

2013 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 (Questions #1-#25)

1. What is the general economic term used to describe the place where buyers and sellers interact?
 - a. a market
 - b. an exchange
 - c. a product
 - d. an arbitrage

2. Which of the following is the best economic explanation of what determines an agricultural product's price?
 - a. weather
 - b. production
 - c. supply and demand
 - d. governmental policy

3. A severe drought in a given corn-producing area is most likely to shift the:
 - a. supply curve to the right
 - b. supply curve to the left
 - c. demand curve to the left
 - d. demand curve to the right

4. A \$10,000 tax-deductible expense will generally:
 - a. lower taxes by \$10,000
 - b. lower after-tax profit by \$10,000
 - c. lower after-tax profit by < \$10,000
 - d. lower after-tax profit by > \$10,000

5. Which of the following will have the largest value on a farm balance sheet?
 - a. current assets
 - b. fixed assets
 - c. net worth
 - d. total claims on assets

6. What is 'n' in a compound value interest factor $(1+r)^n$?
 - a. number of dollars
 - b. number of years
 - c. the nominal interest rate
 - d. the normal exponent

7. In business and economics, what you give up in order to do something is called:
 - a. an opportunity cost
 - b. a sunk cost
 - c. a fixed cost
 - d. profit

8. Money owed by you that you have NOT paid yet would be called this on your 'balance sheet':
 - a. account payable
 - b. negative cash flow
 - c. current liability
 - d. account receivable

9. A risk taker in business is:
 - a. a hedger
 - b. making a poor decision
 - c. an entrepreneur
 - d. a profit maker

10. When an individual evaluates alternatives for how their property will be distributed at the time of their death, they are engaged in:
 - a. budgeting
 - b. feasibility analysis
 - c. worst-case scenario evaluations
 - d. estate planning

11. Net worth, on a balance sheet =
 - a. total assets
 - b. total claims on assets
 - c. total liabilities
 - d. claims on assets by owners of the business

12. A farm firm that has a net loss for the year for tax purposes will pay income taxes for that year equal to:
 - a. a specified percentage of the loss
 - b. a specified percentage of the farm's total income
 - c. a specified percentage of the farm's total assets
 - d. 0

13. Based on the law of diminishing returns, an added pound of fertilizer in corn production will eventually reduce:
 - a. total corn production
 - b. the additional corn produced per additional unit of fertilizer
 - c. profit
 - d. dollar returns

14. Which of the following is a tax-deductible expense?
 - a. hired labor
 - b. depreciation
 - c. purchased crop inputs
 - d. all of the above

15. Which of the following would most likely increase the premium paid for crop insurance by a farmer per acre?
 - a. increase in the number of acres planted
 - b. bad weather after planting
 - c. increase in the yield level of coverage
 - d. increase in the interest rate

16. Which of the following is the most likely expense associated with a tractor purchase?
 - a. depreciation
 - b. basis
 - c. the value of a trade-in
 - d. the cash paid for the tractor

17. A monthly bank statement is:
 - a. NOT a financial statement
 - b. the same as a cash flow statement
 - c. a basic financial statement
 - d. the same as a net worth statement

18. A change in inventory of capital assets is most likely considered in calculating:
 - a. depreciation
 - b. net farm income
 - c. cash farm income
 - d. interest expense

19. Which of the following is a main reason to refinance a loan?
 - a. to reduce the principal
 - b. to increase tax deductions
 - c. to take advantage of a lower interest rate
 - d. all of the above

20. A government price support above the market equilibrium price will most likely:
- encourage consumption
 - discourage production
 - have no market impact
 - result in an excess supply
21. An expense that a firm can use to reduce its taxable income is called:
- deductible
 - an opportunity cost
 - a noncash cost
 - an asset
22. In economics, what shows how output changes in response to different input levels?
- a supply curve
 - a production function
 - a market report
 - an enterprise budget
23. According to the cash accounting method, expenses are recorded:
- when they are paid
 - when they are accrued
 - at the end of each month
 - all of the above
24. Which of the following would most likely increase the demand for pork chops in a grocery store?
- negative publicity about a hamburger ingredient called 'pink slime'
 - increase in the price of pork chops
 - decrease in the price of chicken
 - increase in the price of charcoal
25. What is the 'future value in one year' of \$108 today if the interest rate = 8%?
- \$108.00
 - \$116.64
 - \$224.64
 - \$100.00

Section B. Financial Statements, Records Analysis, Marketing, Risk Management.
(Questions #26-#75)

Use the attached net worth statement (balance sheet) and net farm income statement to answer questions #26-35.

