2004 Iowa Vo Ag/FFA Farm Business Management Career Development Event

MULTIPLE CHOICE SECTION (100 pts.)

Select the <u>best</u> answer (2 pts ea). Code your answers on the answer sheet provided. Be sure to erase completely any answers that you change.

- 1 Futures contract delivery specifications include:
 - a specific quantity of a commodity
 - b. specific quality of a commodity
 - c. acceptable delivery times and locations
 - d all of the above
- At any point in time, the total assets of a farm business are most likely to represent the farm's:
 - a profits
 - b. net worth
 - c. net income
 - d. sale value
- 3. A multi-year loan often associated with the purchase of land is typically called:
 - a a chattel
 - b. a lien
 - c. a mortgage
 - d. an annuity
- 4. Accounts payable by a business equal:
 - a. opportunity costs
 - b. accounts receivable
 - c. forthcoming expenses
 - d items purchased but not yet paid for
- The following is likely to be the most important need in order to produce goods (output):
 - a. money
 - b. inputs
 - c. profit
 - d demand

6.	Fertilizer expense per bushel of corn sold is an example of:						
	a marginal cost						
	b average cost						
	c opportunity cost						
	d fixed cost						
7.	A person who <u>buys</u> a futures contract has this futures market <u>position</u> and <u>obligation</u> respectively:						
	a long, take delivery						
	b. long, make delivery						
	c. short, make delivery						
	d short, take delivery						
8	To calculate 'Total Revenue' for a business one would need the following information:						
	a price and quantity of output						
	b. income and expenses						
	c. supply and demand						
	d. assets and liabilities						
9	The annual rate of return earned by a farmer on his/her assets was 5%? Net earnings for						
	the year were \$30,000. This implies:						
	a total assets = $$150,000$						
	b. total assets = $$600,000$						
	c equity = \$150,000						
	d equity = \$600,000						
10.	Economics is the social science that studies how people allocate scarce:						
	a. wants						
	b needs						
	c resources						
	d supply and demand						
11	A demand curve shows graphically the relationship between a product's price and:						
	a quality						
	b consumers' income						
	c quantity purchased						
	d supply						
12.	A cash flow statement can help a business manager project:						
	a return on investment						
	b. net worth						
	c operating expenses						
	d future borrowing needs						

13	A far	rmer's <u>before-tax</u> cost of production will normally be: affected by the tax rate
	b.	greater than the after-tax cost
	C.	less than the after-tax cost
	d.	unaffected by input prices
		· · · · · · · · · · · · · · · · · · ·
14.	A co	untry's type of money is also called that country's:
	a	devaluation
	b	exchange rate
	C	currency
	d.	tariff
15		'Mad Cow' scare in the U.S. first reported in December 2003, had this impact on the
		beef market:
	a	none
	b	decreased demand for U.S. beef
	·C	increased demand for U.S. beef
	$\mathbf{d}_{\cdot\cdot}$	increased exports of U.S. beef
16	If a p	producer only has variable costs, that producer is:
	\mathbf{a} .	experiencing variable profits
	Ъ.,	operating in the short run
	c	operating in the long run
	d.	facing a lot of uncertainty with respect to input costs
17		ch of the following is not recognized as one of the three primary forms of business nization:
	a	entrepreneurship
	b	partnership
	C.	corporation
	\mathbf{d} .	sole proprietorship
18		ch of the following would be the best value to use for the cost of feeding homegrown burchased) hay to dairy cattle?
	a	0
	b	the cost of producing the hay
	C.,	an average of hay costs for 2 or 3 recent years
	d.	the opportunity cost of the hay

- A local elevator quotes a farmer corn at 25¢ under March futures for future sale, and will pick up the grain for free. Which of the following is most likely represented by the 25¢ number?
 - a. the future corn basis
 - b. the cost of hauling corn to the terminal
 - c. the elevator's commission fee per bushel
 - d. the farmer's profit per bushel
- A farmer has a debt-total asset ratio of 20% and total liabilities of \$100,000. The farmer must have:
 - a. total assets of \$500,000
 - b. total equity of \$20,000
 - c. total debt of \$20,000
 - d. total equity of \$500,000
- 21. An increase in market supply would shift the supply curve:
 - a. to the right and decrease price
 - b. to the right and increase price
 - c to the left and increase price
 - d to the left and decrease price
- Less risk for the landlord and more risk for the tenant is associated with:
 - a cash rent contracts
 - b production share rent contracts
 - c. hedging with options
 - d government price support programs
- A farmer recently sold a depreciable asset for \$1500. The asset had been purchased for \$2000 a few years earlier. The farmer had claimed \$700 of depreciation between the times of purchase and sale. What is the taxable realized gain?
 - a \$200
 - b. \$500
 - c. \$700
 - d. \$800
- Which of the following is least likely to impact the breakeven rate to charge by a custom combine operator?
 - a purchase price of the combine
 - b grain prices
 - c. fuel costs
 - d repair costs

