

## 2012 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. In farm business management, the term agricultural marketing relates mainly to the:
  - a. buying and selling of commodities
  - b. budgeting alternative enterprises
  - c. financing methods used by farmers
  - d. setting of agricultural policies by government
  
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 legal obligation to do something is typically called:
  - a. a lien
  - b. a contract
  - c. a non binding arbitration
  - d. a liability
  
4. What is reported on a 1099 – INT tax form?
  - a. interest expense
  - b. interest income
  - c. mortgage interest
  - d. ownership interest
  
5. The total value of resources associated with a farm business is called what on a balance sheet?
  - a. total assets
  - b. total net worth
  - c. owners' equity
  - d. total liabilities

6. Fertilizer, labor, seed are examples of what for a corn producer?
  - a. fixed costs
  - b. inputs
  - c. byproducts
  - d. enterprises
  
7. A business firm's year that ends on a date other than December 31 is called this type of year in management:
  - a. fiscal
  - b. leap
  - c. unusual
  - d. off
  
8. Money owed to you that you have NOT received yet would be called this on your 'balance sheet':
  - a. account payable
  - b. negative cash flow
  - c. current liability
  - d. account receivable
  
9. A dairy marketing business that is typically owned by dairy farmer customers is:
  - a. an investor-owned firm
  - b. a sole proprietorship
  - c. a cooperative
  - d. a not-for-profit business
  
10. This is the name of the legal document that specifies how an individual's property will be distributed at the time of their death:
  - a. a lien
  - b. an escrow
  - c. a will
  - d. a probate
  
11. A current asset is one that a firm:
  - a. currently is paying for
  - b. just purchased
  - c. can easily convert into cash within a year
  - d. currently is not using
  
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. This is the name of an economic 'principle' (or law) associated with a typical production function or process:
- supply
  - demand
  - diminishing returns
  - diminishing utility
14. The amount of an asset's purchase price that can be deducted annually as a tax-deductible expense is often called:
- current asset expense
  - present value
  - amortization
  - depreciation
15. If total units of output go from 10 to 14 when units of labor employed go from 5 to 8, what is the average product of labor at 8 units of labor?
- 3
  - 0.5
  - 1.33
  - 1.75
16. Net cash flow for a business is usually equal to:
- cash receipts – cash expenses
  - total receipts – total expenses
  - profits
  - after-tax profits
17. An opportunity cost is normally:
- a cash expense
  - a non-cash expense
  - 0
  - negative in value
18. What is the percent change in the value of an item whose price was \$8 and now its price is \$10?
- +200%
  - +20%
  - +25%
  - +40%

19. Which of the following would most likely increase the total amount of interest expense paid by a farmer when paying off a loan that he/she is currently paying off with annual payments?
- go to monthly payments
  - refinance at a lower interest rate
  - extend the length of the loan at same interest rate
  - all of the above
20. The point at which a demand curve and a supply curve intersect in a graph is called:
- a point of tangency
  - the equilibrium point
  - the point of diminishing returns
  - the bliss point
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. An individual who works for themselves is called:
- a loser
  - unemployed
  - self employed
  - under employed
23. Deferring some income to the next tax year is usually beneficial if:
- more time is needed to complete one's tax return
  - the firm is losing money this year
  - the firm will be in a lower tax bracket next year
  - the firm expects to expand next year
24. Which of the following would most likely decrease the demand for hamburger in a grocery store?
- negative publicity about a hamburger ingredient called 'pink slime'
  - increase in the price of pork chops
  - increase in the price of chicken
  - decrease in the price of charcoal
25. What is the 'present value' of \$108 one year from now if the interest rate = 8%?
- \$108.00
  - \$116.64
  - \$1350.00
  - \$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 working capital on January 1, 2012?
- a. \$367,260
  - b. \$776,092
  - c. \$2,531,017
  - d. \$1.90
27. The farm's market value net worth changed by \_\_\_\_% from a year ago.
- a. + 0.8%
  - b. + 2.6%
  - c. +4.4%
  - d. it stayed the same
28. What percent of the farm's total liabilities are due and payable within the next 12 months?
- a. 3%
  - b. 23%
  - c. 37%
  - d. 63%
29. Using 'market' values, the farm's ratio of debt to equity is:
- a. 31%
  - b. 44%
  - c. 69%
  - d. 85%
30. How much has their farmland increased in value since they purchased or inherited it?
- a. \$760,000
  - b. \$1,720,000
  - c. \$2,480,000
  - d. \$960,000
31. Looking at both the farm's net farm income statement and ending net worth statement, their increase in cost value net worth was what percent of their net farm income (accrual)??
- a. 12%
  - b. 77%
  - c. 8%
  - d. 64%