26. What was this farm's current ratio on January 1, 2013?
- 2.60
 - 3.34
 - 2.43
 - 2.34
27. The farm's market value net worth changed by \$_____ from a year ago.
- +\$92,631
 - \$44,929
 - \$92,631
 - it stayed the same
28. What percent of the farm's total liabilities are due and payable beyond the next 12 months?
- 3%
 - 23%
 - 36%
 - 68%
29. Using 'market' values, the farm's ratio of total debt to assets is:
- 28%
 - 38%
 - 43%
 - 70%
30. What is the most likely reason why their market value net worth exceeds their cost value net worth?
- their net farm income has exceeded their withdrawals for family living
 - they have repaid more debt than they have borrowed
 - the value of their land has increased
 - grain inventory prices have increased
31. Looking at both the farm's net farm income statement and ending net worth statement, their value of farm production was what percent of their market value total assets?
- 27%
 - 19%
 - 10%
 - 2%

32. From the Net Farm Income Statement, how much was this farm's net income adjustments to total cash income before arriving at Gross Farm Revenue?
- a. +\$38,334
 - b. -\$38,334
 - c. -\$9,985
 - d. -\$11,880
33. How much did the value of their accrued interest change from the beginning of the year to the end?
- a. \$85,298 increase
 - b. \$39,914 decrease
 - c. \$45,384 increase
 - d. \$45,384 decrease
34. How much was FFA Farms accrual net farm income in 2012?
- a. \$81,533
 - b. \$86,533
 - c. \$84,423
 - d. \$697,017
35. The FFA Farm's total assets increased over \$800,000 from 2012. What single asset was responsible for over half of this increase?
- a. machinery and equipment
 - b. crops held for sale
 - c. buildings and improvements
 - d. farmland

Use the attached cash flow budget projection to answer questions #36-45.

36. How many dollars' worth of crops does FFA Farm plan to sell in May and June?
- a. \$299,836
 - b. \$37,309
 - c. \$139,309
 - d. None
37. In which period does this farm project its largest net cash flow surplus?
- a. January - February
 - b. March-April
 - c. May-June
 - d. September-October
38. How much operating capital does FFA Farm need to borrow in January-February in order to have a cash balance of \$2,000 at the end of February?

- a. \$12,075
 - b. \$13,731
 - c. \$10,076
 - d. \$8,076
39. The projected cash balance at the end of the July-August period for FFA Farm is:
- a. \$46,441
 - b. \$80,554
 - c. \$13,847
 - d. (\$30,409)
40. What is FFA Farm's projected total cash inflows for all of 2013, based on the cash flow budget?
- a. \$945,796
 - b. \$953,010
 - c. (\$7,214)
 - d. \$30,554
41. When does FFA farm expect to sell some old machinery?
- a. January-February
 - b. March-April
 - c. May-June
 - d. July-August
42. In which periods does FFA farm expect to be able to pay off its operating loan balance completely?
- a. Nov.-Dec.
 - b. May-June
 - c. July-August
 - d. In none of the periods.
43. How could FFA farm improve its net cash flow for 2013?
- a. Decrease family living expenses.
 - b. Use borrowed funds for purchasing new capital assets.
 - c. Extend payment of term loans over more years.
 - d. All of these.
44. How much interest will FFA farm have to pay if they repay the \$50,000 operating loan taken out on Feb. 1 at the end of the year? The interest is 6% annually (approximately).
- a. \$3,000
 - b. \$2,750
 - c. \$250
 - d. \$53,000
45. What expense category is found in a cash flow budget but is not included in a net farm income statement?

- a. family living expenses
- b. pesticide purchases
- c. hired labor wages
- d. depreciation

Refer to the attached “Grade A Dairy” budget to answer questions #46-50.

