Questions and Answers

Fundamentals of Financial Accounting and Analysis

6th Edition

Stephen H. Bryan, Ph.D.
TheAccountingOasis.com

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Q & A

Blank Worksheets

to accompany

Fundamentals of Financial Accounting and Analysis, 6th Ed.

by Stephen Bryan, Ph.D.

Preface

This document provides blank worksheets to accompany the questions and problems in the text, Fundamentals of Financial Accounting and Analysis (FFAA), 6th Edition, by Stephen Bryan, Ph.D.

FFAA 6th Edition has all of the solutions to the questions and problems in this document.

The process of writing out by hand the answers in these worksheets helps students internalize the concepts, definitions, methodologies, and techniques.

Comments and questions are always welcomed and appreciated.

Stephen H. Bryan, Ph.D.
TheAccountingOasis.com.
30 Stevens Lane
Walpole, New Hampshire 03608 U.S.A.

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Chapter 1 Q&A: The Language of Business

Purpose; Public Corporations; Standard Setters and Auditors

1. What is the purpose of financial accounting?

2. What is the name of the commission in the U.S. that oversees the standard setting process?

3. Describe briefly the two suppliers of outside, private financial capital, and what they want in return for that capital.

4. What is the difference between public and private financial capital?

5. How do lenders try to protect themselves in the event that the firms to which they have loaned capital are unable to pay interest and principal?

6. What is the definition of fraud?

7. Describe a major purpose of the Sarbanes Oxley Act (SOX) of 2002?

8. What are the three main profit-seeking entities in the private sector?

9. What is the essential difference between public and private corporations?

10. What is the significance of the phrase “other people’s money” in the context of corporations?

11. What do the initials PCAOB stand for, and what does this organization do?

12. Name the so-called "Big 4" accounting firms.

13. What do the initials IASB stand for, and what does this organization do?

14. What is an Exposure Draft and what is its purpose?

Basic Terminology and Methodology: Fundamental Equation; Journal Entries; Ledger; Balance Sheet; Income Statement; Retained Earnings; Cash Flow Statement; Closing the Books

15. What is the fundamental equation of accounting, and how does it reflect a stewardship model of an organization?

16. Name two perceived deficiencies of the fundamental equation of accounting.

17. What do the initials IPO and SEO stand for?

18. What is the "book of original entry"?

19. What is the purpose of the ledger?

20. What is the relationship between the journal and the ledger?

21. What is the relationship between the ledger and the balance sheet?

22. What do the initials COGS stand for?

23. What is the main purpose of an expense?

24. What is the definition of gross profit?

25. How does gross profit differ from the gross margin ratio?

26. What type of firm would exhibit large gross profits but small gross margin ratios?

27. How could lowering selling prices to increase sales be unwise for a firm?

28. Why are expenses recorded as negative values in owners' equity?

29. What is the name of the expense associated with the use of a building?

30. What is the name of the expense associated with the use of borrowed capital?

31. What is the current income tax rate on corporations in the U.S.?

32. What is the name of the account in owners' equity that contains the cumulative amount of a firm's net income, less dividends?

33. Fill in the below table with the names of the three main financial statements, along with the respective equations for each statement.

Name of Financial Statement	Equation
Balance Sheet	
Income Statement	
Cash Flow Statement	

34. What is the main purpose of the closing entry?

35. How often do firms close their books?

36. What are temporary accounts?

37. What are permanent accounts?

38. Given the following temporary accounts, provide the closing entry in the space provided.

Temporary Accounts	Amounts
Revenues	$500
Cost of Goods Sold	- 300
Interest Expense	- 60
Wage Expense	- 80
Depreciation Expense	- 40
Tax Expense	- 8

Assets	Liabilities	Owners' Equity

39. Identify (by X or ✓) the financial statement(s) that would be dated in the following way: "For the Year Ending December 31, Year 3."