25.	The terms additional and incremental are usually associated with which following economic concept?							
	a.	total						
	b	average						
	C	marginal						
	đ.	opportunity		v.				
26	Wha	at has increased for a firm whose		as decreased?				
	a.	total assets less than total lial						
	b .	current assets more than curr						
	C.	current assets less than curre	nt liabilities					
	d.	debt						
27	If a p	producer's debt to asset ratio dec	creases, the pr	oducer's				
	a.	X #						
	Ъ.	b. net cash flow has decreased						
	C	long-term credit riskiness ha						
	d.	total asset value has decrease	ed					
28	The	premium of an option is also kn	own as the:					
	a	strike price	C .	basis				
	b	prepaid for the option	d.	extra profit received				
29.			nd for a comr	nodity is most likely to determine wha				
	for a	producer of that commodity?						
	\mathbf{a} .	price received	C	profits				
	Ъ.	net cash flow	d.	costs of production				
30.	A le	gal claim on the property of ano	ther as securit	y for a loan payment is called:				
	a	a lien						
	b .,	a lease						
	C.	a mortgage						
	. d.	an annuity						
31.		ch of the following would likely numers?	increase the	demand for beef at the retail level by				
	\mathbf{a}	decrease in consumer income						
	b	decrease in the retail price of	-					
	C .,	increase in the retail price of	- ,					
	\mathbf{d}_{\cdot}	decrease in advertising expen	nditures spent	on beef products				

32.	A tax deduction allowed for using up a natural resource by mining or drilling is called	1:
	a depreciation	
	b. a depletion allowance	
	c an investment tax credit	
	d a tax shelter	
33.	Money that must be put up (deposited) in order for a person to buy an item is often ca	lled
	this type of money:	
	a collateral	
	b fast	
	c lien	
	d. good faith or earnest	
34	A cooperative business is typically different from other types of businesses in that a	
	cooperative is:	
	a nonprofit	
	b investor owned	
	c user owned	
	d. incorporated	
35.	A firm that has positive profits and negative cash flows has:	
	a cash 'in' flows greater than cash 'out' flows	
	b noncash revenues greater than noncash costs	
	c made an error in calculating either profits or cash flows	
	d both 'a' and 'b' are true	
36.	Which of the following costs is likely to be the largest for a business?	
	a financial	
	b opportunity	
	c cash	
	d economic	
37.	How sensitive or responsive consumers are to changes in some demand factor such as	
	price is known as a measure of:	
	a elasticity c well being	
	b tastes d profitability	
38	Renting new machinery is essentially the same as:	
	a buying new machinery	
	b borrowing new machinery	
	c. leasing new machinery	
	d renting land	

39.	Risk	s is usually due to:			
	a .	predictability of events			
	b	uncertainty of events			
	C	high prices			
	d.	low prices			
40.	A g	rain farmer who has signed an agree	ement with	an elevator to deliver corn in	three
	mon	oths at a fixed price has entered into	this type of	of a contract:	
	$\mathbf{a}_{\cdot\cdot}$	forward price			
	b	backward price			
	C	basis			
	d.	hedge			
41	Hed	gers usually take on this type of risi	k:		
	a	cash price			
	b	premium			
	C.	basis			
	d.	market outlet			
42.	On a	a balance sheet, total assets:	•		
	a.	= total liabilities			
	b	= net worth			
	C.	= total liabilities + owners' equi	ty		
	d.	= fixed assets + intermediate ass	sets		
43		years from today, \$2 would be wo	rth \$2.33 i	f the relevant interest rate is 8'	% The
	\$2.3	3 is known as the:			
	a	future value			
	b	present value			
	C .	compound interest factor			
	d	risk premium			
44	Solv	ency is the ability to:			
	a	dissolve assets	C.	make a short-term profit	
	b .	pay long-term debts	d	sell the business	
45	A gr	ain farmer who rents land and does	so with ar	agreement to pay the land ov	vner a
	perce	entage of the harvested crop has en	tered into t	his type of lease:	
	a	cash			
	b	noncash			
	C.	crop share			
	d	forward contract			

46.	Which	of the following is usually regarded as the second step in a systematic, scientific
	decisio	on making process?
	a	identify alternatives and collect information

b. evaluate alternatives

c take action

d identify the problem (or the need to decide)

- Hedging with futures contracts normally reduces which of the following 'risks' for a producer:
 - a price
 - b production
 - c. profit
 - d basis
- 48 A partial budget is one that:
 - a is partially completed
 - b. evaluates the profitability of a business change
 - c covers income and expenses for part of a year
 - d excludes noncash expenses
- If a farmer pays off a loan in full, one component of the loan payment is the amount borrowed which is also known as the:
 - a present value
 - b interest
 - c collateral
 - d principal
- Assume an item costs \$200 this year. If the price of this item increases 15% between this year and next year, what will the item cost next year?
 - a \$30
 - b. \$215
 - c \$300
 - d \$230

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PROBLEM SECTION (200 pts.)