46. How much income over all costs (profit) for one dairy cow is projected?
- a. \$5,760
 - b. \$1,498.39
 - c. \$552.19
 - d. \$480.00
47. What is the breakeven selling price of milk to cover total costs after allowing for income from the sale of cull cows and calves?
- a. \$21.70 per cwt.
 - b. \$19.70 per cwt.
 - c. \$15.76 per cwt.
 - d. \$22.00 per cwt.
48. If this farm hires no outside labor, how much would the net return per hour of their own labor be?
- a. \$22.89 per hour
 - b. \$15.00 per hour
 - c. \$7.89 per hour
 - d. \$1,602 per hour
49. How much is the projected feed cost per pound of milk produced in this budget to the nearest cent?
- a. \$.19 per lb.
 - b. \$.18 per lb.
 - c. \$.11 per lb.
 - d. \$10.72 per lb.
50. In this budget, what is the minimum gross income needed to justify continuing to produce in the short-run?
- a. \$5,760.00
 - b. \$5,207.81
 - c. \$1,498.39
 - d. \$4,261.61

Refer to the attached budget for soybeans to answer questions 51-55.

51. How much is the expected return over total costs (profit) per acre?
- \$28.20
 - \$750.00
 - \$333.20
 - \$416.80
52. What selling price is needed to just cover variable costs?
- \$12.03 per bu.
 - \$12.50 per bu.
 - \$6.95 per bu.
 - \$5.08 per bu.
53. How much is their expected gross margin (i.e. return over variable costs)?
- \$28.20 per acre
 - \$333.20 per acre
 - 80% per acre
 - 6.8% per acre
54. What is the approximate breakeven yield needed to cover total costs assuming a selling price of \$12.50 per bushel?
- 58 bu. per acre
 - 60 bu. per acre
 - 33 bu. per acre
 - 47 bu. per acre
55. How much are their total machinery costs per acre?
- \$12.00 per acre
 - \$45.00 per acre
 - \$168.00 per acre
 - \$73.40 per acre

Questions #56-75 deal mainly with marketing and risk management.

56. Insurance substitutes:
- an asset for a liability
 - a certain cost for an uncertain loss
 - an uncertain cost for a certain gain
 - risk for non-risk
57. A farm with multiple enterprises is:
- diversifying
 - specializing
 - increasing risks
 - expanding
58. In ag marketing, a basis is typically the difference between:

- a. two different cash prices in different locations
 - b. two different futures prices
 - c. a cash expense and a noncash expense
 - d. a futures price and a cash price
59. The right to sell a futures contract at a specified price is acquired by:
- a. going short in that futures market
 - b. buying a put option
 - c. buying a call option
 - d. selling a call option
60. A cash forward contract locks this in for a farmer:
- a. the cash price of the product
 - b. the basis
 - c. the futures price of that product
 - d. profit
61. An unhedged farmer is most likely to be made worse off by:
- a. futures price decreases
 - b. yield increases
 - c. cash price decreases
 - d. hedging cost increases
62. The abbreviation for the main market where grain futures contracts are traded is the:
- a. GTO
 - b. AMO
 - c. CBOT
 - d. Dow Jones
63. If a farmer hedges using futures contracts, they can expect to pay to the brokerage firm what?
- a. a basis
 - b. a commission fee
 - c. a margin deposit
 - d. b and c
64. If $TR = \text{total revenue}$ and $Q = \text{output quantity}$, $TR/Q =$
- a. price of the product
 - b. marginal product
 - c. profit per unit of output
 - d. breakeven output
65. An expected hedged price to be received by a corn farmer would best be calculated by subtracting the expected ending basis from:
- a. the ending cash price

