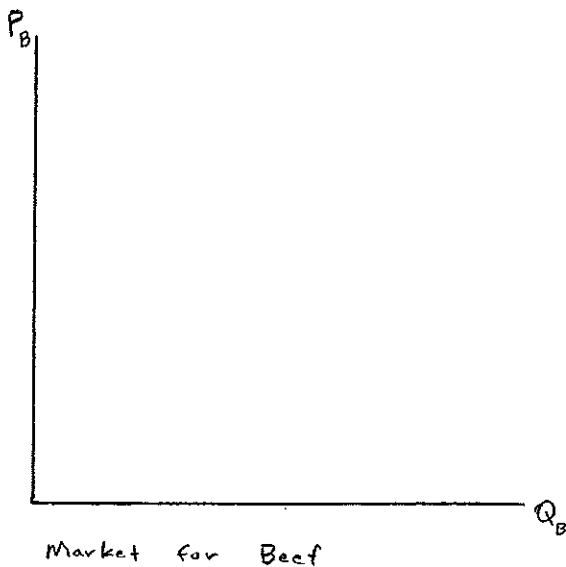


100 points total. Answer each question in the space provided. General advice: show your work, including any formulas or diagrams that you use in reasoning through your answers.

1. (5 pts.)  $TFC = \$2000$ ,  $AVC = \$10$ , and  $ATC = \$12$ . What is  $Q$ ?

2. (10 pts.) From the WSJ, 8/25/10: "Cattle prices are soaring toward records, pushing up the cost of beef in grocery stores. The gains are being fueled by rising appetites globally. . . . Nations in Asia and elsewhere are buying more U.S. beef." Briefly explain and illustrate in the market diagrams below what is going on in the market for beef. Then explain and illustrate any secondary effects that you think might occur in the market for leather.



3. (10 pts.) Why might hold-up potentially be a problem for the vertical relationship between Corning and Sharp? In your answer, you should explain what hold-up is and what specifically might give rise to it in this case.
4. (10 pts.) You use fertilizer and insecticide to grow roses in your garden. Given the amounts of each that you are currently using, another pound of fertilizer applied to your rose bushes would yield an additional 10 roses, while an additional quart of insecticide would increase your rose output by 25. Insecticide costs \$5 per quart, and fertilizer costs \$2 per pound. What can we conclude from this information about the economic efficiency of the mix of fertilizer and insecticide you are currently using? Show any formula that you use in arriving at your answer.

5. (10 pts.) Southeast Airlines and Jet Purple are the only two airlines serving the Pikeville-Paducah city pair market. You collect the following data on the prices charged by each airline and the number of passengers flying on each:

| <u>Month</u> | <u>SE Price</u> | <u>JP Price</u> | <u>SE passengers</u> | <u>JP passengers</u> |
|--------------|-----------------|-----------------|----------------------|----------------------|
| 1            | 109             | 111             | 70                   | 61                   |
| 2            | 109             | 110             | 62                   | 63                   |

- a) Calculate the own-price elasticity of demand for air travel on Jet Purple. Show the formula you use and the numbers you use to perform the calculation.
- b) Calculate the cross-price elasticity between JP's price and SE's passenger load. Show the formula you use and the numbers you use to perform the calculation.
6. (5 pts.) Why is a person with only a grade-school education likely to be able to grow tobacco at a lower cost than a person with an MBA degree?

7. (20 pts.) Labor and capital are used to produce widgets according to the production table below:

|               |   | Labor Input |    |     |     |     |
|---------------|---|-------------|----|-----|-----|-----|
|               |   | 1           | 2  | 3   | 4   | 5   |
| Capital Input | 1 | 20          | 40 | 55  | 65  | 75  |
|               | 2 | 40          | 60 | 75  | 85  | 90  |
|               | 3 | 55          | 75 | 90  | 100 | 105 |
|               | 4 | 65          | 85 | 100 | 110 | 115 |
|               | 5 | 75          | 90 | 105 | 115 | 120 |

- a) Is this production process subject to the law of eventually diminishing marginal returns? Pick a set of combinations of inputs to illustrate and explain your answer.

- b) Does this production exhibit increasing, constant, or decreasing returns to scale? Pick a set of combinations of inputs to illustrate and explain your answer.

8. (5 pts.) Why are there blackouts in Jakarta while at the same time Indonesian coal producers are exporting significant quantities of coal to India?

9. (5 pts.) Briefly explain what Honda has recently done to actually **reduce** the economies associated with long production runs in its U.S. plants.
10. (15 pts.) Thinking about the make or buy decision, why might firms find it advantageous to use the market? Why might firms find it advantageous to vertically integrate? In that context, explain why we see beef processors rely on arm's length spot market transactions to acquire cattle while chicken and pork processors have much closer contractual vertical relationships with farmers who produce chickens and hogs.

11. (5 pts.) True or False and Explain: Your parents own and operate a local jewelry store. They buy diamonds at wholesale and sell them at retail. At any point in time they will have some diamonds in inventory that they purchased last week and some that they purchased last year. Wholesale diamond prices have risen sharply in the past month. Hence the economic profit from selling a diamond of given size and quality that was purchased last year will be greater than that from selling an equivalent diamond that was purchased last week.