32. From the Net Farm Income Statement, how much was this farm's Gross Farm Expenses (= total cash expenses after expense adjustments and depreciation were taken into account)?
- a. \$771,507
  - b. \$637,084
  - c. \$673,626
  - d. \$612,965
33. How much did their value of market livestock held for sale change from the beginning of the year to the end?
- a. \$1,900 increase
  - b. \$1,900 decrease
  - c. \$38,440 decrease
  - d. \$38,440 increase
34. How much was FFA Farms net cash farm income in 2011?
- a. \$771,507
  - b. \$77,121
  - c. \$82,121
  - d. \$134,423
35. Capital gains come from:
- a. selling grain for more than its cost of production
  - b. selling assets for more than their "cost value"
  - c. selling purchased feeder livestock for more than their original cost
  - d. selling land for less than you originally paid for it

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

36. How many dollars' worth of livestock does FFA Farm plan to sell in March and April?
- a. \$94,095
  - b. \$553,500
  - c. \$72,000
  - d. \$184,495
37. In which period does this farm project its largest net cash flow deficit?
- a. January - February
  - b. March-April
  - c. July-August
  - d. September-October
38. How much operating capital does FFA Farm need to borrow in all of 2012?
- a. \$91,000
  - b. \$160,691
  - c. \$137,000
  - d. \$215,000

39. The projected cash balance at the end of the November-December period for FFA Farm is:
- a. \$45,052
  - b. \$160,691
  - c. \$1,522
  - d. \$1,619
40. What is FFA Farm's projected total cash outflows for all of 2012, based on the cash flow budget?
- a. \$1,131,400
  - b. \$1,055,666
  - c. \$75,734
  - d. \$160,691
41. When does FFA farm expect to have to purchase some new 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 down its operating loan?
- a. Jan.-Feb. and Nov.-Dec.
  - b. May-June and Nov.-Dec.
  - c. March-April and July-August
  - d. July-August and Nov.-Dec.
43. What does the cash flow budget tell us about FFA Farm's expected profits for 2012?
- a. They are projecting positive profits.
  - b. They are projecting to just break even.
  - c. They are projecting negative profits.
  - d. The cash flow budget does not analyze profitability.
44. What is the largest outstanding operating loan balance this farm expects to have at the end of any period?
- a. \$238,691
  - b. \$160,691
  - c. \$200,691
  - d. \$329,691
45. What expense category is not found in a cash flow budget but is included in a net farm income statement?
- a. family living expenses
  - b. pesticide purchases
  - c. hired labor wages
  - d. depreciation

**Refer to the attached “Finishing Yearling Steers” budget to answer questions #46-50.**

46. How much income over all costs (profit) for one steer is projected?
- \$1,500.00 profit
  - \$1,521.81 loss
  - \$21.81 loss
  - \$7.81 loss
47. What is the breakeven selling price to cover total costs?
- \$1.22 per lb.
  - \$1.20 per lb.
  - \$2.03 per lb.
  - \$1.00 per lb.
48. If the price of corn rises to \$6.00 per bushel, how much will total costs per head rise (all else equal)? Ignore interest.
- \$50
  - \$25
  - \$.50
  - No change.
49. How much is the projected feed cost per pound of gain in this budget?
- \$.31 per lb.
  - \$.52 per lb.
  - \$.78 per lb.
  - \$1.22 per lb.
50. In this budget, for what purchase price for the yearling feeder steer would you just break even if all other costs = \$509.31?
- \$1.35/lb.
  - \$1.32/lb.
  - \$1.22/lb.
  - \$2.00/lb.

**Refer to the attached budget for corn (following soybeans) to answer questions 51-55.**

51. How much is the expected return over total costs (profit) per acre of corn?
- \$138.22
  - \$900.00
  - \$761.78
  - \$491.00



52. What selling price is needed to just break even (profit = 0)?
- \$5.00 per bu.
  - \$1.96 per bu.
  - \$4.23 per bu.
  - \$2.27 per bu.
53. If you had to borrow \$500 per acre at 5.7% annually for 8 months to pay for input costs and rent, how much interest would you have to pay?
- \$28.50 per acre
  - \$228.00 per acre
  - \$1,900.00 per acre
  - \$19.00 per acre
54. What is the breakeven yield assuming a selling price of \$5.00 per bushel?
- 180.0 bu. per acre
  - 152.4 bu. per acre
  - 81.8 bu. per acre
  - 70.6 bu. per acre
55. How much cash rent could you afford to pay and still earn a profit of \$100 per acre?
- \$258 per acre
  - \$396 per acre
  - \$296 per acre
  - \$38 per acre