- b. the ending futures price
 - c. the initial futures price
 - d. the initial basis
66. If a farmer delays selling a product in the cash market, which of the following is true:
- a. lost interest income would be a cost
 - b. there are no costs
 - c. revenues will be greater
 - d. income taxes will be paid sooner
67. The profit-maximizing level of output is likely to be least impacted by:
- a. sunk costs
 - b. variable costs
 - c. marginal costs
 - d. marginal revenue
68. The two general types of futures contract options are:
- a. longs and shorts
 - b. bulls and bears
 - c. cash and noncash
 - d. puts and calls
69. If a corn farmer has two pricing options: A = sell today for \$5.00 or B = sell two years from today for \$5.50. Which of the following is true about the farmer's 'best' pricing strategy?
- a. sell today
 - b. sell two years from now
 - c. it depends on what the costs of production were
 - d. it depends on storage costs and the interest rate
70. One advantage of hedging future livestock sales with put options versus regular futures contracts is:
- a. lower costs
 - b. one can take better advantage of subsequent price increases
 - c. the selling price is fixed
 - d. gains are not taxable
71. Per unit cost of production =
- a. A farmer's breakeven price
 - b. average variable cost of production
 - c. total cost of production
 - d. cash cost of production
72. The strike price of an option is:
- a. the same as the option's premium
 - b. the same as the basis

- c. the same as the market price
 - d. None of the above
73. A farmer's share of a co-op's profits based on level of business done with the co-op is called:
- a. a stock dividend
 - b. a commission
 - c. a patronage refund
 - d. retained earnings
74. A tendency for prices of certain ag commodities to vary by time or months of the year is also known as this type of price variability:
- a. annual
 - b. long term
 - c. inter commodity
 - d. seasonal
75. Niche marketing typically refers to:
- a. marketing niches
 - b. targeting certain buyers
 - c. marketing without a plan
 - d. marketing on a seasonal basis

2013 Iowa Farm Business Management Career Development Event

INDIVIDUAL EXAM KEY

Section A. Principles of Economics and Management

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

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

26. C Current ratio = current farm assets / current farm liabilities
 = \$786,097 / \$323,941 = 2.43
27. A market value net worth change = (market value net worth this year – market value
 net worth last year)
 = \$2,625,913 - \$2,533,282 = \$92,631
28. D (Total fixed liabilities / total liabilities)
 = \$703,028 / \$1,026,969 = 68%
29. A Debt-to-asset ratio = total farm liabilities divided by total farm assets (market
 value)

$$= \$1,026,969 / \$3,652,882 = 28\%$$

30. C The difference between cost and market values is due to revaluation of assets such as land.
31. B Value of farm production / market value total assets
 $= \$697,017 / \$3,652,882 = 19\%$
32. D Net income adjustment = ending – beginning
 $= \$815,965 - \$827,845$
33. C Ending accrued interest minus beginning accrued interest
 $\$85,298 - \$39,914 = \$45,384$ increase
34. B Net farm income from operations + capital gains = net farm income
 $\$81,533 + \$5,000 = \$86,533$
35. D The farmland asset increased $\$560,000 = 69\%$ of total asset value increase.
36. B Sales of crop in May-June = $\$37,309$.
37. C Projected net cash flow is most positive in May-June ($\$42,900$).
38. A Net operating loans needed in January-February = (negative net cash flow Jan. and Feb.) – (beg. Cash balance) – (ending cash balance)
 $\$13,731 - \$3,655 + \$2,000 = \$12,076$
39. C $\$13,847$ at the end of July-August period.
40. A Total cash inflows for the whole year = $\$945,796$.
41. A $\$20,000$ in Jan.-Feb. for sale of capital assets.
42. D The operating loan balance cannot be completely paid off in any period.
43. D All of the answers would improve cash flow.
44. B Interest = principal x rate x time = $\$50,000 \times .06 \times 11/12$ yr. = $\$2,750$.
45. A Family living expense is a cash outflow, but it is not a farm business expense.
46. C Profit = total income – total all costs
 $\$5,760.00 - \$5,207.81 = \$552.19$
47. B Breakeven price = (total costs-other income) / cwt. milk sold
 $(\$5,207.81 - \$480.00) / 240$ cwt. = $\$19.70$ per cwt.

