

## 2009 Iowa Farm Business Management Career Development Event

### INDIVIDUAL EXAM (150 pts.)

Select the best answer to each of the 75 questions to follow (2 pts. ea.). Code your answers on the answer sheet provided. Be sure to erase completely any answers that you change. You have 120 minutes (maximum) to complete this exam. Section A contains 25 questions over 'Principles of Economics and Management'. Section B contains 50 questions over 'Financial Statements, Records Analysis, as well as Marketing and Risk Management'.

#### Section A. Principles of Economics and Management

1. A dollar received today is worth more than a dollar to be received one year from today because of:
  - a. depreciation
  - b. the time value of money
  - c. deflation
  - d. the fact you can only spend a dollar today
  
2. A governmental tax on imports is also called
  - a. an embargo
  - b. a trade quota
  - c. a tariff
  - d. a subsidy
  
3. A subchapter S corporation's earnings are:
  - a. taxable to the individual owners
  - b. not taxed
  - c. taxed the same as for an ordinary corporation
  - d. taxed as if they are dividends
  
4. What is the financial/economic term that means an item is owed or currently payable to someone else?
  - a. receivable
  - b. accrued
  - c. escrow
  - d. ad hoc
  
5. The "law of demand" states consumers will buy less of an item if:
  - a. the demand curve shifts to the left
  - b. the supply of that item increases
  - c. a law is passed that makes consumption of that item illegal
  - d. the price of that item increases
  
6. If a corn farmer has a yield of 200 bushels per acre with total fixed costs of \$200 per acre and total variable costs of \$400 per acre, what is "average total cost" of corn production for this farmer?
  - a. \$1.00
  - b. \$2.00
  - c. \$3.00
  - d. \$6.00

7. The marginal net benefit of an activity for a business firm is positive if the activity:
- increases total income for the business
  - increases total income for the business more than it increases total cost for the business
  - decreases total cost for the business
  - has a positive marginal revenue
8. A W-2 form is:
- a federal tax form that reports wages earned and income taxes withheld
  - the same as a 1040 form
  - used to record cash flow projections
  - a federal tax form that reports mortgage interest paid
9. Solvency of a business is best indicated by the value of the firm's:
- total assets
  - total liabilities
  - net cash flow
  - net worth
10. A firm known as a conglomerate is:
- the same as a corporation
  - one that produces many different goods
  - non profit
  - created by Congress
11. Which of the following options contains terms that are most alike and have similar meaning?
- business, firm, enterprise
  - product, manufacturing plant, consumer
  - industry, brand, cost
  - supply, demand, market
12. Economics is most often generally defined as the study of how people:
- set policies
  - spend money
  - choose to use scarce resources to satisfy their wants
  - make the best use of unlimited resources
13. If there is a linear relationship between two variables, say  $y$  and  $x$ , which of the following mathematical expressions would represent this relationship.
- $y = a + bx^2$
  - $y = mx + bx^2$
  - $y = 0$
  - $y = b + mx$
14. A decline in the value of the dollar (relative to the Japanese yen) makes U.S. ag exports to Japan:
- more expensive to Japanese buyers
  - less wanted by Japanese buyers
  - decline in quality
  - less expensive to Japanese buyers

15. In economics, costs include:
  - a. both cash and non cash expenses
  - b. only those expenses reported by accountants
  - c. cash expenses, but not non-cash expenses
  - d. variable expenses, but not fixed expenses
  
16. A greater willingness and ability by consumers to purchase a given product is shown graphically as a shift:
  - a. to the right of a supply curve
  - b. up of a demand curve
  - c. to the right of a demand curve
  - d. a and c
  
17. A vertical supply curve for a product indicates:
  - a. production is zero
  - b. there is no demand for the product
  - c. the amount available in the market is fixed
  - d. the firms producing this product are vertically integrated
  
18. The additional satisfaction Joan receives from consuming another slice of pizza is her:
  - a. total happiness from eating pizza
  - b. marginal utility of eating more pizza
  - c. cost of buying that slice of pizza
  - d. opportunity cost of what she had to give up
  