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

56. An individual who takes a position in a futures market who does NOT have an opposite, offsetting cash position is known as:
- a speculator
  - a hedger
  - a forward contractor
  - a general contractor
57. Crop production risks are typically reduced with:
- hedging
  - forward contracting
  - crop insurance
  - all of the above

58. In ag marketing, a basis is typically the difference between:
- two different cash prices in different locations
  - two different futures prices
  - a cash expense and a noncash expense
  - a futures price and a cash price
59. The right to sell a futures contract at a specified price is known as:
- a call option
  - a short futures position
  - a put option
  - the strike price
60. A corn farmer who has hedged some future corn sales has NOT 'locked in' a price due to this remaining risk:
- cash price
  - futures price
  - basis
  - margin calls
61. A producer is most likely UNABLE to take advantage of future price increases for a commodity they plan to sell if they had:
- entered into a cash forward contract
  - hedged with options
  - speculated in the cash market
  - waited to sell in the cash market
62. If a farmer performs a calculation of dividing total revenue by total units of the commodity sold, they are calculating what?
- marginal revenue
  - average revenue
  - breakeven price
  - marginal product
63. If a farmer hedges using futures contracts, they can expect to pay to the brokerage firm what?
- a basis
  - a commission fee
  - a margin deposit
  - b and c
64. What is the common abbreviation for the production technology that has produced corn that is resistant to some commercial herbicides?
- GTO
  - PTO
  - GMO
  - NuTech

65. An expected hedged price to be received by a corn farmer would best be calculated as the initial futures price sold:
- the ending basis
  - the ending futures price
  - the ending cash price
  - + the ending cash price
66. What is the common term used to describe the 'position' a person has in the futures market if they have sold a futures contract?
- hedged
  - short
  - intermediate
  - offsetting
67. Which of the following is most likely NOT to change for a farmer when marketing their product during a 'short-run' period?
- price of their product
  - total fixed costs
  - average variable costs
  - cash on hand
68. A futures contract PUT option gives the buyer this:
- a requirement to sell at a given price
  - the right to sell at a given price
  - a guaranteed resale price
  - production insurance
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?
- sell today
  - sell two years from now
  - it depends on what the costs of production were
  - it depends on storage costs and the interest rate
70. Marginal revenue equals what at the profit-maximizing level of output:
- marginal product
  - marginal cost
  - 0
  - total profit

71. A farmer's breakeven price =
- per unit cash cost of production
  - average variable cost of production
  - total cost of production
  - average total cost of production
72. The price at which an option buyer has the right to exercise the purchased option is called:
- the strike price
  - the basis
  - the spread
  - the option's premium
73. In the futures market for corn, which of the following is specified for one 'regular' futures contract:
- where the corn is produced
  - what the corn is used for
  - the quantity of corn
  - all of the above
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:
- annual
  - long term
  - inter commodity
  - seasonal
75. Which of the following is the most likely determinant of what products successful food marketing firms produce and sell in the long-run in the U.S.?
- governmental regulations
  - what farmers produce
  - talents and abilities of the firms' employees
  - consumer wants

**2012 Iowa Farm Business Management Career Development Event**

**INDIVIDUAL EXAM KEY**

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

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

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

26. A      Working capital = current farm assets – current farm liabilities  
              = \$776,092 - \$408,832 = \$367,260
27. C      % market value net worth increase = (change in farm net worth (market)/farm net  
              worth (market) last year)  
              = \$106,220 / \$2,424,796 = 4.4%
28. C      (Total current liabilities / total liabilities)  
              = 408,832 / 1,111,860 = 37%

29. B Debt-to-equity ratio = total farm liabilities divided by farm net worth (market value)  
 $= \$1,111,860 / \$2,531,017 = 44\%$
30. D Gain in farmland value = market value – cost value  
 $= \$1,720,000 - \$760,000 = \$960,000$
31. A Increase in cost value net worth / net farm income  
 $= \$10,181 / \$82,121 = 12\%$
32. C Gross farm expenses after adjustments = total cash expenses + net expense adjustments + depreciation  
 $= \$637,084 - \$8,860 - \$15,259 + \$60,661 = \$673,626$
33. D Ending market livestock held minus beginning market livestock held  
 $= \$242,550 - \$204,110 = \$38,440$  increase
34. D Total cash income – total cash expenses =  $\$771,507 - \$637,084 = \$134,423$
35. B Capital gains come from selling assets for more than their cost value.
36. A Livestock sales in March-April =  $\$94,095$ .
37. B Projected net cash flow is most negative in March-April ( $-\$111,521$ ).
38. C Net operating loans needed (total for year) =  $\$137,000 = 91,000 + 31,000 + 15,000$ .
39. D  $\$1,619$  in Nov.-Dec.
40. B Total cash outflows for the whole year =  $\$1,055,666$ .
41. C  $\$25,000$  in May-June for purchase of capital assets.
42. B Operating loan repayments will occur in May-June and Nov.-Dec.
43. D A cash flow budget analyzes liquidity but not profitability.
44. D  $\$329,691$  at the end of April.
45. D Depreciation expense is not a cash outflow, but it is a farm business expense.
46. C Profit = total income – total all costs  
 $\$1,500.00 - \$1,521.81 = \$21.81$  loss
47. A Breakeven price = total costs/sale weight