Select the best answer (5 pts. each). Code your answers on the answer sheet provided. Be sure to erase completely any answers that you change.

Section A: Financial Statement Analysis (50 pts.) Using the attached ending net worth statement (balance sheet) and net farm income statement, answer the following questions.

What is the estimated value of this farm's cost value net worth on Jan 1, 200	1.	What is the estimated	value of this	farm's cost	value net worth	on Jan 1	.2004?
-------------------------------------------------------------------------------	----	-----------------------	---------------	-------------	-----------------	----------	--------

- a. \$1,229,415
- b. \$1,492,550
- c \$2,200,295
- d. \$1,208,227

2. The difference between <u>current liabilities</u> and <u>fixed liabilities</u> is:

- a current liabilities are owed on the day the statement is made out, fixed liabilities were owed in the past
- b. current liabilities are not past due, fixed liabilities are
- c current liabilities are for loans used to purchase current assets
- d current liabilities are due to be paid off in less than a year, fixed liabilities will be repaid over a longer period of time
- 3. Using 'market' values, the total debt to total asset ratio is:
 - a. .39

c. 2.54

b. 1.57

d. ..44

4. Why is the market value of machinery and equipment higher than its cost value?

- a market value includes leased equipment as well as owned
- b. machinery has been depreciated faster than its estimated sale value has decreased
- c. market values are equal to the original cost of the machinery
- d. someone made a mistake!
- 5. By how much has this farm increased its market value net worth over last year?
 - a. \$21,188
 - b \$1,370,680
 - c. \$1,492,550
 - d. \$121,870

6. What is the purpose of the 'Income Adjustments' section of the Net Farm Income Statement? to include the value of expenses incurred but not yet paid in cash a. **b**.. to include the value of crops and livestock that have been produced but not sold to subtract out income taxes that will have to be paid C. d. to include only income received in cash 7. "Agricultural program payments" come from: The FFA a.. **b**.. Local cooperatives Iowa State University The U.S. Department of Agriculture d. 8 From the Net Farm Income Statement, calculate net cash farm income for the past year a. \$638,321 \$523,912 **b**.. \$114,409 C. d. \$80,423 9. Net farm income from operations for 2003 was: \$645,489 a. \$65,424 **b**.. C. \$80,424 d. \$114,409 Capital gains or losses could result from selling: 10 sovbeans a b. feeder pigs milk C. d. machinery Section B. Cash Flow Analysis (50 pts.) Use the attached <u>cash flow budget</u> projection to answer the questions below. 11. How much cash on hand did this farm have at the beginning of the year?

\$48,787

\$41,295 \$19,597

\$163,691

b..

c. d.

12	In ho	w many periods is this farm pro	jected to show a	posi	tive net cash flow in the			
	a	one						
	а b							
		two three						
	c d	four						
	u.	TOUL						
13.	In wl	nich period does this farm projec	et the largest total	cas	sh outflows for all purpose			
	a	January-February						
	b	March-April						
	C	May-June						
	d	November-December			•			
14	Appr	oximately, how many dollars w	ill this farm need	to t	oorrow in January-Februa			
	have an ending cash balance of at least \$1,000 for that period?							
	a	\$85,560						
	b	\$86,560						
	C	\$105,222						
	$\mathbf{d}_{\cdot\cdot}$	none						
15	Acco	rding to this example cash flow	budget, when is	this	farm's cash rent due?			
	a.	all in the spring	•					
	b	all in the fall						
	C.	half in the spring, half in the	fall		•			
	\mathbf{d}	monthly						
16.	In wl	nich period will this farm have to	o borrow the mos	t or	erating loan money?			
	a	JanFeb	C.	•	May-June			
	b	Mar -April	đ	,	NovDec			
17	Acco	rding to this budget, the farm's	net income for the	e co	oming year is expected to			
	a	positive						
	b	negative						
	c.	zero						
	d	cannot tell						
18.	Whic	h of the following items is inclu	ided in a cash flor	w.b	udget but does not appear			
		arm income statement?						
	a	wages paid to hired labor						
	b .	value of crop inventory not so	old yet					
	C.	principal payments on long-te						
	$\mathbf{d}_{\cdot \cdot}$	depreciation						

19.			arm project a positive cash balance at the end of the first period, erating loan funds?
	a.	sell crops earli	
	b.,	pay real estate	······································
•	C.	* •	iving expenses
	d.		rice used to value its beginning crop inventory
			<i>5</i>
20	This fa	arm's operating	loan balance at the end of the year will probably be
	than at	t the beginning	of the year.
	a	higher	
	b	lower	
	C	the same	
	d	can't tell	
Sectio	n C:	Budgeting an	d Investment Analysis (50 pts.)
21	Calcul	ate the gross in	come per dairy cow given the following production rates and prices:
	Milk s	ales:	20,000 lb. per year @ \$14 per cwt
		ow sales:	.3 head weighing 1,400 lb. @ \$.50 per lb.
	Dairy		9 head @ \$200 per head
	a .	\$280,390	
	b	\$3,680	
	C.	\$3,700	
	d.	\$3,190	
22	Which	source of incor	me would be different if replacement heifers were raised from the
		istead of purcha	
	a	milk sales	
	b	cull cow sales	
	C	dairy calf sale	
	d.	all of them	

The following information is used for questions #23 through #26.

