

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	12/31/2014	12/31/2013		12/31/2014	12/31/2013
Current Assets	1,800,000		Current Liabilities	700,000	
Non-Current Assets		3,200,000	Non-Current Liabilities	2,500,000	2,200,000
			Total Liabilities	3,200,000	2,800,000
			Equity	2,000,000	
Total Assets	5,200,000	4,700,000	Total Liabilities & Equity		4,700,000

b) (2 pts.) Based on this Balance Sheet, what is the Current Ratio on 12/31/2014?

c) (2 pts.) Based on this Balance Sheet, what is the Debt to Asset Ratio on 12/31/2014?

d) (4 pts.) For each item below, identify whether it is classified as a current asset, non-current asset, current liability or non-current liability **and briefly explain why.**

\$500,000 of corn stored on your farm for your milk cows

Tractor you bought for \$300,000 and completely depreciated using the Section 179 election

\$5,000 your neighbor owes you because you custom harvested his corn with your combine

\$50,000 you owe to your parents on a long-term no interest loan they gave you to start farming

2) (8 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		12/31/2013 to 12/31/2014	
Crop Sales			<input type="text"/>
Livestock/Dairy Sales		700,000	
Total Revenue		1,250,000	
Operating Costs		900,000	
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		100,000	

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)?

3) (6 pts. total) Briefly and concisely answer each question below.

a) You sell a tractor for \$100,000 that has been fully depreciated (\$0 basis) and use the money to buy \$100,000 of corn (ignore taxes). Explain how this transaction affects these measures:

a) (2 pts.) Your current assets and non-current assets

b) (2 pts.) Your current ratio

b) (2 pts.) Your debt to asset ratio and your equity

4) (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 2015 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 2014 taxes, is this cash accounting or accrual accounting?

d) (3 pts.) To demonstrate your ability as a farm manager, would you use cash or accrual accounting? Briefly explain why.

f) (3 pts.) Do banks typically use a market basis or a cost basis to value the land when used as collateral for a loan? Briefly explain why.

g) (3 pts.) Suppose your dairy farm has a debt to asset ratio of 0.10 (10%). Explain why this is or is not a problem.

g) (3 pts.) Suppose your dairy farm has a current ratio of 8.7 (870%). Explain why this is or is not a problem.

5) (4 pts. total) You buy a truck to haul grain for \$90,000 with a useful life of 4 years.

a) (2 pts.) Fill in the table below using Straight Line Depreciation for this tractor 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 150% 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

6) (12 pts.) Suppose that in February of 2014 you paid \$150,000 for a tractor and have been depreciating it for tax purposes using the tax table below.

a) (2 pts.) Enter the depreciation claimed in 2014 and that will be claimed 2015 in the table.

Year	Calendar Year	Depreciation Rate	Depreciation Claimed
1	2014	25.00%	
2	2015	21.43%	
3	2016	15.31%	
4	2017	10.93%	
5	2018	8.75%	
6	2019	8.74%	
7	2020	8.75%	
8	2021	1.09%	

b) (2 pts.) What will be your income tax basis in the tractor at the end of 2015?

c) (2 pts.) If you sold the tractor in December of 2015 for \$90,000, how much gain or loss would you report on your income tax return?

Rather than using the table in part a, suppose instead you chose the Section 179 election and deducted the full cost of the tractor for your 2014 taxes.

d) (2 pts.) What is your income tax basis in the tractor at the end of 2015?

e) (2 pts.) If you sold the tractor in December of 2015 for \$90,000, how much gain or loss would you report on your income tax return?

f) (2 pts.) Consider ordinary income tax, capital gain tax, and self-employment tax. Of these three taxes, which one or ones is this gain or loss subject to?

7a) (3 pts.) Briefly explain how buying an asset and choosing the Section 179 election, rather than using the standard IRS table for depreciating purchased assets, affects your taxes, if at all, in the year you purchase the asset.

7b) (3 pts.) Briefly explain a long-term tax benefit of choosing the Section 179 election for depreciating purchased assets that occurs when the asset is sold.

8) (22 pts. total) Provide short answers to each of the following questions. Mary and Mike own a farm, with all assets owned as marital property under Wisconsin's marital property law. Among their assets is land currently worth \$1,300,000 with a \$300,000 income tax basis. Use this information to answer each question below. **Briefly explain each answer.**

a) (2 pts.) If Mary and Mike sold the land to Jane for \$1,300,000, how much gain or loss would Mary and Mike have to report as a result of the sale?

b) (2 pts.) Consider ordinary income tax, capital gain tax, and self-employment tax. Of these three taxes, which one or ones is this gain or loss subject to?

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

d) (2 pts.) If Jane sold the land for \$1,300,000 after Mary and Mike gave it to her, how much gain or loss would Jane have to report as a result of the sale?

- e) **(2 pts.)** Mike dies, giving his interest in the land to Mary in his will, and then Mary gives the land to Jane. How much gain or loss would Jane have to report if she sold it for \$1,300,000?
- f) **(2 pts.)** Actually, Mike did not die, rather Mary and Mike contributed the land to a C-Corporation in exchange for ownership shares in the C-Corporation and the C-Corporation sold the land for \$1,300,000, how much gain or loss would the C-Corporation realize?
- i) **(2 pts.)** Would the C-Corporation pay income tax on the gain or loss?
- ii) **(2 pts.)** Instead of selling the land, the C-Corporation returns the land to Mary & Mike. Does the C-Corporation and/or Mary & Mike have to pay income tax due to this transfer?
- g) **(2 pts.)** If instead Mary and Mike contributed the land to an LLC in exchange for an ownership interest in the LLC and then the LLC sold the land for \$1,300,000, 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.)** Mary and Mike change their mind and instead of selling the land, the LLC returns the land back to Mary and Mike. Would the LLC and/or Mary and Mike have to pay income tax as a result of this transfer?

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

a) (3 pts.) Which business entities discussed in class do not legally need to 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 a partnership and your partner buys a tractor for the partnership on credit, could the lender seize your personal assets to pay off this debt? Briefly explain why/why not.

10) (5 pts.) True or False? Mark your answer based on material discussed in class.

- a) T___ F___ Depreciation is a common non-cash cost in farm accounting.
- b) T___ F___ According to the Dairy Carrie blog we discussed, greed and corporations are why dairy farms were getting bigger and she is clearly against it.
- c) T___ F___ Based on our discussion of beginning farmer arrangements, most specialist recommend a short-term, employee-employer relationship with incentives when a child first starts to farm with his/her parents.
- d) T___ F___ The Milk Source video we discussed was about how smaller dairy farms are better sources for milk because they generate less manure per cow.
- e) T___ F___ According to the “Farming a Flat Function” lecture in class, most farmers over use inputs like nitrogen fertilizer because they make mistakes.