Balance Sheet	
Income Statement	
Cash Flow Statement	

40. Label the following cash flows as operating, investing, or financing:

Cash Flow Description	Cash Category
Cash received from customers	
Cash received from a bank for a loan	
Cash paid to employees	
Cash paid to buy a building	
Cash paid to buy inventory	
Cash received from investors in the firm's IPO	

41. Describe the effect on owners' equity (increase, decrease, or no effect) from the following events:

Event	Effect
Sale of stock to investors	
Borrowing cash from a bank	
Recognition of tax expense	
Sale of a service to customers	
Recognition of wage expense	
Sale of products to customers	
Recognition of cost of goods sold	
Payment of principal to a bank	
Purchase of a building with cash	
Recognition of depreciation on a building	
Cash purchase of inventory	
Recognition of rent expense	

42. Calculate and identify the missing number in the below equation for the cash account:

Beginning Balance	Operating Cash Flow	Investing Cash Flow	Financing Cash Flow	Ending Balance
200		- 60	+ 100	220

43. Given a gross margin ratio of 80% and sales of $500, calculate cost of goods sold.

Sales	500
Cost of Goods Sold	
Gross Profit	

44. Below are accounts in random order. In the space provided, put the accounts in appropriate order, and create the balance sheet and income statement. Include the dates (also below) for each statement.

Accounts and Dates	Amounts
Revenues	$600
Note Payable	800
Cash	200
Depreciation Expense	- 100
Stock	200
Inventory	120
Retained Earnings	200
Building	1,000
Cost of Goods Sold	- 280
Wages Payable	10
Wage Expense	- 10
Tax Expense	- 50
Tax Payable	50
Interest Expense	- 60
Interest Payable	60
For the Year Ending 12/31/Year 2	
As of 12/31/Year 2	

Balance Sheet	
Date: As of 12/31/Year 2	
Current Assets	
Cash	
Inventory	
Total Current Assets	
Noncurrent Assets	
Building	
Total Assets	
Current Liabilities	
Interest Payable	
Wages Payable	
Tax Payable	
Total Current Liabilities	
Noncurrent Liabilities	
Note Payable	
Total Liabilities	
Owners' Equity	
Stock	
Retained Earnings	
Total Liabilities & Owners' Equity	

Income Statement	
Date: For the Year Ending 12/31/Year 2	
Revenues	
Cost of Goods Sold	
Wage Expense	
Depreciation Expense	
Operating Income	
Interest Expense	
Pre-tax Income	
Tax Expense	
Net Income	

Recording Events and Transactions

45. Journalize the following events and transactions. Each event is independent of the others, except where noted.

1. A firm borrows $20 cash from a bank.

Assets	Liabilities	Owners' Equity

2. A firm pays wages of $10 cash.

Assets	Liabilities	Owners' Equity

3. A firm buys equipment for $6 cash.

Assets	Liabilities	Owners' Equity

4. A firm makes a cash sale of $10. COGS was $4.

Assets	Liabilities	Owners' Equity

5. A firm recognizes $2 of interest expense and pays cash.

Assets	Liabilities	Owners' Equity

6. A firm recognizes $2 of interest expense and will pay the bank later.

Assets	Liabilities	Owners' Equity

7. A firm issues stock for $60 cash.

Assets	Liabilities	Owners' Equity

8. A firm pays back the bank $20 of principal that it had borrowed previously.

Assets	Liabilities	Owners' Equity

9. A firm pays the bank $2 of interest that it had previously recognized but not yet paid.

Assets	Liabilities	Owners' Equity

10. A firm depreciates equipment by $4.

Assets	Liabilities	Owners' Equity

11. A firm calculates taxes to be $8. The firm recognizes tax expense and immediately pays cash.

Assets	Liabilities	Owners' Equity

12. A firm makes a credit sale (rather than a cash sale) for $40. The gross profit on the sale was $10. Since the sale is a credit sale, the firm uses accounts receivable, rather than cash.

Assets	Liabilities	Owners' Equity

13. A firm records $3 of utilities expense and immediately pays the utility company.

Assets	Liabilities	Owners' Equity

14. A firm buys inventory for $18 and pays cash to the vendor.

Assets	Liabilities	Owners' Equity

15. A firm buys inventory for $22, but will pay the vendor later. (Use accounts payable, a liability.)

Assets	Liabilities	Owners' Equity

16. A firm with revenues, COGS, wage expense, and tax expense of $100, 40, 12, and 10, respectively closes its books. Give the closing entry.