You are considering buying a new grain combine and want to calculate annual costs (fixed and variable) of owning it for 10 years. You have the following information.

Capacity 3 acres per hour Interest rate = 6% Repairs annually (% of purchase price) 1% Years of ownership expected 10 Fuel used per acre 6 gallon Fuel price per gallon \$1.10 Purchase price \$180,000 Salvage value expected after 10 years \$50,000

- 23. How much is the annual depreciation cost for the combine?
 - a. \$18,000
 - b. \$23,000
 - c. \$13,000
 - d. \$11,500
- How much is the annual interest (opportunity) cost for the combine based on its average value during its 10-year life?
 - a. \$6,900
 - b. \$10,800
 - c. \$1,380
 - d. \$3,900
- 25 How much is the expected fuel cost per year if the combine is used on 2,000 acres per year?
 - a. \$2,200
 - b. \$1,200
 - c. \$1,320
 - d. \$.66
- 26 If the wage for the combine operator is \$12 per hour, then the labor cost per acre for combining is?
 - a. \$4.00
 - b. \$12.00
 - c. \$36.00
 - d. \$.75

Refer to the attached 'Dryland Barley' budget to answer questions 27 through 30.

- 27 How much are the projected total receipts per acre in this budget?
 - a. \$2.14
 - b. \$83.46
 - c. \$8.32
 - d. \$91.78
- 28. What is the budgeting unit for this barley budget?
 - a. 1 bushel
 - b 1 acre
 - c. \$1
 - d. 1 hour
- What is the break-even yield per acre of barley necessary to cover the total costs (subtract other income from total costs first)?
 - a. \$43.4 bu/acre
 - b. \$39.5 bu/acre
 - c. \$2.38 per bu.
 - d. \$2.17 per bu...
- 30 Based on this budget, would you recommend growing barley or leaving the land idle?
 - a. Grow barley
 - b Leave it idle
 - c. Cannot tell from the budget
 - d No clue

Section D: Marketing (50 pts.)

- Assume on March 20, Izza Farmer hedged some future (November 1) soybean sales using the Nov. Soybean futures contract at \$7.70. Izza had to pay a commission fee of \$0.02/bu, and expects the local soybean basis to be \$0.25/bu, on November 1. Izza can expect to receive what net price for the 'hedged' soybeans after commissions?
 - a. \$7.70
 - b. \$7.45
 - c. \$7.47
 - d. \$7.43
- Which of the following would most likely result in a farmer receiving a <u>lower than</u> expected net corn price as a result of having hedged with futures?
 - a. corn basis turns out to be wider than expected (\$0.30 versus \$0.20)
 - b. cash corn prices decrease after hedge is placed
 - c. corn futures prices decrease after hedge is placed
 - d cash corn prices increase after hedge is placed

33. While hedging, which of the following would Izza (see question #31) most likely do on Nov. 1 when he/she lifts the hedge? sell November soybean futures sell cash soybeans and buy November soybean futures **b**. buy November soybean futures C. buy March soybean futures and sell Nov. soybeans futures $\mathbf{d}_{\cdot \cdot}$ 34. Production, market (or price), financial, human health, and legal are different types of: risks **b**.. expenses C. resources đ. enterprises 35. If Izza (see question #31) wanted to hedge against a soybean price decline using options, Izza would most likely: sell Nov. Soybean put options a. buy Nov. Soybean call options b. buy Nov. Soybean put options C. sell Nov. Soybean call options d. 36. The 'premium' on an options contract is: the cost of buying the contract a. the cost of selling the contract **b**.. the extra price one can expect to receive over a standard futures contract C. d. the premium quality of product required for delivery 37. Which of the following actions is most likely taken to deal with price risks in marketing: purchase multiple peril crop insurance a b. enter into a forward contract on finished hogs lease instead of purchase equipment C. d crop share rent instead of cash rent 38. If a farmer sells 4,000 bushels, 5,000 bushels, and 6,000 bushels of soybeans at \$7.20, \$7.40, and \$7.60 respectively, what is the average price per bushel received by this farmer? a. \$7.40 b \$7.50 \$7.43 C. d. \$7.53