19. In a graph, if two curves touch at a point but do not cross, that area is called a point of:
  - a. diminishing returns
  - b. intersection
  - c. tangency
  - d. equilibrium
  
20. Who generally seeks to earn profits as innovators and risk takers?
  - a. entrepreneurs
  - b. consumers
  - c. corporations
  - d. socialists
  
21. Trading products without the use of money, or simply exchanging one product for another, is known as:
  - a. capitalism
  - b. tariffs
  - c. exporting
  - d. barter
  
22. A “short run” production period is one that typically:
  - a. is less than a year
  - b. utilizes only labor as an input
  - c. has at least one fixed input
  - d. does not allow enough time to alter or change the quantity of output produced

23. What is usually the first step in making a managerial decision?
- identify alternative courses of action
  - collect data on expected revenues and costs
  - make a decision
  - identify the problem or the need to make a decision
24. Which of the following are equal if a firm is at a breakeven level of production?
- total revenue and total cost
  - total assets and total liabilities
  - price and average variable cost
  - cash outflows and cash inflows
25. Which of the following is most likely to qualify for depreciation for tax purposes?
- a building you are renting from someone else
  - livestock purchased for breeding or dairy purposes
  - land you own
  - inventory of products being held primarily for sale to customers of a business

**Section B. Financial Statements, Records Analysis, Marketing, Risk Management**

Use the attached net worth statement (balance sheet) and net farm income statement to answer questions #26-37.

26. What was this farm's net worth on January 1, 2009, using market values for their assets?
- \$2,304,160
  - \$2,852,292
  - \$1,779,163
  - \$1,686,245
27. The farm's cost value net worth changed by \$\_\_\_\_\_ from a year ago.
- decreased \$15,122
  - increased \$92,918
  - increased \$1,102,312
  - stayed the same
28. The total value of their multi-year notes and contracts (loans) owed in 12 months and beyond is:
- \$370,101
  - \$703,028
  - \$1,073,129
  - \$777,087
29. Using 'market' values, the farm's total debt-to-asset ratio is:
- 62%
  - 49%
  - 38%
  - 60%

30. How much is this farm's current ratio?
- 2.66
  - 1.48
  - .68
  - .27
31. How much has their farmland increased in value since it was purchased or inherited?
- \$760,000
  - \$1,168,000
  - \$408,000
  - can't tell
32. If FFA farm borrowed \$50,000 to buy beef cows, repayable in 5 equal annual principal installments, at 6.5% annual interest, how much would their fixed liabilities (those payable beyond one year from now) increase?
- \$50,000
  - \$40,000
  - \$10,000
  - \$3,250
33. From the Net Farm Income Statement, how much was this farm's Net Farm Income after adjusting for beginning and ending inventories, and capital gains and losses?
- \$51,819
  - \$46,819
  - \$56,819
  - \$134,423
34. From the Net Worth Statement and Net Farm Income Statement, what was this farm's asset turnover ratio for 2008, using market values for assets?
- |         |         |
|---------|---------|
| a. 2.0% | c. 8.5% |
| b. 38%  | d. 21%  |
35. The purpose of the "income adjustments" on the Net Farm Income Statement is to:
- account for changes in grain prices since harvest.
  - make Net Farm Income higher.
  - include the value of unsold production in Net Farm Income.
  - make income look lower, for tax purposes.
36. Which expense item on the Net Farm Income Statement could look different on the farm's income tax return?
- interest paid
  - labor hired
  - feed purchased
  - depreciation
37. If this farm employed one person full-time all year and 2 more people full-time for 3 months out of the year, what was the value of their gross farm revenue per person for 2008?
- \$610,732
  - \$407,155
  - \$203,577
  - \$33,930

Use the attached cash flow budget projection to answer questions #38-44.