$$= \$1,521.81 / 1,250 \text{ lb.} = \$1.22/\text{lb.}$$

48. B change in price of corn x bushels fed  
 $(\$6.00 - \$5.50) \times 50 \text{ bu.} = \$25$
49. C Total feed costs / (selling weight – purchase weight)  
 $= \$390.00 / (1,250 \text{ lb.} - 750 \text{ lb.}) = \$.78 \text{ per lb. of gain}$
50. B (income – total costs except purchase cost of steer) / purchase weight  
 $(\$1,500.00 - \$509.31) / 750 \text{ lb.} = \$1.32/\text{lb.}$
51. A Total revenue minus total costs = return over total costs  
 $\$900.00 - \$761.78 = \$138.22$
52. C (Total costs) / bushels to sell  
 $= \$761.78 / 180 \text{ bu.} = \$4.23 \text{ per bu.}$
53. D Amount borrowed x interest rate x time borrowed =  $\$500 \times 5.7\% \times 8/12 \text{ yr.} = \$19.00 \text{ per acre.}$
54. B Breakeven yield = total all costs / selling price  
 $\$761.78 / \$5.00 = 152.4 \text{ bu. per acre}$
55. C Total income minus all costs but land minus \$100 =  
 $\$900.00 - \$503.78 - \$100.00 = \$296.22 \text{ per acre}$
56. A
57. C
58. D
59. C
60. C
61. A
62. B
63. D
64. C (= Genetically Modified Organisms)
65. A
66. B
67. B
68. B
69. D
70. B
71. D
72. A
73. C
74. D
75. D

## Team Participation Event – “Individual” Portion

### 2012 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. Which of the following has increased at annual rate of 20+% from 2009 to 2011 for Iowa farmers?
  - a. interest rates on borrowed money
  - b. land values for land used to produce corn and soybeans
  - c. the amount of farmland being sold
  - d. the amount of farmland being lost due to urban sprawl
2. The average value of Iowa farmland increased from \$4371 per acre in 2009 to \$5064 per acre in 2010. What was the percent of increase?
  - a. 115.85%
  - b. 13.68%
  - c. 15.85%
  - d. 86.32%
3. Rising farmland values are most likely to result in this for the farmland owner/operator:
  - a. lower cash rents
  - b. lower property taxes
  - c. lower cash sales per acre
  - d. higher opportunity costs of owning farmland
4. What is the formula below used to estimate?

$$\frac{\text{Income}}{\text{Discount rate} - \text{Income growth rate}}$$

- a. farmland value
  - b. present value of future farmland values
  - c. future income values
  - d. opportunity costs of owning farmland
5. Which of the following is the most likely cause of higher farmland values in Iowa?
    - a. higher property taxes
    - b. higher interest rates
    - c. greater number of acres being sold
    - d. higher corn and soybean prices



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

**2012 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 farmland values in Iowa.

1. According to a 2011 Choices article on land values by ISU Extension Economist Mike Duffy, “The 1970’s was a truly unique and unprecedented period in U.S. history. Starting in 1972, real farmland values in the U.S. rose more than 7% per year for 10 consecutive years.” What happened to land values in Iowa for the next few years starting in 1982?
  - a. they increased at an annual rate much greater than 7%
  - b. they leveled off and remained fairly constant
  - c. they declined rather significantly
  - d. they continued to increase but at an annual rate of only about 2-3%

Recent changes in Iowa farmland values based on annual ISU surveys are as follows:

<u>Year</u>	<u>Value per acre (\$)</u>	<u>Dollar change (from yr before)</u>
2009	4371	-97
2010	5064	+693
2011	6708	+1644

Use this information to answer questions #2-5 below.