- The public announcement of discovery of a cow with 'Mad Cow' disease in the U S in December 2003 resulted shortly thereafter in live cattle futures declining the maximum allowable amount known as:
 - a. the basis
 - b. the margin
 - c. the premium
 - d the limit
- What is the breakeven price per bushel for a corn producer who has \$200 per acre operating costs and \$90 per acre fixed costs if the farmer's projected yield is 180 bushels per acre?
 - a. \$0.50
 - b. \$1.11
 - c. \$1.61
 - d \$0.62

Problem Section Attachments

Ending Net Worth Statement

Name FFA Farm			Date	01/01/04
Farm Assets	Cost Value	Market Value	Farm Liabilities	Market Value
			Accounts payable (Sched, N)	29,540
Checking and savings accounts	19,597	19,597	Farm taxes due (Sched. O)	0
Crops held for sale/feed (Sched. A)	285,360	285,360	Current notes and credit lines (Sched. P)	163,691
Investment in growing crops(Sch. B)	0	0	Accrued interest - short (Sched, P)	9,216
Commercial feed on hand (Sch. C)	7,600	7,600	- fixed (Sched. Q)	44,169
Prepaid expenses (Sched. D)	12,750	12,750		
Market livestock (Sched. E)	157,563	157,563	Due in 12 months - fixed (Sched. Q)	60,912
Supplies on hand (Sched. F)	0	0		· · · · · · · · · · · · · · · · · · ·
Accounts receivable (Sched. G)	0	0	Other current liabilities	
Other current assets		0		
		0		
Total Current Assets	\$482,870	\$482,870	Total Current Liabilities	307,528
Unpaid coop. distributions(Sch. H)	14,435	14,435	Notes and contracts, remainder (Sched. Q)	663,352
Breeding livestock (Sched. I)	49,125		Machinery	333,502
Machinery & equipment (Sched. J)	321,132	500,000	Land	
Buildings/improvements (Sched. K)	452,734	617,000		
Farmland (Sched. L)	880,000	800,000		
Farm securities, certificates(Sch. M)	0	0		·
Other fixed assets		0	Other fixed liabilities	
Total Fixed Assets	1,717,426	1,980,560	Total Fixed Liabilities	663,352
a. Total Farm Assets	2,200,295	\$2,463,430	b. Total Farm Liabilities	\$970,880
c. Farm Net Worth (a - b)		\$1,492,550	Working Capital	\$175,342
d. Farm Net Worth Last Year	1,208,227	1,370,680	Current Asset-to-Debt Ratio	
e. Change in Farm Net Worth (c - d)			Total Debt-to-Asset Ratio	
Personal Assets			Personal Liabilities	
Bank accounts, cash, savings			Credit card, charge accounts, other loans	
Automobiles, boats, etc.			Automobile loans	
Household goods, clothing			Accounts payable, taxes due	
Stocks, bonds, etc.			Other loans	
Real estate			Real estate, other long-term loans	<u> </u>
f. Total Personal Assets		0	g. Total Personal Liabilities	0
h. Total Personal Net Worth (f - g)		0		
i. Total Net Worth, Market Value (c +	· h)		Personal Debt-to-Asset Ratio	0%

Net Farm Income Statement

Name

Mayer Farm

Year

2003

Income							
Cash Income		Income Adjustments	Ending	Beginning			
Salesof livestock bought for resale		Crops held for sale or feed (Sched. A)	285,360	298,485			
Sales of market livestock, grain, etc.	559,679	Market livestock (Sched. E)	157,563	136,270			
Cooperative distributions paid		Accounts receivable (Sched. G)	0	0			
Agricultural program payments	48,790	Unpaid coop, distributions (Sched, H)	14,435	14,435			
Crop insurance proceeds		Breeding livestock (Sched. I)	49,125	50,625			
Custom hire income		Subtotal of Adjustments	506,483	499,815			
Other cash income	5,672		b	С			
Sales of breeding livestock	24,180	d. Value of Home Used Production	· · · · · · · · · · · · · · · · · · ·	500			
a. Total Cash Income	\$638,321	e. Gross Farm Revenue (a + b - c + d)	,	\$645,489			

		Expenses		
Cash Expenses		Expense Adjustments	Beginning	Ending
Car and truck expenses	1,894	Investment in growing crops (Sched. B)	5,850	. 0
Chemicals	40,460	Commercial feed on hand (Sched, C)	7,000	7,600
Conservation expenses		Prepaid expenses (Sched. D)	0	12,750
Custom hire	0	Supplies on hand (Sched. F)	0	0
Employee benefits	1,780		Ending	Beginning
Feed purchased	104,310	Accounts payable (Sched. N)	29,540	45,600
Fertilizer and lime	25,500	Farm taxes due (Sched. O)	0	0
Freight, trucking	12,290	Accrued interest (Sched. P, Q)	53,385	54,353
Gasoline, fuel, oil	23,650	Subtotal of Adjustments	95,775	120,303
insurance	16,500		g	h
Interest paid	85,511	i. Depreciation (Sched. J, K)		80,681
Labor hired	28,000	i. Gross Farm Expenses (f + g - h + i)		\$580,065
Pension and profit-share plans				
Rent or lease payments	85,900	k. Net Farm Income From Operations (e - j)		
Repairs, maintenance	12,333		<u> </u>	
Seeds, plants	18,560	l. Sales of Farm Capital Assets		15,000
Storage, warehousing		m. Cost Value of Items Sold (Sched. J, K, L)		0
Supplies purchased	2,375	n. Capital Gains or Losses (I - m)		15,000
Taxes (farm)	8,980			
Utilities	21,386	o. Net Farm income (k + n)		\$15,000
Veterinary fees, medicine, breeding	11,623			
Other cash expenses	4,560			
Livestock purchased	18,300			
f. Total Cash Expenses	\$523,912			