48. A Labor return per hour = (labor charge + profit) / hour labor per cow
 $(\$1,050.00 + \$552.19) / 70 \text{ hours} = \22.89 per hour
49. C Total feed costs / cwt. milk sold)
 $\$2,571.96 / 24,000 \text{ lb.} = \$1.07 \text{ (or } \$1.11 \text{ rounded) per lb.}$
50. D Income to just cover variable costs.
 $\$4,261.61$
51. A Total revenue minus total costs = return over total costs (profit)
 $\$750.00 - \$721.80 = \$28.20$
52. C (variable costs) / bushels to sell
 $= \$416.80 / 60 \text{ bu.} = \6.95 per bu.
53. B Gross margin = gross revenue – variable costs = $\$750.00 - \$416.80 = \$333.20$.
54. A Breakeven yield = total all costs / selling price
 $\$721.80 / \$12.50 = 58 \text{ bu. per acre}$
55. D Preharvest variable + harvest variable + fixed = total machinery costs
 $= (\text{preharvest machinery}) + (\text{harvest machinery}) + (\text{machinery ownership})$
 $\$12.00 + \$16.40 + \$45.00 = \73.40
56. B
57. A
58. D
59. B
60. A
61. C
62. C
63. D
64. A
65. C
66. A
67. A
68. D
69. D
70. B
71. D
72. D
73. C
74. D
75. B

Team Participation Event – “Individual” Portion (5 Questions @ 1 pt ea)

**2013 Iowa Vo-Ag/FFA
Farm Business Management Career Development Event
(Maximum possible pts = 5 per individual and 15 per team)**

Instructions: The questions below are related to the problems you just worked on as a team. Select the best answer (1 pt. each). Code your answers on the answer sheet provided. Be sure to erase completely any answers that you change.

1. The various multiple peril crop insurance (MPCI) policies can protect crop producers against losses caused by all of the following except:
 - a. poor farming practices
 - b. drought
 - c. flood
 - d. declining commodity prices

2. What kind of insurance covers unavailable crop production losses for a farmer due to various acts of nature (e.g. droughts, floods, etc.)?
 - a. price insurance
 - b. yield protection insurance
 - c. liability insurance
 - d. term insurance

3. Assume a farmer insured 300 acres of crop production at a premium of \$10.00 per acre and received an indemnity payment of \$24,000 at the end of the year. In this case, the farmer would have ‘netted’ how much on his insurance purchase?
 - a. +\$27,000
 - b. -\$21,000
 - c. -\$6,000
 - d. +\$21,000

4. Revenue Protection (RP) crop insurance guarantees an insured farmer:
 - a. a minimum level of gross income per acre
 - b. a maximum price per crop unit
 - c. a maximum level of costs per acre
 - d. a profit

5. The level of yield protection obtained with Yield Protection crop insurance is:
 - a. dependent on the level of price protection obtained
 - b. set by the government based on recent county yield data
 - c. determined after harvest when actual yields are known
 - d. picked by the farmer as a percent of their historic yields

Team Participation Event – “Team” Portion (7 questions @ 5 pts. ea.)

**2013 Iowa Vo-Ag/FFA
Farm Business Management Career Development Event
(Maximum possible pts = 35 pts per team)**

As a group (or team), you are to collectively select the best answer to each question below (5 pts. each). Code your answers on the answer sheet provided (one answer sheet per team). Be sure to erase completely any answers that your team changes.

This activity is designed to test your ability as a group to 1) apply your knowledge of economic and business concepts to actual firm decisions, and 2) generalize and summarize the basic content and implications of economic articles and reports. The applications will focus on information summarized in selected publications previously cited as reference materials for this event.

In particular, this activity focuses on sub topics related to CROP INSURANCE.

1. One common type of crop insurance is Yield Protection (YP) insurance. Which of the following are the two main decisions that a farmer must make that determines the amount of protection received per acre?
 - a. Actual production history (APH) yield and yield coverage
 - b. Projected price for the year and price coverage
 - c. Yield coverage and price coverage
 - d. Number of acres to insure and the level of price coverage
2. With Yield Protection (YP) insurance, a farmer would be entitled to an insurance payment if his/her actual yield is:
 - a. Less than the level of yield coverage chosen
 - b. Greater than the level of yield coverage chosen
 - c. Less than their expected yield
 - d. Less than their county average yield
3. With Yield Protection (YP) insurance a farmer can choose to ensure their crop yields at levels ranging from 50 to 85 percent of:
 - a. their actual production history (APH) yield
 - b. their recent county average yield
 - c. the recent national average yield
 - d. their desired crop yield
4. Revenue Protection (RP) crop insurance offers a corn or soybean farm a guaranteed level of gross revenue based on its APH crop yields and what initial price?
 - a. The price the farmer received last year
 - b. The current local elevator price
 - c. One specified by the farmer
 - d. The average futures price during the month of February