2. What was the average ‘value per acre’ of Iowa farmland for 2008?
  - a. Unknown as the table values only go back to 2009
  - b. 4468
  - c. 4264
  - d. 4240
3. What was the total percentage change in value per acre of Iowa farmland from 2009 to 2011?
  - a. +53%
  - b. +46%
  - c. +32%
  - d. +2337%

4. Assume a farmer a) had purchased in 2000 the farmland he/she farms at a price of \$1857 per acre and b) now owns the land debt free. Assuming a 5% rate of foregone interest on his/her investment in his/her farmland that is of 'average' value in the state of Iowa, which of the following would be a good estimate of the economic (i.e. opportunity) cost per acre of owning and farming the land in 2011?
- \$0.00
  - \$92.85
  - \$335.40
  - \$6708.00
5. Which of the following is likely to NOT be a significant economic factor causing the recent dramatic increase in Iowa average farmland values?
- rising corn and soybean prices producing higher net farm incomes
  - declining or historically low interest rates
  - a substantial increase in the amount of farmland being sold (i.e. it's now easier for people to find land to buy)
  - rising net worth (i.e. wealth) of farmers who are in a better financial position to acquire more land
6. Results from the most recent Iowa State University Extension rental rate survey estimated the average per acre for Iowa corn and soybean land in the state was 16.3% higher for 2011 than the \$184 reported for 2010. What is your estimate of the average cash rent per acre for Iowa farmland in 2011?
- not enough information available to calculate
  - \$190
  - \$195
  - \$214
7. A traditional economic (or 'income capitalization') formula used to estimate or explain per acre farmland values is the following:

$$\text{Farmland value} = \frac{\text{Income}}{\text{Discount rate} - \text{Income growth rate}}$$

Based on this formula which of the following would most likely be associated with increasing farmland values?

- increase in income
- increase in the discount rate
- decrease in the income growth rate
- all of the above would contribute to increased farmland values

**Team Participation Event – “Individual” Portion KEY**

**2012 Iowa Vo-Ag/FFA  
Farm Business Management Career Development Event  
(Maximum possible pts: 5 per individual and 15 per team)**

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

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

**2012 Iowa Vo-Ag/FFA  
Farm Business Management Career Development Event**

1. C
2. B
3. A
4. C
5. C
6. D
7. A

# Farm Financial Statements

Ag Decision Maker -- Iowa State University Extension

See the [Financial Files](#) for more information.

Enter your input values in shaded cells.

## Ending Net Worth Statement

Name	FFA FARM		Date	01/01/12
Farm Assets	Cost Value	Market Value	Farm Liabilities	Market Value
<b>Current Assets</b>			<b>Current Liabilities</b>	
Checking and savings accounts	\$16,092	\$16,092	Accounts payable (Sched. N)	\$29,540
Crops held for sale/feed (Sched. A)	\$490,350	\$490,350	Farm taxes due (Sched. O)	\$4,490
Investment in growing crops(Sch. B)			Current notes and credit lines (Sched. P)	\$260,554
Commercial feed on hand (Sch. C)	\$8,350	\$8,350	Accrued interest - short (Sched. P)	\$2,805
Prepaid expenses (Sched. D)	\$18,750	\$18,750	- fixed (Sched. Q)	\$37,384
Market livestock (Sched. E)	\$242,550	\$242,550	Due in 12 months - fixed (Sched. Q)	\$74,059
Supplies on hand (Sched. F)			Other current liabilities	
Accounts receivable (Sched. G)			<b>C) Total Current Liabilities</b>	<b>\$408,832</b>
Other current assets			<b>Fixed Liabilities</b>	
<b>A) Total Current Assets</b>	<b>\$776,092</b>	<b>\$776,092</b>	Notes and contracts remainder (Sched. Q)	\$703,028
<b>Fixed Assets</b>			Other fixed liabilities	
Unpaid coop. distributions (Sch. H)	\$14,435	\$14,435	<b>Total Fixed Liabilities</b>	<b>\$703,028</b>
Breeding livestock (Sched. I)	\$59,750	\$59,750		
Machinery & equipment (Sched. J)	\$313,932	\$455,600		
Buildings/improvements (Sched. K)	\$489,817	\$617,000		
Farmland (Sched. L)	\$760,000	\$1,720,000		
Farm securities, certificates (Sch.M)				
Other fixed assets				
Total Fixed Assets	\$1,637,934	\$2,866,785		
<b>B) Total Farm Assets</b>	<b>\$2,414,026</b>	<b>\$3,642,877</b>	<b>D) Total Farm Liabilities</b>	<b>\$1,111,860</b>
<b>E) Farm Net Worth (B - D)</b>	<b>\$1,302,166</b>	<b>\$2,531,017</b>		
<b>F) Farm Net Worth Last Year</b>	<b>\$1,291,985</b>	<b>\$2,424,796</b>	<b>Working Capital (A - C)</b>	
<b>G) Change in Farm Net Worth (E - F)</b>	<b>\$10,181</b>	<b>\$106,220</b>	<b>Current Asset-to-Debt Ratio (A / C)</b>	<b>1.90</b>
<b>Percent Change in Net Worth (G / F)</b>			<b>Total Debt-to-Asset Ratio (D / B)</b>	<b>31%</b>

