

(pts) (Q)

(16) 1. For the single lot model of broiler production, fill in the blanks:

Wt. of Broiler	Feed Intake	Feed Cost	Feed Cost per Pound Live Wt.	Average Fixed Cost	Average Total Cost	Marginal Cost
4.0	7.759		0.1940	0.0500	0.2440	<input type="text" value="0.2684"/>
4.5	9.101	0.9101		0.0444	0.2467	<input type="text" value="0.2998"/>
5.0	10.595	1.0595	0.2119		0.2519	<input type="text"/>
5.5	12.307	1.2307	0.2238	0.0363		<input type="text" value="0.4977"/>
6.0	14.372	1.4372	0.2395	0.0333	0.2799	

Feed Price \_\_\_\_\_ Total Fixed Cost \_\_\_\_\_

(6) 2. If chickens were selling for \$.28 per pound, what size bird should be grown to maximize profits?

\_\_\_\_\_ Pounds

Explain (justify) your answer:

(6) 3. If the value of chicken were to increase to \$.35 per pound, what size bird should be grown to maximize profits?

\_\_\_\_\_ Pounds

What basic economic principle does this illustrate?

- (8) 4. Why is it not realistic to maximize profits for a single flock of broiler chickens?
- (8) 5. What factors need to be included in profit maximizing models to make them realistic?
- (4) 6. Which technical relationships must be known especially well to arrive at accurate conclusions?
- (6) 7. For broilers, how does the body weight to feed consumption curve change during the year? (Label the axes)
- (6) 8. For broilers, how has the body weight to feed consumption curve changed since the 1980's? (Label the axes).
- (6) 9. Explain (define) the “Law of Diminishing Returns”:
- (5) 10. What factors are most important in determining how much feed a hen will eat?  
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- (4) 11. Draw production functions for layers in cool and warm environments: (Label the axes).
- (6) 12. Draw production curves for commercial layers molted after 50 weeks of lay (Include 2 years of production and label the axes):
- (6) 13. What are the advantages and disadvantages of molting laying hens?
- (6) 14. Define culling and explain why it is not normally practiced in the United States:
- (10) 15. What percent production is necessary to be able to keep individual hens from a flock that will be replaced after another 15 weeks? Costs of housing and lighting are \$0.02 per hen per day. The hens eat 20 pounds of feed/100 hens per day, feed costs \$220 per ton, and eggs are worth \$0.96 per dozen.