5. A certain farm purchased a Yield Protection (YP) crop insurance policy for soybeans with a yield guarantee level of 80%. If the farm's APH yield is 50 bushels per acre and the average futures price during the month of February is \$12.00 per bushel, how much is its guarantee per acre?
 - a. 50 bushels per acre
 - b. 40 bushels per acre
 - c. \$600 per acre
 - d. \$480 per acre

6. If the farm in question 5 harvests only 30 bushels of soybeans per acre, and the level of price coverage turns out to be \$12.00 per bushel, how much would their indemnity payment per acre be?
 - a. \$480
 - b. \$360
 - c. \$240
 - d. \$120

7. A severe drought hit most of Iowa in 2012. Which of the following statements best describes the general economic impact of this drought on crop farmers in Iowa?
 - a. Farmers' overall returns to crop production were greatly diminished, since a majority of Iowa producers did not have crop insurance.
 - b. Potential losses due to lower yields were substantially offset by higher prices and crop insurance indemnity payments.
 - c. Farmers suffered financial losses due to low yields as well as from low prices caused by above average production in other corn and soybean producing states
 - d. Losses due to low crop yields were mostly offset by disaster payments received from the U.S. Dept. of Agriculture.

V. 2013 Event Resources

1. "Managing Risk With Crop Insurance" by William Edwards
<http://www.extension.iastate.edu/agdm/crops/html/a1-48.html>

2. "Combination of Drought and Insurance Increases Farm Profits" by Don Hofstrand
http://www.agmrc.org/renewable_energy/climate_change_and_agriculture/combination-of-drought-and-insurance-increases-farm-profits/

3. "Yield Protection Crop Insurance" by William Edwards
<http://www.extension.iastate.edu/agdm/crops/html/a1-52.html>

4. "Drought Damage Can Affect Crop Insurance Yields" by William Edwards
<http://www.extension.iastate.edu/agdm/crops/html/a1-59.html>

Team Participation Event – “Individual” Portion KEY

2013 Iowa Vo-Ag/FFA

**Farm Business Management Career Development Event
(Maximum possible pts: 5 per individual and 15 per team)**

1. A
2. B
3. D
4. A
5. D

Team Participation Event – “Team” Portion (35 pts.) - KEY

**2013 Iowa Vo-Ag/FFA
Farm Business Management Career Development Event**

1. C
2. A
3. A
4. D
5. $B = (50 \text{ bu per acre} \times 80\%)$
6. $D = (\text{insured yield} - \text{actual yield}) (\text{price coverage})$
 $= (40 \text{ bu.} - 30 \text{ bu}) (\$12.00) = \$120$
7. B

2013 Iowa Farm Business Mgt CDE

ATTACHMENTS

Ending Net Worth Statement

Name	FFA FARM		Date	01/01/13
Farm Assets	Cost Value	Market Value	Farm Liabilities	Market Value
Current Assets			Current Liabilities	
Checking and savings accounts	\$16,092	\$16,092	Accounts payable (Sched. N)	\$29,540
Crops held for sale/feed (Sched. A)	\$479,030	\$479,030	Farm taxes due (Sched. O)	\$4,490
Investment in growing crops(Sch. B)			Current notes and credit lines (Sched. P)	\$130,554
Commercial feed on hand (Sch. C)	\$9,475	\$9,475		
Prepaid expenses (Sched. D)	\$18,750	\$18,750	Accrued interest - short (Sched. P)	\$7,272
Market livestock (Sched. E)	\$262,750	\$262,750	- fixed (Sched. Q)	\$78,026
Supplies on hand (Sched. F)			Due in 12 months - fixed (Sched. Q)	\$74,059
Accounts receivable (Sched. G)				
Other current assets			Other current liabilities	
A) Total Current Assets	\$786,097	\$786,097	C) Total Current Liabilities	\$323,941
Fixed Assets			Fixed Liabilities	
Unpaid coop. distributions (Sch. H)	\$14,435	\$14,435	Notes and contracts remainder (Sched. Q)	\$703,028
Breeding livestock (Sched. I)	\$59,750	\$59,750	Other fixed liabilities	
Machinery & equipment (Sched. J)	\$331,932	\$455,600	Total Fixed Liabilities	\$703,028
Buildings/improvements (Sched. K)	\$489,817	\$617,000		
Farmland (Sched. L)	\$1,160,000	\$1,720,000		
Farm securities, certificates (Sch.M)				
Other fixed assets				
Total Fixed Assets	\$2,055,934	\$2,866,785		
B) Total Farm Assets	\$2,842,031	\$3,652,882	D) Total Farm Liabilities	\$1,026,969
E) Farm Net Worth (B - D)	\$1,815,063	\$2,625,913		
F) Farm Net Worth Last Year	\$1,800,470	\$2,533,282	Working Capital (A - C)	\$462,156
G) Change in Farm Net Worth (E - F)	\$14,593	\$92,632	Current Asset-to-Debt Ratio (A / C)	
Percent Change in Net Worth (G / F)			Total Debt-to-Asset Ratio (D / B)	