Personal Assets		Personal Liabilities	
Bank accounts, cash		Credit card, charge accounts, etc.	
Vehicles, boats, etc.		Automobile loans	
Household goods, clothing, personal items		Accounts payable, taxes due	
Stocks, bonds, retirement accounts, life insurance		Other loans	
Real estate		Real estate, other long-term loans	
Other personal assets		Other personal liabilities	
Total Personal Assets		Total Personal Liabilities	
Total Personal Net Worth		Personal Debt-to-Asset Ratio	
<b>Farm plus Personal Net Worth, Market Value</b>	<b>\$2,531,017</b>	<b>Overall Debt-to-Asset Ratio</b>	<b>31%</b>

# Net Farm Income Statement

Ag Decision Maker -- Iowa State University Extension

See the [Financial Files](#) for more information.

Enter your input values in shaded cells.

Name	FFA FARM	Year	2011		
<b>Income</b>					
<b>Cash Income</b>		<b>Income Adjustments</b>		<b>Ending</b>	<b>Beginning</b>
Sales of livestock bought for resale		Crops held for sale or feed (Sched. A)	\$490,350	\$547,650	
Sales of market livestock, grain, etc.	\$722,865	Market livestock (Sched. E)	\$242,550	\$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	\$61,650	
Other cash income	\$5,672	Subtotal of adjustments	\$807,085	\$827,845	
Sales of breeding livestock	\$24,180	(b) Net adjustment (ending - beginning)	(\$20,760)		
(a) Total Cash Income	\$771,507	(c) Value of home used production			
		<b>(d) Gross Farm Revenue (a + b + c)</b>	<b>\$750,747</b>		
<b>Expenses</b>					
<b>Cash Expenses</b>		<b>Expense Adjustments</b>		<b>Ending</b>	<b>Beginning</b>
Car and truck expenses	\$1,894	Investment in growing crops (Sched. B)		\$9,490	
Chemicals	\$30,760	Commercial feed on hand (Sched. C)	\$8,350	\$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)	(\$8,860)		
Feed purchased	\$124,310		<b>Ending</b>	<b>Beginning</b>	
Fertilizer and lime	\$75,500	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)	\$40,189	\$48,400	
Insurance	\$6,500	(g) Net adjustment (ending - beginning)	(\$15,259)		
Interest paid	\$85,511	(h) Depreciation (Sched. J, K)		\$60,661	
Labor hired	\$28,000	<b>(i) Gross Farm Expenses</b>			
Pension and profit-share plans					
Rent or lease payments	\$112,800	<b>(j) Net Farm Income from Operations (d - i)</b>		<b>\$77,121</b>	
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	<b>Net Farm Income (accrual) (j + m)</b>		<b>\$82,121</b>	
Utilities	\$17,358				
Vet. fees, medicine, breeding	\$11,623	Net Farm Income (cash)			
Other cash expenses	\$4,560	Value of Farm Production		\$608,137	
Livestock purchased	\$18,300				
(e) Total Cash Expenses	\$637,084				

## Cash Flow Budget

### Ag Decision Maker -- Iowa State University Extension

Place the cursor over cells with red triangles to read comments.

Enter your input values in shaded cells.

Name:

FFA FARM

Year:

2012

CASH INFLOWS	Total for Year	January February	March April	May June	July August	September October	November December
<b>Operating</b>							
Livestock income	\$553,500	94,095	94,095	88,560	94,095	94,095	88,560
Sales of crops	\$521,500	72,000	72,000	157,500	0	0	220,000
Other crop income	\$0	0	0	0	0	0	0
USDA payments	\$18,000	12,000	0	0	0	0	6,000
Custom hire income	\$0	0	0	0	0	0	0
Farm rents, interest	\$0	0	0	0	0	0	0
Other	\$6,000	1,000	1,000	1,000	1,000	1,000	1,000
<b>Sales of Capital Assets</b>	\$5,000	5,000	0	0	0	0	0
<b>Financing</b>							
Total new short-term loans to receive	\$0	0	0	0	0	0	0
New term loans to receive	\$20,000	0	0	20,000	0	0	0
<b>Non-farm Income</b>	\$7,400	400	400	2,900	400	400	2,900
<b>Total Cash Inflows</b>	<b>\$1,131,400</b>	<b>184,495</b>	<b>167,495</b>	<b>269,960</b>	<b>95,495</b>	<b>95,495</b>	<b>318,460</b>