Assets	Liabilities	Owners' Equity

Recording; Posting; Deriving Financial Statements

46. A firm commences its business on January 1, Year 2.

a. Journalize each of the transactions enumerated below:

1. The firm borrows $50 cash.

Assets	Liabilities	Owners' Equity

2. The firm issues stock for $20 cash.

Assets	Liabilities	Owners' Equity

3. The firm buys a building for $30 cash.

Assets	Liabilities	Owners' Equity

4. The firm buys inventory for $10 cash.

Assets	Liabilities	Owners' Equity

5. The firm sells $8 of inventory for $30 cash.

Assets	Liabilities	Owners' Equity

6. The firm pays wages of $2 cash.

Assets	Liabilities	Owners' Equity

7. The firm depreciates the building by $6.

Assets	Liabilities	Owners' Equity

8. The firm books $4 of interest expense to be paid later.

Assets	Liabilities	Owners' Equity

9. At the end of the year, the firm calculates and records $4 of tax expense to be paid later.

Assets	Liabilities	Owners' Equity

10. The firm closes all temporary accounts.

Assets	Liabilities	Owners' Equity

b. Post the journal entries to the ledger.

		Assets				Liabilities & Owners' Equity							Temporary Accounts					
		Cash	Inventory	Building	**Total Assets**	Note Payable	Interest Payable	Tax Payable	**Total Liabilities**	Stock	Retained Earnings	**Total Liabilities & Owners' Equity**	Revenues	Cost of Goods Sold	Wage Expense	Depreciation Expense	Interest Expense	Tax Expense
Begin		0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0	0	0	0
Event Numbers	1																	
	2																	
	3																	
	4																	
	5																	
	5																	
	6																	
	7																	
	8																	
	9																	
	10																	
End																		

c. Create the income statement in the space provided below.

Income Statement For the Year Ending 12/31/Year 2	
Revenues	
Cost of Goods Sold	
Wage Expense	
Depreciation Expense	
Interest Expense	
Income Before Tax	
Tax Expense	
Net Income	

d. Label the cash flows in the cash account (copied below) as operating, investing, or financing.

		Cash	Description	Label
1/1/Year 2		0		
Event Numbers	1			
	2			
	3			
	4			
	5			
	5			
	6			
	7			
	8			
	9			
	10			
12/31/Year 2				

e. Add up the cash flows by category in the below space, and create the cash flow statement.

Cash Flow Statement	
For the Year Ending 12/31/Year 2	
Operating Cash Flow	
Investing Cash Flow	
Financing Cash Flow	
Total Change in Cash	
Beginning Cash Balance	
Ending Cash Balance	

Chapter 2 Q&A: Additional Concepts and Methodology

Accounting Cycle, Capitalize/Expense, Gains/Losses, Debits/Credits, T-Accounts, Trial Balances

1. State the four main steps of the accounting cycle.

2. Define statement disclosures and note disclosures.

3. Describe the main purpose of temporary accounts.

4. What is the income summary account, and what is its purpose?

5. Describe the main criteria for determining whether an expenditure should be capitalized or expensed.

6. A firm buys office supplies for $100 cash.

a. Give the journal entry if the firm capitalizes the office supplies. (Use "Office Supplies" as the name of the asset.)

Assets	Liabilities	Owners' Equity

b. Give the journal entry if the firm expenses the office supplies. (Use "SG&A Expense.")

Assets	Liabilities	Owners' Equity

7. State the main distinguishing difference between a revenue and a gain and between an expense and a loss.

8. Explain why sales of inventory result in revenues whereas sales of property, plant, and equipment (PP&E) result in gains (or losses) rather than revenues.

9. Why is it important for gains and losses to be distinguished from revenues and expenses?

10. A firm sells a car for $100 cash. The cost of the car is $80.

a. Book the transaction assuming the firm is a car dealer, and the car is therefore classified as inventory.

Assets	Liabilities	Owners' Equity

b. Assume the firm does not normally sell cars, but rather simply uses them to visit customers, and therefore classifies cars as part of PP&E. Assume that $80 is the car's net book value (cost less any accumulated depreciation). Book the transaction.

Assets	Liabilities	Owners' Equity

11. Fill in the below chart with "debit" or "credit":

	Assets	Liabilities	Owners' Equity
Increase with			
Decrease with			

12. Why are revenues and gains credits, and why are expenses and losses debits?

13. What is the purpose of the "T" account?

14. With respect to T accounts, fill in the below chart with "debit" or "credit".

	Assets	Liabilities	Owners' Equity
Normal beginning balance			

15. What is a trial balance, and what is its purpose?

16. What is the purpose of the accumulated depreciation account?

17. What is the equation for calculating interest expense?

18. What is the classification of the cash flow associated with the purchase of inventory? What is the classification of the cash flow associated with the purchase of property, plant, and equipment?

