

PS 371
Spring 1991, 2nd Exam

Points Question

(18) 1. Under the contract system as currently practiced by the U.S. broiler industry,
(2 each) industry,

a) who owns or provides:

	<u>Company</u>	<u>Grower</u>
Birds	_____	_____
Feed	_____	_____
Poultry houses	_____	_____
Processing plant	_____	_____
Farm labor	_____	_____
Medication	_____	_____

b) who decides:

when chicks are placed	_____	_____
when broilers are processed	_____	_____
Ventilation rates	_____	_____

(10) 2. Explain the “law of diminishing returns”. Use a graph to help illustrate the concept.

(10) 3. How does the body weight to feed consumption curve change during the year?
Why?

(20) 4. For the single lot model of broiler production, complete the following table:

Feed costs = \$.15 per pound fixed cost = \$.30/bird and broiler value = \$.40/lb.

Weight of Broiler	Feed Intake	Avg. Variable Cost \$/lb.	Average Fixed Cost	Average Total Cost	Marginal Cost
lbs.	lbs.	\$	\$/lb.	\$/lb.	\$/lb.
3.0	5.4				
3.5	6.5				
4.0	7.8				
4.5	9.1				

5. Consider the following data for a multiple lot analysis of broiler production:

Average live wt.	Sq. Ft./bird	Birds per sq. ft. per year finished	Broilers per sq. ft. per year (pounds)	Feed per sq. ft. per year (pounds)
2.0	.650	17.0	31.3	58.0
2.5	.675	14.1	33.9	60.7
3.0	.700	11.8	35.5	63.8
3.5	.725	10.1	36.6	66.1
4.0	.750	8.7	37.3	67.8
4.5	.775	7.6	37.7	69.5

- (4) a) If the price of feed increases, would the tendency be to grow a larger or smaller bird?
- (4) b) If the cost of chicks increases, would the tendency be to grow a larger or smaller bird?
- (4) c) If the cost of housing increases, would the tendency be to grow a larger or smaller bird?
- (4) d) If the cost of broilers increases, would the tendency be to grow a larger or smaller bird?
- (4) e) Write an explanation of your answers stating the basic principles involved.
- (5) 6. What factors lead to poor prices for medium size eggs in summer?
- (5) 7. What management methods can be used to increase the production of egg size in summer?
- (5) 8. What management methods can be used to decrease feed consumption?
- (7) 9. Assume a flock of hens will be in production an additional 60 days. The hens are eating 20 pounds of feed per day and their eggs are worth \$.84/dozen. Feed costs \$200 per ton. What level of production is acceptable to keep a hen?