

1) (10 pts. total) Below is a simplified farm Balance Sheet.

a) (2 pts.) Use the information given and your knowledge of the relationships among Balance Sheet entries to fill in the **four** missing cells and then answer the questions below.

BALANCE SHEET	1/1/2016	1/1/2015		1/1/2016	1/1/2015
Current Assets	1,400,000		Current Liabilities	600,000	
Non-Current Assets		3,400,000	Non-Current Liabilities	2,400,000	2,300,000
			Total Liabilities	3,000,000	2,900,000
			Equity	1,800,000	
Total Assets	4,800,000	4,900,000	Total Liabilities & Equity		4,900,000

b) (2 pts.) Based on this Balance Sheet, what is the Current Ratio on 1/1/2016?

c) (2 pts.) Based on this Balance Sheet, what is the Debt to Asset Ratio on 1/1/2016?

d) (4 pts.) Suppose you renovate your milking parlor on your farm at a cost of \$100,000. To pay for it you take \$50,000 from your cash savings and \$50,000 comes as a no interest loan from your parents that you have to pay back in 3 years. The column **Before** in the balance sheet below gives the financial data for before you make the purchase. For each entry in the **Before** column, write in the **After** column the new value that applies after you complete the purchase.

BALANCE SHEET	Before	After		Before	After
Current Assets	200,000		Current Liabilities	100,000	
Non-Current Assets	500,000		Non-Current Liabilities	300,000	
			Total Liabilities	400,000	
			Equity	300,000	
Total Assets	700,000		Total Liabilities & Equity	700,000	

2) (11 pts. total) Below is a simplified farm Income Statement.

a) (2 pts.) Use the given information to fill in the **three** missing cells.

INCOME STATEMENT		1/1/2015 to 1/1/2016	
Crop Sales			<input type="text"/>
Livestock/Dairy Sales		550,000	
	Total Revenue		1,000,000
Operating Costs		950,000	
Interest Expenses		150,000	
	Total Costs		<input type="text"/>
	Net Farm Income from Operations		<input type="text"/>
Unpaid Labor and Management		100,000	
	Net Farm Income		-200,000

Use the Income Statement above and the Balance Sheet in Question 1 to answer the questions below. Show how you calculate your answers for potential partial credit.

b) (2 pts.) What is this farm's Return on Assets? What is this farm's Rate of Return on Assets?

c) (2 pts.) What is this farm's Return on Equity? What is this farm's Rate of Return on Equity?

d) (2 pts.) What is this farm's Operating Profit Margin Ratio (i.e. Profit Margin)?

e) (3 pts) The income statement above shows a net farm income loss of \$200,000, which includes paying \$100,000 to the owner/manager for unpaid labor & management. Briefly explain where the \$100,000 comes from in terms of the farm balance sheet?

3) (18 pts. total) Briefly and concisely answer each question below.

a) (2 pts.) Do most farms use cash or accrual accounting for filing taxes?

b) (2 pts.) Suppose you planted and harvested corn in 2014, but sold it in 2015. If you claim the income on your 2014 taxes, is this cash accounting or accrual accounting?

c) (2 pts.) Suppose you bought seed in November 2014 to plant in May 2015. If you deduct the cost on your 2015 taxes, is this cash accounting or accrual accounting?

d) (3 pts.) You work as lead farm manager for a large farm. Would you use cash or accrual accounting to demonstrate your managerial performance over the last three years? Briefly explain why.

e) (3 pts.) If you were a banker analyzing a farmer's loan application to build a milking parlor, would you use a market basis or a cost basis to value the farm's assets? Briefly explain why.

f) (3 pts.) Suppose your dairy farm has a debt to asset ratio of 0.90 (90%). Explain why this is or is not a problem.

g) (3 pts.) Suppose your dairy farm has a current ratio of 1.3 (130%). Explain why this is or is not a problem.

4) (4 pts. total) You buy a truck to haul grain for \$70,000 with a useful life of 4 years.
a) (2 pts.) Fill in the table below using Straight Line Depreciation for this truck assuming a \$10,000 salvage value. Show your work.

Year	Depreciation During Year	Value at Year End
1		
2		
3		
4		

b) (2 pts.) Fill in the table below using 200% Declining Balance Depreciation for this truck for years 1 and 2 only. IGNORE SALVAGE VALUE. Show your work.

Year	Depreciation During Year	Value at Year End
1		
2		
3	xxxx	xxxx
4	xxxx	xxxx

5) (8 pts.) Suppose that in June of 2015 you paid \$10,000 for a bull and have been and will be depreciating it for tax purposes using the tax table below.

a) (2 pts.) Enter the depreciation claimed in 2015 and that will be claimed 2016 in the table.