38. What is this farm's largest source of cash inflows?
- livestock sales
  - crop sales
  - capital asset sales
  - new loans
39. In which period does this farm project its largest net cash flow surplus?
- Jan.-Feb.
  - May-June
  - July-August
  - Nov.-Dec.
40. How much does FFA Farm need to borrow in order to achieve a positive ending cash balance of \$2,000 at the end of the January-February period?
- \$42,920
  - \$18,092
  - \$24,828
  - \$26,828
41. Will FFA Farm likely have a higher or lower operating loan balance at the end of the year compared to the beginning?
- higher
  - lower
  - no change
  - can't tell
42. What is FFA Farm's projected accrual net farm income for 2009, based on the cash flow budget?
- \$1,041,214
  - \$27,944
  - \$44,036
  - can't tell
43. In how many of the six budgeting periods will FFA Farm need to borrow operating loan funds?
- 6
  - 4
  - 3
  - 1
44. "Purchase of capital assets" could be for:
- feeder cattle
  - U.S. treasury bonds
  - fertilizer
  - machinery

**Refer to the attached “Farrow-to-Finish” budget for One Litter to answer questions #45-49.**

45. How much profit per litter is projected?
- a. \$1,208
  - b. \$1,030
  - c. \$337
  - d. \$178
46. What price per cwt. is needed from market hog sales to just pay for all costs, after receiving income for sales of cull sows?
- a. \$42.43
  - b. \$35.61
  - c. \$49.95
  - d. \$.42
47. If the price of corn rises to \$4.50 per bushel, how much will total costs rise (all else equal)?
- a. \$436.50
  - b. \$.85
  - c. \$82.45
  - d. \$1,112.12
48. How much is the projected feed cost per pound of hogs sold in this budget? Include both market hogs and cull sows.
- a. \$.61
  - b. \$.23
  - c. \$.95
  - d. \$.45
49. How much is the projected carcass weight market hog selling price if the live weight price is \$.50 per pound and the dressing percent is 75%?
- a. \$.667
  - b. \$.375
  - c. \$1.25
  - d. \$.50

**Refer to the attached “Corn following Soybeans” budget to answer questions 50-54.**

50. How much is the expected profit per acre of corn?
- a. \$740.00
  - b. \$28.60
  - c. \$45.06
  - d. \$694.94
51. What selling price is needed to just break even (profit = 0)?
- a. \$1.50
  - b. \$2.26
  - c. \$3.76
  - d. \$4.00

52. If the price of nitrogen fertilizer increases from \$.68 per pound to \$.90 per pound, how much per acre will total costs increase?
- \$.22
  - \$23.76
  - \$97.20
  - \$73.44
53. How low would the price of corn have to be before the producer would be better off planting no crop at all on the land?
- under \$4.00
  - under \$3.76
  - under \$2.26
  - under \$1.50
54. How much could you afford to pay for cash rent in this example and still earn a profit of \$50 per acre?
- \$195
  - \$250
  - \$225
  - \$200
55. The difference between a futures price and a cash price for the same commodity is most often called:
- a premium
  - a strike price
  - a futures price spread
  - the basis
56. A cash forward contract is most likely to:
- lock in production costs
  - lock in a future product price
  - NOT lock in a future product price
  - lock in the basis
57. A corn farmer who has hedged future corn sales is attempting to protect against future:
- corn price increases
  - corn price decreases
  - corn production cost increases
  - corn production cost decreases
58. To obtain the right to sell a futures contract at a given price, one should:
- buy a put option
  - sell a put option
  - sell a call option
  - buy a call option
59. A lease is generally:
- used to walk a dog
  - a type of will seen in estate planning
  - a current liability
  - a type of rental agreement