March Mayer Maye	CASH FLOW BUDGE!							
Time Vear Each Lange April July September Nover August Nover	ShTlow							
National Processing	CASH INFLOWS	Whole	- January-	March-	May-	-VinC	September	November
Oct Income 294,300 47,387 49,881 49,881 52,375 49,881 49,881 49,881 49,881 49,881 49,881 49,881 49,881 49,881 49,881 49,881 49,881 49,881 49,881 49,881 49,881 49,881 49,881 40,000 37,500 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Operating	Year	February	April	June	August	October	December
of crops 307,500 0 270,000 37,500 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <th>Livestock income</th> <th>294,300</th> <th>47,387</th> <th>49,881</th> <th>49,881</th> <th>52,375</th> <th>49,881</th> <th>44,893</th>	Livestock income	294,300	47,387	49,881	49,881	52,375	49,881	44,893
crop income 0 0 8,333 25,000 Negyments Copyon 0 8,333 25,000 Negyments 0 0 0 0 0 0 Permits, interest 0 0 0 0 0 0 0 rents, interest 0 0 0 0 0 0 0 of Capital Assets 0 0 0 0 0 0 0 0 of Capital Assets 0 0 0 0 0 0 0 0 cing 0 0 0 0 0 0 0 0 0 0 cing 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Sales of crops	307,500	0	0	270,000	37,500	0	0
Payments S0,000 Company Comp	Other crop income	0	0	0	0	0	0	0
m hire income 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <	USDA payments	20,000	0	8,333	0	8,333	25,000	8,333
rentls, inferest 6,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000	Custom hire income	0	0	0	0	0	0	0
of Capital Assets 6,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000	Farm rents, interest	0	0	0	0	0	0	0
circle Capital Assets 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Other	000'9	1,000	1,000	1,000	1,000	1,000	1,000
cing Commons to receive 25,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 </td <td>Sales of Capital Assets</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td>	Sales of Capital Assets	0	0	0	0	0	0	0
new short-term loans to receive 25,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Financing							
cash Inflows 717,200 48,787 59,615 347,281 99,609 76,281 8 Cash Inflows 717,200 48,787 59,615 347,281 99,609 76,281 8 Cash Inflows 7 Cash Inflows 7 Cash Inflows March- May- July- September- Noven Pear ating 24,410 January- April June August October Decor 2er and lime 22,420 10,680 32,040 0 0 0 2er and lime 42,720 11,680 32,040 0 0 0 36,200 12,067 24,133 0 0 4,260 0 36,200 13,200 0 0 0 4,400 0 36,200 13,200 0 0 0 4,400 0 36,200 0 0 0 0 0 0 0 36,200 0 0 0 0 0	Total new short-term loans to receive New term loans to receive	25,000	00	00	20,000	0 0	00	25,000 0
Cash Inflows 717,200 48,787 59,615 347,281 99,609 76,281 8 COUTFLOWS Whole January- March- May- July- September- Nover- 20 Corber January- March- May- July- September- Nover- 24,410 February April June August October Decender 24,410 6,103 18,308 0 0 0 0 ides 32,040 0 0 0 0 4,260 insurance 4,260 0 0 0 4,400 4,400 if uel 13,200 0 0 0 4,400 4,400 m hire or machine rental 0 0 0 0 0 0 cash costs per acre 10,200 1,700 1,700 1,700 1,700 1,700	Nonfarm Income	14,400	400	400	6,400	400	400	6,400
COUTFLOWS Whole sting January- March- May- July- September- Nover August July- September- Nover Decendancy April June August July- September- Nover Decendancy October Decendancy April June August July- September- Nover Decendancy October Decendancy October Decendancy October Decendancy April June August July- September- Nover Decendancy October Decendancy Octob	Total Cash Inflows	717,200	48,787	59,615	347,281	609'66	76,281	85,627
Court Lows Whole August January- March- May- July- September- Nover April June August July- September- Nover Decendance July- September- Decendance Decendance zer and lime 42,720 10,680 32,040 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 4,260 0 0 4,400 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0								
zer and lime 24,410 6,103 18,308 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CASH COLFECTION	vvnoie	January- Eobriton	March-	May-	July-	September-	November-
zer and lime 42,720 10,680 32,040 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Seed	24.410	6.103	48.308	C Dispo		Ccoper	December
36,200 12,067 24,133 0 0 0 0 0 4,260 13,200 0 0 0 4,400 4,400 0 0 0 0 4,400 0 0 0	Fertilizer and lime	42,720	10,680	32,040	0	0	0	0
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Pesticides	36,200	12,067	24,133	0	0	0	0
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Crop insurance	4,260	0	0	0	0	4,260	0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Drying fuel	13,200	0	0	0	4,400	4,400	4,400
10,200 1,700 1,700 1,700 1,700 1,700	Custom hire or machine rental	0	0	0	0	0	0	0
	Other cash costs per acre	10,200	1,700	1,700	1,700	1,700	1,700	1,700
								- -

