Write your name on the cover of the test booklet and nowhere else. Enclose this sheet with the booklet. Failure to follow these directions will cost you 1 point. The test has 100 points (to be scaled up to 170 points) and is scheduled to take 50 minutes. Therefore, expect to spend 1 minute for every 2 points. For example, a 12-point question should take 6 minutes. I cannot give extra time because some students have a class after your class.

1) (10 points) For EITHER economies of scale OR patents, explain why it is a barrier to entry.

2) (12 points) For EITHER cost-shifting OR special interest influence (regulatory capture), explain what the term means and why it means that regulating a natural monopoly is difficult to do.

3) (12 points) Answer EITHER Part A OR Part B.
A) Explain why the rental rate of capital is the MRP_K.
B) Explain why firms will set $MP_L/P_L = MP_K/P_K$.

4) (14 points) Find the Cournot-Nash equilibrium or equilibria (if they exist) for the following payoff matrix. Explain how you reached that conclusion.

		Yankees	
		High Price	Low Price
Mets	High Price	5 ⟍ 4	6 ⟍ 8
	Low Price	9 ⟍ 7	2 ⟍ 3

5) (16 points) Answer EITHER Part A OR Part B.
A) Draw the supply and demand for capital. Illustrate the effects of a decrease in the productivity of capital. Explain why the curve(s) moved as drawn. What happens to the price of capital and the amount of capital used?
B) Draw the supply/demand for wood. Illustrate the effects of a decrease in the demand for new houses. Explain why the curve(s) moved as drawn. What happens to the price of wood and the quantity used?

6) (18 points) copy the table into your answer booklet. Fill it in. Show all work. If there is no work, then state how you got the answer. Assume this firm is in a perfectly competitive industry. How many people should this firm hire? Explain your logic. If you are stuck and need one number to calculate another number, take a guess and write that you guessed as your explanation.

L	TP_L	MP_L	Price	TR	MRP_L
4	100	20	30	3000	600
				3900	450
	160	10			

7) (18 points) Answer EITHER Part A OR Part B.
A) Did we say a cartel is more likely to fall apart if it is difficult to detect price cuts or easy to detect price cuts? Why is that true? Explain your logic. Give an example where it is difficult to detect price cuts including why it is difficult to detect.
B) Draw the MC/ATC/D diagram for a natural monopoly. How much would an unregulated monopoly produce and charge? Explain how you found those. What price and quantity would a regulator choose for the monopoly to produce? Explain why they would choose there.