60. In March a farmer sells December corn futures at \$4.75 to hedge new crop corn. At harvest, the farmer buys back the contract for \$4.85 and sells corn in the cash market for \$4.55. What is the net price of corn received by the farmer (ignoring all commission fees)?
- \$4.75
  - \$4.85
  - \$4.55
  - \$4.45
61. Which of the following is most likely to have a 'fixed' cost associated with it?
- buy a futures contract
  - sell a futures contract
  - buy an options contract
  - all of the above
62. If the strike price for a put option exceeds the current corresponding futures price, the option is said to be:
- in the money
  - at the margin
  - at a premium
  - expired
63. The initial amount of money that must be paid to a broker in order to buy or sell a futures contract is known as:
- the premium
  - margin money
  - the strike price
  - liquidity
64. The price paid for an option is called:
- the basis
  - the strike price
  - the premium
  - the commission fee
65. A cooperative business is usually owned by:
- non user investors
  - the government
  - other business firms
  - its customers
66. Assume currently in March the cash corn price is \$5.00 and the December corn futures price is \$5.45. In December, the most likely observation would be:
- cash corn price = \$5.45
  - basis = \$0.45
  - December corn futures price < \$5.45
  - basis < \$0.45
67. Hedging with futures contracts is an attempt to reduce this type of risk:
- marketing
  - production
  - financial
  - legal

68. Rising futures prices are most likely to raise:
- the premiums on put options
  - the premiums on call options
  - the strike prices on put options
  - open interest
69. The cost of all of the processes and functions involved in getting food products from the producer to the consumer is known as the:
- transportation budget
  - farmer's share of the consumer's food dollar
  - marketing bill
  - consumer's food budget
70. Advertising by Pepsi Cola to promote Diet Pepsi is this kind of advertising:
- complementary
  - generic
  - niche
  - brand
71. An increase in the price of hamburger will most likely shift the:
- demand curve for hamburger buns to the left
  - demand curve for hamburger to the left
  - demand curve for chicken to the left
  - demand curve for hamburger buns to the right
72. An obligation to make delivery of soybeans is associated most with:
- buying a soybean futures contract
  - selling a soybean futures contract
  - buying a soybean call option
  - buying a soybean put option
73. Marginal revenue means the same as:
- total revenue
  - average revenue
  - additional revenue
  - incremental profit
74. Which of the following is not known at the time an option is purchased?
- its strike price
  - its premium
  - its expiration date
  - its future value
75. A hog farmer who believes cash hog prices are going to decrease is described as being:
- Hogish
  - Bearish
  - Sheepish
  - Bullish

**2009 Iowa Farm Business Management Career Development Event**  
**INDIVIDUAL EXAM KEY**

**Section A. Principles of Economics and Management**

1. B
2. C
3. A
4. B
5. D
6. C
7. B
8. A
9. D
10. B
11. A
12. C
13. D
14. D
15. A
16. C
17. C
18. B
19. C
20. A
21. D
22. C
23. D
24. A
25. B

**Section B. Financial Statements, Records Analysis, Marketing, Risk Management**

26. C     Market value net worth = total farm assets (market value) – total farm liabilities  
= \$2,852,292 - \$1,073,129 = \$1,779,163
27. A     Cost value net worth increase = total farm assets (cost value) this year – total farm  
liabilities – cost value net worth last year  
= \$2,175,441 - \$1,073,129 - \$1,117,434 = (\$15,122)
28. D     Value of multi-year notes and contracts = Fixed liabilities due in 12 months +  
notes and contracts remainder  
= \$74,059 + \$703,028 = \$777,087
29. C     Debt-to-asset ratio = total farm liabilities divided by total farm assets (market  
value)  
= \$1,073,129 / \$2,852,292 = 38%

30. B Current ratio = current assets divided by current liabilities  
=  $\$548,132 / \$370,101 = 1.48$
31. C Market value of land minus cost value of land  
=  $\$1,168,000 - \$760,000 = \$408,000$
32. B Total loan minus principal due in 12 months  
=  $\$50,000 - \$10,000 = \$40,000$
33. C Net farm income = NFI from operations plus capital gains  
=  $\$51,819 + \$5,000 = \$56,819$
34. D Asset turnover ratio = gross farm revenue divided by total farm assets (market)  
=  $\$610,732 / \$2,852,292 = 21\%$
35. C Include the value of unsold production in net farm income.
36. D Depreciation can vary based on the income tax method chosen.
37. B = gross revenue / (months of labor/12)  
=  $\$610,732 / (18/12) = \$407,155$
38. A Livestock sales (\$606,150)
39. B Projected net cash flow is largest in May-June (\$67,962).
40. D Net cash flow minus beginning cash balance plus \$2,000  
=  $\$40,920 - \$16,092 + \$2,000 = \$26,828$
41. B Lower. Net cash flow for the whole year is positive (\$27,944)
42. D You cannot project accrual net farm income from a cash flow budget.
43. D One (January-February). Ending cash balance is projected to be positive the rest of the year.
44. D Only machinery is a “capital” asset.
45. D Profit = gross income minus all costs.  
=  $\$1,207.73 - \$1,029.67 = \$178.06$
46. A Breakeven sale price = (total costs – cull sow income) / (head sold x market weight)  
=  $(\$1,029.97 - \$35.00) / (9.02 \text{ head} \times 2.60 \text{ cwt.}) = \$42.43$