Purchased crops	0	0	0	0	0	0	0
Purchased feed	15,000	0 11,250	0 11,250	7,500 11,250	0 11,250	11,250	7,500
Health and veterinary	7,500	1,250	1,250	1,250	1,250	1,250	1,250
Marketing Other and and and and	9,000	1,500	1,500	1,500	1,500	1,500	1,500
Outer cash costs per nead	0	0	0	0	0	0	0
Real estate taxes	10,000	0	5.000	С	C	5 000	c
Cash rent	000'06	0	45,000	0	· c	000,0	45,000
Hired labor	30,000	5,000	2,000	2.000	5.000	2 000	5,000
Repairs and upkeep	13,000	4,333	1,444	1,444	1.444	1.444	2,000
Fuel and lubrication	10,000	833	2,500	1,667	1,667	2,500	833
Other fixed expenses	5,000	833	833	833	833	833	833
Equipment lease payments	3,500	0	0	0	0	3,500	0
Purchases of Capital Assets	30,000	30,000	0	0	0	0	0
Financina			¥P				
Accounts payable	29 540	29 540	c	c	c	((
Short term notes due	22,540	22,540		-	-	0 0	0
Term loan payments	139.375	9 420	66 750	> C	0 0 0 0 0	> c	00000
	2	0,720	00,130	o .	24,043	O	38,360
Nonfarm Expenditures							
ramily living expenses Nonfarm investments	30,000	5,000	5,000	5,000	5,000	5,000	5,000
	23,000	2,000	13,000	12,000	2,000	2,000	2,000
Total Cash Outflows	675,905	154,009	234,709	49,144	60,889	49,638	127,516
CITAMADO	14.0	-					
	vvnole	January-	March-	May-	July-	September-	November-
Net Cash Flow	41 295	(40£ 222)	API 1	onne 200 424	August	October	December
+Beginning cash balance	19 597	19 597	(85,560)	(260,653)	20,719	26,644	(41,889)
+Interest earned on cash balance	789	65	(000,00)	(200,002)	37,463 425	70,328	103,226
+New operating loap received	.1				CZ	407	344
-Repayment of operating loan	_ <u></u>						
-Interest paid on oper. loan balance	<u> </u>	C	_ 				
≕Ending cash balance	61.681	(85.560)	(260 653)	37 483	76 328	103 226	2782
be posi	tive)	(222/22)	(200(200)	,	0,00	03,440	50,
OPERATING LOAN BALANCE							
Beginning Balance	163,691	163,691	163,691	163,691	163,691	163,691	163,691
Enuing balance	163,691	163,691	163,691	163,691	163,691	163,691	163,691