CASH OUTFLOWS	Total for Year	January February	March April	May June	July August	September October	November December
<b>Operating</b>							
Seed	\$85,200	0	0	0	0	0	85,200
Fertilizer and lime	\$127,400	42,042	42,042	0	0	0	43,316
Pesticides	\$23,300	0	23,300	0	0	0	0
Crop insurance	\$14,040	0	0	0	0	14,040	0
Drying fuel	\$20,000	0	0	0	0	20,000	0
Custom hire or machine rental	\$0	0	0	0	0	0	0
Other cash costs per acre	\$10,200	1,734	1,734	1,632	1,734	1,734	1,632
Purchased crops	\$0	0	0	0	0	0	0
Purchased livestock	\$22,500	3,825	3,825	3,600	3,825	3,825	3,600
Purchased feed	\$202,500	34,425	34,425	32,400	34,425	34,425	32,400
Health and veterinary	\$11,250	1,913	1,913	1,800	1,913	1,913	1,800
Marketing	\$13,500	2,295	2,295	2,160	2,295	2,295	2,160
Other cash costs per head	\$0	0	0	0	0	0	0
Real estate taxes	\$16,000	0	8,000	0	0	8,000	0
Cash rent	\$160,000	0	80,000	0	0	0	80,000
Hired labor	\$30,000	5,000	5,000	5,000	5,000	5,000	5,000
Repairs and upkeep	\$13,000	3,000	2,000	1,000	1,000	3,000	3,000
Fuel and lubrication	\$25,000	2,000	6,000	3,000	3,000	6,000	5,000
Other fixed expenses	\$6,000	1,000	1,000	1,000	1,000	1,000	1,000
<b>Purchases of Capital Assets</b>	\$25,000	0	0	25,000	0	0	0
<b>Financing</b>							
Accounts payable	\$29,540	29,540	0	0	0	0	0
Short term notes due	\$21,863	21,863	0	0	0	0	0
Term loan payments	\$140,373	22,243	48,482	1,300	65,748	1,300	1,300
Equipment lease payments	\$0	0	0	0	0	0	0
<b>Non-farm Expenditures</b>	\$59,000	8,000	19,000	8,000	8,000	8,000	8,000
<b>Total Cash Outflows</b>	<b>\$1,055,666</b>	<b>178,880</b>	<b>279,016</b>	<b>85,892</b>	<b>127,940</b>	<b>110,532</b>	<b>273,408</b>
<b>Net Cash Flow</b>	<b>\$75,734</b>	<b>5,616</b>	<b>(111,521)</b>	<b>184,068</b>	<b>(32,445)</b>	<b>(15,037)</b>	<b>45,052</b>

SUMMARY	Total for Year	January February	March April	May June	July August	September October	November December
Net cash flow	\$75,734	5,616	(111,521)	184,068	(32,445)	(15,037)	45,052
Beginning cash balance	\$16,092	16,092	21,761	1,313	2,987	1,553	1,522
Interest earned on cash balance	\$151	54	73	4	10	5	5
<b>New operating loan needed</b>	<b>\$137,000</b>		<b>91,000</b>		<b>31,000</b>	<b>15,000</b>	
<b>Operating loan repayments</b>	<b>\$215,000</b>			<b>175,000</b>			<b>40,000</b>
Interest paid on oper. loan balance	\$12,358	0	0	7,398	0	0	4,960
Ending cash balance	\$1,619	21,761	1,313	2,987	1,553	1,522	1,619

For a feasible cash flow plan, all projected ending cash balances should be positive.

<b>Operating Loan Balance</b>							
Balance at start of year or period	\$238,691	238,691	238,691	329,691	154,691	185,691	200,691
Balance at end of year or period	\$160,691	238,691	329,691	154,691	185,691	200,691	160,691

## Finishing Yearling Steers - One Head

### Ag Decision Maker -- Iowa State University Extension

For more information see Information File B1-21 Livestock Enterprise Budgets.

Place the cursor over cells with red triangles to read comments.  
Enter input values in yellow grid-lined cells.