47. C Change in price of corn x bushels fed  
 $= (\$4.50 - \$3.65) \times 97 \text{ bu.} = \$82.45$
48. B Total feed costs / total pounds sold  
 $= \$568.34 / [(260 \text{ lb.} \times 9.02 \text{ hd}) + (400 \text{ lb} \times .25 \text{ hd.})] = \$.23$
49. A Live weight selling price / dressing percent =  $\$.50/.75 = \$.667$
50. C Total revenue minus total costs  
 $= \$740.00 - \$694.94 = \$45.06$
51. C Total costs / bushels to sell  
 $= \$694.94 / 185 \text{ bu.} = \$3.76 \text{ per bushel}$
52. B Increase in cost per unit x number of units  
 $= (\$.90 - \$.68) \times 108 \text{ lb.} = \$23.76$
53. C Total variable costs / bushels to sell  
 $= \$417.49 / 185 \text{ bu.} = \$2.26$
54. A Total revenue minus all costs except rent minus \$50 profit  
 $= \$740.00 - (\$694.94 - \$200.00) - \$50.00 = \$195.06$
55. D
56. B
57. B
58. A
59. D
60. D – Futures P sold – ending basis =  $\$4.75 - 0.30 = \$4.45$
61. C – The options premium = a fixed cost
62. A
63. B
64. C
65. D
66. D – Grain basis tends to narrow over time
67. A
68. B
69. C
70. D
71. A
72. B
73. C
74. D
75. B

## Ending Net Worth Statement

Name	FFA Farm		Date	
		<b>01/01/09</b>		
<b>Farm Assets</b>	<b>Cost Value</b>	<b>Market Value</b>	<b>Farm Liabilities</b>	<b>Market Value</b>
<b><i>Current Assets</i></b>			<b><i>Current Liabilities</i></b>	
Checking and savings accounts	\$16,092	\$16,092	Accounts payable	\$29,540
Crops held for sale/feed	\$334,600	\$334,600	Farm taxes due	\$9,344
Investment in growing crops			Current notes and credit lines	\$210,554
Commercial feed on hand	\$9,100	\$9,100		
Prepaid expenses	\$18,750	\$18,750	Accrued interest - short	\$9,216
Market livestock	\$169,590	\$169,590	- fixed	\$37,388
Supplies on hand			Due in 12 months - fixed	\$74,059
Accounts receivable				
Other current assets			Other current liabilities	
<b>Total Current Assets</b>	<b>\$548,132</b>	<b>\$548,132</b>	<b>Total Current Liabilities</b>	<b>\$370,101</b>
<b><i>Fixed Assets</i></b>			<b><i>Fixed Liabilities</i></b>	
Unpaid coop. distributions	\$14,435	\$14,435	Notes and contracts remainder	\$703,028
Breeding livestock	\$49,125	\$49,125	Machinery	
Machinery & equipment	\$313,932	\$455,600	Land	
Buildings/improvements	\$489,817	\$617,000		
Farmland	\$760,000	\$1,168,000		
Farm securities, certificates			Other fixed liabilities	
Other fixed assets			<b>Total Fixed Liabilities</b>	<b>\$703,028</b>
<b>Total Fixed Assets</b>	<b>\$1,627,309</b>	<b>\$2,304,160</b>		
<b>Total Farm Assets</b>	<b>\$2,175,441</b>	<b>\$2,852,292</b>	<b>Total Farm Liabilities</b>	<b>\$1,073,129</b>
<b>Farm Net Worth</b>				
<b>Farm Net Worth Last Year</b>	<b>\$1,117,434</b>	<b>\$1,686,245</b>		