Dryland Barley Enterprise Budget - Grain Only

1200 acres farmed, 1040 acres for this budget

OKLAHOMA COOPERATIVE EXTENSION SERVICE

PROPYGETON						Total		
PRODUCTION	Units		Price	Quantity		\$/Acre	You	ır Value
Barley	$\mathbf{B}\mathbf{u}$.	\$	2 14	39	\$			
Small Grain Pasture	Acre	\$	100	0	\$	-		
Other Income	Acre	\$	8 32	1	\$	8.32		
I otal Receipts					\$		\$	
OPERATING INPUTS	Units		Price	Quantity		\$/Acre	Yoı	ır Value
Barley Seed	Bu /acre	\$	580	2.00	\$	11 60		
Fertilizer	Acre	\$	13.88	1	\$	13 88		
Custom Harvest	Acre	\$	_	0	\$	-		
Pesticide	Acre	\$	4 60	1	\$	4.60	·	
Crop Insurance	Acre	\$	198	1	\$	1 98		
Annual Operating Capital	Dollars		8.80%	35.36	\$	3 11		
Machinery Labor	Hrs	\$	6.50	1.01	\$	6 57		
Irrigation Labor	Hrs.	\$	_	0	\$	-		
Custom Hire	Acre	\$	5.00	1	\$	5 00		
Machinery Fuel, Lube, Repair	Acre	\$	21.44	1	\$	21 44		
Irrigation Fuel, Lube, Repair	Acre	\$	-	. 0	\$			
Rent	Acre	\$	_	0	\$	-		
Other Expense	Acre	\$	-	0	\$	_		
Total Operating Costs				-	\$	68.18	\$	68.18
Returns Above Total Operating	Costs				\$	23.60	<u> </u>	23.60
FIXED COSTS	Units		Rate			\$/Acre		r Value
Machinery/Irrigation	\$/value							
Interest at	Dollars		9.10%		\$	9.84		
Taxes at	Dollars		1 00%		\$	1.70		
Insurance	Dollars		0.60%		\$	0 65		
Depreciation	Dollars				\$	12.43		
Land	\$/acre	\$	-		•			
Interest at	Dollars		0.00%		\$	_		
Taxes at	Dollars		0.00%		\$			
Total Fixed Costs				-	\$	24.62	\$	24.62
Total Costs (Operating + Fixed)				-	\$	92.80	\$	92.80
Returns Above All Specified Cost	s				\$	(1.02)	\$	(1.02)
				·	_	(2.02)	<u> </u>	(2.02)

Team Participation Event (100 pts.)

2004 Iowa Vo-Ag/FFA Farm Business Management Career Development Event

As a group (or team), you are to collectively select the best answer to each question below (10 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 <u>as a group</u> 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.

- Which of the following is <u>NOT</u> an Iowa farm ownership/operation trend reported by Iowa State University for the period 1982-2002:
 - a a decrease in the percent of acres operated by the owner
 - b. an increase in the percent of acres owned by people aged 65 and over
 - an increase in the percent of leases that are of the crop-share type
 - d an increase in the percent of leases that are of the cash-rent type
- 2 Tax advantages of passing land on to heirs through an estate and less money required to expand a farming operation are two advantages of:
 - a leasing versus owning land
 - b cash-rent lease versus crop-share lease
 - c borrowing money from relatives versus borrowing money from a bank
 - d. farming in Iowa versus farming in Wyoming
- Returns to farmland ownership as reported by Iowa State University are of the following two forms:
 - a before tax and after tax
 - b. leasing and owning
 - c. short-run and long-run
 - d cash (estimated by cash rental rates) and the annual change in the market value of farmland

From the information below, what was the total percentage return to Iowa farmland ownership for the year 2002 as reported by Iowa State University?

-		.,
<u>Year</u>	Cash Rent	Land Value
2002	\$116	\$1980
2001	\$114	\$1900
5.9%		
4.2%		
10.1%		

- 5. On an annual percentage basis, land values in Iowa:
 - a. increased the most 1973-1980 and decreased the most 1982-1987
 - b. increased the most 1980's and decreased the most 1990's
 - c increased the most 1990's and decreased the most 1970's
 - d increased the most 1982-1987 and decreased the most 1973-1980
- Assume the average Iowa market land value for 2003 is \$2079. If this is 5% greater than the corresponding value for 2002, what was the average Iowa market land value in 2002?
 - a. \$2183

69.6%

a...

c.

- b. \$1975
- c. \$1980
- d. \$2038
- For the past 20 years in Iowa, whole farm cash rents per acre have consistently been 6-9% of:
 - a crop-share lease values
 - b net farm income per acre
 - c gross farm income per acre
 - d. average market land values
- Suppose a person who has \$250,000 to invest comes to your team for advice. This person is considering buying Iowa farmland, or apartment buildings, or stocks of business firms. In particular, this person is interested in knowing more about the past returns to investing in Iowa farmland. Which of the following would be a true statement about the past annual returns to Iowa farmland ownership for the years 1970-2002 that you could tell this investor:
 - a they have never been negative during this time period
 - b. they have never been less than the returns on stock ownership
 - they have varied greatly depending on when farmland was purchased
 - d they have been remarkably constant regardless of when farmland was purchased

On October 15,2003, Iowa State University projected the following Iowa average soybean prices by quarter (=Q) for 2004:

<u>Qtr</u>	<u>Price</u>
1	\$6.70
2	\$6.55
3	\$6,40

Suppose a soybean farmer with 200 acres of soybeans in 2003 (projected yield = 40 bushels/acre) has decided to sell all of his/her beans in the second quarter of 2004. What would be his/her expected cash receipts from soybean sales (excluding any government payments)?

- a. \$53,600
- b. \$52,400
- c. \$51,200
- d. \$52,267
- Refer to the 2004 projected soybean prices (by ISU) and farmer production information above in question #9. What is your estimate of the net economic benefit to this farmer of selling all of his/her 2003 soybean crop in the 1st quarter of 2004 versus selling half of the crop in the 2nd quarter and half in the 3rd quarter?
 - a. \$1800
 - b more than \$1800

1

- c less than \$1800
- d there would be a net loss (no positive net economic benefits)