#### Corn and Hay or Corn and Silage Rations

Income	Price	Unit		Quantity	Unit	=	Total
Steer sales	\$1.20	per lb	x	1250	lbs	=	\$1,500.00
<b>Variable Costs</b>							
Yearling feeder Cost	\$1.35	per lb	x	750	lbs	=	\$1,012.50
Interest	6%		x	5.5	months	=	27.84
<b>Feed Costs</b>							
Corn	\$5.50	per bu	x	50	bu	=	\$275.00
Fair quality hay	\$95.00	per ton	x	0.25	ton	=	23.75
Modified distiller grain	\$75.00	per ton	x	0.95	ton	=	71.25
Supplement & minerals	\$0.20	per lb	x	100	lbs	=	20.00
		per ton	x		tons	=	0.00
Other							0.00
<b>Total Feed Costs</b>							<b>\$390.00</b>
Veterinary and health							\$8.00
Machinery and equipment							7.00
Marketing and miscellaneous							16.00
Interest on variable costs	6%		x	2.75	months	=	5.79
Labor	\$14.00	per hour	x	2	hours	=	28.00
Death loss	1%	hd				=	12.68
<b>Total Variable Costs</b>							<b>\$1,507.81</b>
<b>Income over Variable Costs</b>							<b>(\$7.81)</b>
<b>Fixed Costs</b>							
Machinery, equipment, housing							\$14.00
<b>Total All Costs</b>							<b>\$1,521.81</b>
<b>Income over All Costs</b>							

Break-even selling price for all costs

## Corn following Soybeans

### Gross returns

Expected selling price	\$5.00	Expected yield	180	bu./acre
Other income			\$	-
<b>Gross income</b>				<b>\$900.00</b>

### Cost per Acre

	<u>Fixed</u>	<u>Variable</u>	<u>Total</u>
<b>Preharvest machinery</b>			
Tandem disk	\$3.60	\$3.10	\$6.70
Apply nitrogen	\$4.70	\$5.30	\$10.00
Field cultivate	\$2.50	\$3.10	\$5.60
Plant	\$6.00	\$5.40	\$11.40
Spray	\$2.00	\$2.00	\$4.00
Custom hire	\$0.00	\$0.00	\$0.00
Other	\$0.00	\$0.00	\$0.00
Other	\$0.00	\$0.00	\$0.00
<b>Total per acre</b>	<b>\$18.80</b>	<b>\$18.90</b>	<b>\$37.70</b>

### Seed, chemicals, etc.

Seed		\$102.00	\$102.00
<i>cost per 1000 kernels</i>	\$3.40		
<i>kernels per acre</i>	30,000		
Nitrogen		\$80.01	\$80.01
<i>price per pound</i>	\$0.63		
<i>pounds per acre</i>	127		
Phosphate		\$43.52	\$43.52
<i>price per pound</i>	\$0.64		
<i>pounds per acre</i>	68		
Potash		\$29.70	\$29.70
<i>price per pound</i>	\$0.55		
<i>pounds per acre</i>	54		
Lime (annual cost)		\$9.67	\$9.67
Herbicide		\$20.00	\$20.00
Crop insurance		\$22.50	\$22.50
Miscellaneous		\$9.00	\$9.00
Interest on preharvest variable costs		\$12.74	\$12.74
<i>length of period (months)</i>	8		
<i>interest rate</i>	5.7%		
<b>Total</b>		<b>\$329.14</b>	<b>\$329.14</b>

### Harvest machinery

Combine	\$20.60	\$11.40	\$32.00
Grain Cart	\$5.70	\$3.30	\$9.00
Haul	\$7.20	\$7.20	\$14.40
<i>Fixed- price per bushel</i>	\$0.04		
<i>Variable- price per bushel</i>	\$0.04		
Drying	\$9.00	\$34.56	\$43.56
<i>Fixed- price per bushel</i>	\$0.05		
<i>Variable- price per bushel</i>	\$0.19		
Handling	\$3.06	\$4.50	\$7.56
<i>Fixed- price per bushel</i>	\$0.02		
<i>Variable- price per bushel</i>	\$0.03		
Custom hire	\$0.00	\$0.00	\$0.00
<b>Total per acre</b>	<b>\$45.56</b>	<b>\$60.96</b>	<b>\$106.52</b>

### Labor

Hours	2.6	\$30.42	\$30.42
Rate per hour	\$11.70		

### Land

Cash rent equivalent	\$258.00		\$258.00
----------------------	----------	--	----------

### Total fixed, variable and all costs

	<u>Fixed</u>	<u>Variable</u>	<u>Total</u>
Per acre	\$352.78	\$409.00	\$761.78
Per bushel	\$1.96	\$2.27	

### Profit