**Net Farm Income Statement**

Name		FFA Farm	Year	2008	
<b>Income</b>					
<b>Cash Income</b>			<b>Income Adjustments</b>	Ending	Beginning
Sales of livestock bought for resale			Crops held for sale or feed	\$334,600	\$379,875
Sales of market livestock, grain, etc.	\$602,865		Market livestock	\$169,590	\$163,590
Cooperative distributions paid			Accounts receivable		
Agricultural program payments	\$18,790		other current assets		
Crop insurance proceeds			Unpaid coop. distributions	\$14,435	\$14,435
Custom hire income			Breeding livestock	\$49,125	\$50,625
Other cash income	\$5,672			\$567,750	\$608,525
Sales of breeding livestock	\$24,180		Value of Home Used Production		
Total Cash Income	\$651,507		<b>Gross Farm Revenue</b>		<b>\$610,732</b>
<b>Expenses</b>					
<b>Cash Expenses</b>			<b>Expense Adjustments</b>	Beginning	Ending
Car and truck expenses	\$1,894		Investment in growing crops	\$9,490	
Chemicals	\$40,760		Commercial feed on hand	\$8,400	\$9,100
Conservation expenses			Prepaid expenses		\$18,750
Custom hire			Supplies on hand		
Employee benefits	\$1,780			<b>Ending</b>	<b>Beginning</b>
Feed purchased	\$104,310		Accounts payable	\$29,540	\$36,589
Fertilizer and lime	\$35,500		Farm taxes due	\$9,344	\$8,480
Freight, trucking	\$12,290		Accrued interest	\$46,604	\$49,291
Gasoline, fuel, oil	\$23,650		Subtotal of Adjustments	\$103,378	\$122,210
Insurance	\$6,500				
Interest paid	\$85,511		Depreciation		\$60,661
Labor hired	\$28,000		Gross Farm Expenses		\$558,913
Pension and profit-share plans			<b>Net Farm Income From Operations</b>		<b>\$51,819</b>
Rent or lease payments	\$72,800				
Repairs, maintenance	\$12,333		Sales of Farm Capital Assets		\$5,000
Seeds, plants	\$28,560		Cost Value of Items Sold		
Storage, warehousing			Capital Gains or Losses		\$5,000
Supplies purchased	\$2,375				
Taxes (farm)	\$8,980		<b>Net Farm Income</b>		
Utilities	\$17,358				
Vet. fees, medicine, breeding	\$11,623				
Other cash expenses	\$4,560				
Livestock purchased	\$18,300				
Total Cash Expenses	\$517,084				