Year	Calendar Year	Depreciation Rate	Depreciation Claimed
1	2015	25.00%	
2	2016	30.00%	
3	2017	18.00%	
4	2018	11.37%	
5	2019	11.37%	
6	2020	4.26%	

b) (2 pts.) What will be your income tax basis in the bull at the end of 2016?

c) (2 pts.) If you sold the bull in December of 2016 for \$6,000, how much gain or loss would you report on your income tax return?

d) (2 pts.) For tax purposes, bulls are breeding livestock. Consider ordinary income tax, self-employment tax, and capital gains tax, which one or ones is this gain or loss subject to?

6) (11 pts.) Suppose you bought a tractor for \$100,000 in 2013 and chose the Section 179 election for depreciation.

a) (2 pts.) Briefly explain how this affected your taxes, if at all, in 2013.

b) (2 pts.) What is your income tax basis in the tractor at the end of 2016?

c) (2 pts.) If you sold the tractor in December of 2016 for \$30,000, how much gain or loss would you report on your income tax return?

d) (2 pts.) Considering ordinary income tax, self-employment tax, and capital gains tax, which one or ones is this gain or loss subject to?

e) (3 pts.) Briefly explain a long-term tax benefit of choosing the Section 179 election for depreciating purchased assets (like the tractor) that occurs when the asset is sold.

7) (22 pts. total) Provide short answers to each of the following questions. Mike and Ike own a farm, with all assets owned as marital property under Wisconsin's marital property law. Among their assets is land currently worth \$1,800,000 with a \$300,000 income tax basis. Use this information to answer each question below. **Briefly explain each answer.**

a) (2 pts.) Suppose Mike and Ike gave the land to Tarzan. If gift taxes are due, who would pay them, Mike and Ike or Tarzan? Based on current tax laws, would gift taxes be due?

b) (2 pts.) If Tarzan sold the land for \$1,800,000 after Mike and Ike gave it to him, how much gain or loss would Tarzan have to report as a result of the sale?

- c) **(2 pts.)** If Mike and Ike sold the land to Tarzan for \$1,800,000, how much gain or loss would Mike and Ike have to report as a result of the sale?
- d) **(2 pts.)** Considering ordinary income tax, self-employment tax, and capital gains tax, which one or ones is this gain or loss subject to?
- e) **(2 pts.)** Mike and Ike contribute the land to a General Partnership they have formed with Tarzan and the Partnership sells the land for \$1,800,000, how much gain or loss would the Partnership realize?
- i) **(2 pts.)** Would the Partnership pay income tax on the gain or loss?
- ii) **(2 pts.)** Instead of selling the land, the Partnership returns the land to Mike and Ike. Does the Partnership and/or Mike and Ike have to pay income tax due to this transfer?
- f) **(2 pts.)** If instead Mike and Ike contribute the land to an LLC in exchange for an ownership interest in the LLC and then the LLC sells the land for \$1,800,000, how much gain or loss would the LLC realize?
- i) **(2 pts.)** Would the LLC pay income tax on this gain or loss?
- ii) **(2 pts.)** Mike and Ike change their mind and instead of selling the land, the LLC returns the land back to Mike and Ike. Would the LLC and/or Mike and Ike have to pay income tax as a result of this transfer?
- g) **(2 pts.)** Mike dies, giving his interest in the land to Ike in his will, and then Ike gives the land to Tarzan. How much gain or loss would Tarzan have to report if he sold it for \$1,800,000?

8) (9 pts. total) Provide short answers to each question below.

a) (3 pts.) Which business entities discussed in class must file or register with the state?

b) (3 pts.) Which business entities discussed in class do not pay taxes on their income, but pass the income on to the owners who pay taxes?

c) (3 pts.) If you are a member of an LLC and another member of the LLC buys a tractor for the LLC on credit, could the lender seize your personal assets to pay off this debt? Briefly explain why/why not.

9) (7 pts.) True or False? Mark your answer based on material discussed in class.

a) T___ F___ Inventory changes are common non-cash revenues in farm accounting.

b) T___ F___ Most small farmers have other jobs to make a “good” living

c) T___ F___ Most of the beginning farmers we examined reported starting slow, using apprenticeships or having mentors help them.

d) T___ F___ Dairy grazing is a lower cost, lower output production system that seems to work for some farmers.

e) T___ F___ If you organize a farm as a C-corporation with relatives, you can be a shareholder, serve on the board of directors and be chief executive officer.

f) T___ F___ Large dairy farmers and environmentalist in northeastern WI are working together against the DNR to clean up manure contaminated wells.

g) T___ F___ The author of “Don’t let your children grow up to be farmers” has become famous, with a TED talk about his seaweed and oyster farm.