Net Farm Income Statement

Name		FFA FARM	Year	2012
Income				
Cash Income			Ending	Beginning
		Income Adjustments		
Sales of livestock bought for resale		Crops held for sale or feed (Sched. A)	\$479,030	\$547,650
Sales of market livestock, grain, etc.	\$802,865	Market livestock (Sched. E)	\$262,750	\$204,110
Cooperative distributions paid		Accounts receivable (Sched. G)		
Agricultural program payments	\$18,790	Other current assets		
Crop insurance proceeds		Unpaid cooperative distributions (Sched. H)	\$14,435	\$14,435
Custom hire income		Breeding livestock (Sched. I)	\$59,750	\$81,650
Other cash income	\$5,672	Subtotal of adjustments	\$815,965	\$827,845
Sales of breeding livestock	\$24,180	(b) Net adjustment (ending - beginning)	(\$11,880)	
(a) Total Cash Income	\$851,507	(c) Value of home used production		
		(d) Gross Farm Revenue (a + b + c)		
Expenses				
Cash Expenses			Ending	Beginning
		Expense Adjustments		
Car and truck expenses	\$1,894	Investment in growing crops (Sched. B)		\$9,490
Chemicals	\$30,760	Commercial feed on hand (Sched. C)	\$9,475	\$8,750
Conservation expenses		Prepaid expenses (Sched. D)	\$18,750	
Custom hire		Supplies on hand (Sched. F)		
Employee benefits	\$1,780	(f) Net adjustment (beginning - ending)	(\$9,985)	
Feed purchased	\$124,310		Ending	Beginning
Fertilizer and lime	\$105,500	Accounts payable (Sched. N)	\$29,540	\$36,589
Freight, trucking	\$12,290	Farm taxes due (Sched. O)	\$4,490	\$4,490
Gasoline, fuel, oil	\$23,650	Accrued interest (Sched. P, Q)	\$85,298	\$39,914
Insurance	\$6,500	(g) Net adjustment (ending - beginning)	\$38,334	
Interest paid	\$85,511	(h) Depreciation (Sched. J, K)		\$82,661
Labor hired	\$26,000	(i) Gross Farm Expenses		
Pension and profit-share plans				
Rent or lease payments	\$112,800	(j) Net Farm Income from Operations (d - i)		\$81,533
Repairs, maintenance	\$12,333			
Seeds, plants	\$58,560	(k) Sales of farm capital assets		\$5,000
Storage, warehousing		(l) Cost value of items sold (Sched. J, K, L)		
Supplies purchased	\$2,375	(m) Capital gains or losses (k - l)		\$5,000
Taxes (farm)	\$8,980			
Utilities	\$17,358	Net Farm Income (accrual) (j + m)		
Vet. fees, medicine, breeding	\$11,623			
Other cash expenses	\$4,560			
Livestock purchased	\$18,300	Net Farm Income (cash)		\$184,423
(e) Total Cash Expenses	\$667,084	Value of Farm Production		\$697,017