## Corn following Soybeans

<b>Gross returns</b>	<b>Price</b>	<b>Yield (bu.)</b>	
Expected selling price	\$4.00	185	\$740.00
<b>Total returns</b>			<b>\$740.00</b>
		<b>Cost per Acre</b>	
<b>Preharvest machinery</b>		<u>Fixed</u> <u>Variable</u>	<u>Total</u>
Tandem disk		\$3.30    \$2.30	\$5.60
Apply nitrogen		\$4.20    \$4.10	\$8.30
Field cultivate		\$2.10    \$2.20	\$4.30
Plant		\$4.00    \$3.20	\$7.20
Cultivate		\$1.40    \$1.50	\$2.90
Spray		\$1.20    \$1.00	\$2.20
Custom hire		\$0.00    \$0.00	\$0.00
Other		\$0.00    \$0.00	\$0.00
<b>Total per acre</b>		\$16.20    \$14.30	<b>\$30.50</b>
<b>Seed, chemicals, etc.</b>			
Seed		----	\$93.90
<i>cost per 1000 kernels</i>	\$3.13		
<i>kernels per acre</i>	30,000		
Nitrogen		----	\$73.44
<i>price per pound</i>	\$0.68		
<i>pounds per acre</i>	108		
Phosphate		----	\$54.00
<i>price per pound</i>	\$0.90		
<i>pounds per acre</i>	60		
Potash		----	\$34.56
<i>price per pound</i>	\$0.72		
<i>pounds per acre</i>	48		
Lime (annual cost)		----	\$7.00
Herbicide		----	\$37.80
Crop insurance		----	\$20.00
Miscellaneous		----	\$9.00
Interest on preharvest variable costs		----	\$14.33
<i>length of period (months)</i>	8		
<i>interest rate</i>	6.3%		
<b>Total</b>		----	<b>\$344.03</b>
<b>Harvest machinery</b>			
Combine		\$15.30    \$8.20	\$23.50
Grain Cart		\$4.40    \$2.30	\$6.70
Haul		\$3.70    \$5.55	\$9.25
<i>Fixed- price per bushel</i>	\$0.02		
<i>Variable- price per bushel</i>	\$0.03		
Drying		\$7.40    \$42.18	\$49.58
<i>Fixed- price per bushel</i>	\$0.04		
<i>Variable- price per bushel</i>	\$0.23		
Handling		\$1.85    \$0.93	\$2.78
<i>Fixed- price per bushel</i>	\$0.01		
<i>Variable- price per bushel</i>	\$0.01		
Custom hire		\$0.00    \$0.00	\$0.00
<b>Total per acre</b>		\$32.65    \$59.16	<b>\$91.81</b>
<b>Labor</b>			
Operator		<u>\$28.60</u>	----
<i>Hours</i>	2.6		
<i>Rate per hour</i>	\$11.00		
Hired		----	<u>\$0.00</u>
<i>Hours</i>	0		
<i>Rate per hour</i>	\$0.00		
<b>Total</b>		\$28.60	<b>\$28.60</b>
<b>Land</b>			
Cash rent		\$200.00	----
			\$200.00
<b>Total fixed, variable and all costs</b>		<u>Fixed</u> <u>Variable</u>	<u>Total</u>
Per acre		\$277.45    \$417.49	<b>\$694.94</b>
Per bushel		\$1.50    \$2.26	

## Swine Production - Farrow-to-Finish - One Litter

### Production Efficiencies

Weaning average	9.3	pigs per litter
Pig death loss	3%	
Sow death loss	5%	
Litters per sow per year	2.3	
Litters in sow lifetime	4.0	

### Income

	Price	Unit	Quantity	Unit		Total
Market Hogs	\$0.50	per lb	x 260	lbs	x 9.02 head	= \$1,172.73
Cull Sows	\$0.35	per lb	x 400	lbs	x 0.25 head	= \$35.00
<b>Gross Income</b>						<b>\$1,207.73</b>

### Variable Costs

#### Feed Costs

	Price	Unit	Quantity	Unit		
Corn	\$3.65	per bu	x 97	bu	=	\$354.05
Soybean meal	\$0.14	per lb	x 943	lbs	=	\$132.02
Dried distiller grain	\$0.06	per lb	x 267	lbs	=	\$16.02
Vitamin & minerals	\$0.45	per lb	x 35	lbs	=	\$15.75
Vitamin & minerals	\$0.30	per lb	x 95	lbs	=	\$28.50
Pasture		per acre	x	ac	=	\$0.00
Feed Additives						\$22.00
Other						\$0.00
<b>Total Feed Costs</b>						<b>\$568.34</b>

#### Veterinary and health

Veterinary and health = \$34.00

Fuel, repairs, utilities = 35.00

Bedding, marketing, miscellaneous = 45.00

Other = 0.00

Interest on variable costs = 19.90

Labor = 168.00

**Total Variable Costs** = **\$870.24**

### Income over Variable Costs

\$337.49

### Fixed Costs

Machinery, facilities = \$99.00

Breeding costs, boar/semen = 13.00

Replacement gilts = 40.69

Interest, insurance on breeding herd = 6.74

**Total Fixed Costs** = **\$159.43**

### Total All Costs

**\$1,029.67**

### Income over All Costs