**Soybeans
1 Acre**

Gross Revenue	<u>Quantity</u>	<u>Unit</u>	<u>Price</u>			
Soybean sales	80	bushels	\$ 12.50			\$ 750.00
						\$ -
						\$ 750.00
Preharvest Machinery				<u>Fixed Costs</u>	<u>Variable Costs</u>	<u>Total Costs</u>
Chisel plow					\$ 3.40	\$ 3.40
Tandem disk					\$ 2.00	\$ 2.00
Drill					\$ 5.00	\$ 5.00
Spray twice					\$ 1.60	\$ 1.60
Subtotal					\$ 12.00	\$ 12.00
Inputs	<u>Quantity</u>	<u>Unit</u>	<u>Price</u>			
Seed	120	1000	\$ 0.40		\$48.00	\$ 48.00
Phosphate	40	lbs.	\$ 0.55		22.00	\$ 22.00
Potash	70	lbs.	\$ 0.40		28.00	\$ 28.00
Lime (every 5 years)	0.5	ton	\$ 14.00		7.00	\$ 7.00
Herbicide					38.00	\$ 38.00
Crop insurance					16.00	\$ 16.00
Miscellaneous					9.00	\$ 9.00
Subtotal					\$168.00	\$ 168.00
Total of preharvest variable costs					\$ 180.00	
Interest on preharvest operating costs	\$ 180.00	6 months	6.0%		5.40	\$ 5.40
Harvest machinery						
Combine					\$ 8.00	\$ 8.00
Haul	60	bu.	\$ 0.12		\$ 7.20	\$ 7.20
Handle	60	bu.	\$ 0.02		\$ 1.20	\$ 1.20
Machinery ownership costs				\$ 45.00		\$ 45.00
						\$ -
Labor	2.5	hours	\$14.00		\$35.00	\$ 35.00
						\$ -
Land rent	1	acre	\$268	\$260.00		\$ 260.00
Total cost per acre				Fixed	Variable	
				\$ 305.00	\$ 416.80	\$ 721.80
Gross margin (gross revenue minus variable costs)						<input type="text"/>
Profit (gross revenue minus total costs)						<input type="text"/>
Total cost per bushel (total cost divided by yield)						\$ 12.03

Grade A Dairy - One Cow Unit

Income	Price	Unit	x	Quantity	Unit	=	Total
Milk sales*	\$22.00	per cwt	x	240	cwt	=	\$5,280.00
Cull cow	\$0.60	per lb	x	1350	lbs	=	\$324.00
Dairy calf	\$300.00	per head	x	0.52	head	=	\$156.00
Gross Income							\$5,760.00
Variable Costs							
Feed Costs	Price	Unit	x	Quantity	Unit	=	Total
Corn equivalents	\$5.50	per bu	x	113	bu	=	\$621.50
Corn Silage	\$49.50	per ton	x	8	tons	=	396.00
Hay equivalents	\$160.00	per ton	x	6	tons	=	960.00
Salts and minerals	\$0.13	per lb	x	323	lbs	=	41.99
Protein supplement	\$0.18	per lb	x	1855	lbs	=	333.90
Cottonseed	\$0.07	per lb	x	1361	lbs	=	95.27
Fat	\$0.30	per lb	x	111	lbs	=	33.30
Milk replacer, calf starter							90.00
Other							<u>0.00</u>
Total Feed Costs							\$2,571.96
Veterinary and health							\$118.00
Fuel, utilities and repairs							160.00
DHIA & accounting							30.00
Breeding fees							50.00
Bedding, supplies and miscellaneous							170.00
Hauling	\$0.30	per cwt					72.00
Interest on variable costs	5%			3	month		39.65
Labor	\$15.00	per hour		70	hours		<u>1,050.00</u>
Total Variable Costs							\$4,261.61
Income over Variable Costs							\$1,498.39
Fixed Costs							
Machinery, equipment, facilities							\$620.00
Interest, insurance on herd							<u>326.20</u>
Total Fixed Costs							\$946.20
Total of All Costs							\$5,207.81
Income over All Costs							<div style="border: 1px solid black; width: 100px; height: 20px; margin: 0 auto;"></div>
Income from cull cows, calves, and heifers							\$480.00
Break-even selling price for variable costs							\$15.76 per cwt
Break-even selling price for all costs							\$19.70 per cwt