More Practice Recording Simple Events and Transactions

19. Journalize the following events.

Note:
- Beginning in this chapter, space is provided for both "intuitive" and "conventional" journal entries. Use either type of journal entry (or both, if you wish additional practice).
- Interspersed among some problems are both types of ledgers (equations and T-accounts). Post the journal entries to their respective accounts in either type of ledger (or both, for additional practice).

a. A firm borrows $30 from a bank.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

b. A firm issues (sells) stock to investors for $80.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

c. A firm recognizes $10 in wage expense. However, the firm does not pay employees at this time.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

d. The firm pays the $10 owed to employees in the previous event.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

e. A firm buys sundry office equipment for $180 cash. The firm expenses the equipment (as SG&A Expense).

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

f. A firm buys sundry office equipment for $480. The firm capitalizes the equipment.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

g. After one year, the firm depreciates the above equipment by 50%. Use the contra-account, accumulated depreciation (A/D).

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

20. A firm has the following temporary accounts:

Account	**Amount**
Revenues	80
Cost of Goods Sold	- 25
SG&A Expense	- 15
Interest Expense	- 10
Tax Expense	- 12

Give the closing entry below:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Recording; Posting; Trial Balancing; Deriving Financial Statements

21. The below firm is just beginning its business on January 1, Year 2.

Journalize the below transactions in the spaces provided. For each entry involving cash, label the cash flow as operating (Op), investing (Inv), or financing (Fin).

1. The firm issues (sells) its own stock for $100 cash. This is its Initial Public Offering (IPO).

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

2. The firm borrows $50 cash.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

3. The firm buys a building for $100 cash. Use either "building" or PP&E.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

4. The firm buys inventory for $50. It pays $40 cash. The remainder is on account.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

5. The firm sells inventory costing $20 for $60. The sale is a credit sale.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

6. The firm collects $50 cash from the above accounts receivable.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

7. The firm records wage expense of $5 (cash).

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Provide a trial balance.

Trial Balance Before Adjusting Entries		
	Debit	Credit
Cash		
Accounts Receivable		
Inventory		
Building		
Accumulated Depreciation		
Accounts Payable		
Note Payable		
Interest Payable		
Taxes Payable		
Stock		
Retained Earnings		
Revenues		
Cost of Goods Sold		
Wage Expense		
Depreciation Expense		
Interest Expense		
Tax Expense		
Total		

8. The firm depreciates the building by $5. (Use the contra-account, accumulated depreciation, A/D.)

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

9. The firm records $5 of interest expense on the amount borrowed in event two, above. The firm will pay the interest later.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

10. The firm calculates tax expense as $10. The firm will pay the tax later.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Provide an adjusted trial balance.

Adjusted Trial Balance		
	Debit	Credit
Cash		
Accounts Receivable		
Inventory		
Building		
Accumulated Depreciation		
Accounts Payable		
Note Payable		
Interest Payable		
Taxes Payable		
Stock		
Retained Earnings		
Revenues		
Cost of Goods Sold		
Wage Expense		
Depreciation Expense		
Interest Expense		
Tax Expense		
Total		

11. The firm closes its books.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Complete the posting to the below ledger and derive all ending balances.

		Assets						Liabilities and Owners' Equity							Temporary Accounts					
		Cash	Accounts Receivable	Inventory	Property, Plant, and Equipment	Accumulated Depreciation	**Total Assets**	Accounts Payable	Interest Payable	Taxes Payable	Notes Payable	Stock	Retained Earnings	**Total Liabilities & O.E.**	Revenues	Cost of Goods Sold	Wage Expense	Depreciation Expense	Interest Expense	Tax Expense
1/1/Year 2		0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0
Event Numbers	1																			
	2																			
	3																			
	4																			
	5																			
	5																			
	6																			
	7																			
	8																			
	9																			
	10																			
	11																			
12/31/Year 2																				

For additional practice, in addition to the above equation form of the ledger, complete the posting to the below T-accounts and derive the ending balances.

Assets

Cash		Accounts Receivable		Inventory		Building		A/D	
0		0		0		0			0

Liabilities

Account Payable		Note Payable		Interest Payable		Taxes Payable	
	0		0		0		0

Owners' Equity

Stock	
	0

Retained Earnings	
	0

Temporary Accounts

Revenues	
	0

COGS	
0	

Wage Expense	
0	

Depreciation Expense	
0	

Interest Expense	
0	

Tax Expense	
0	

Provide a post-closing trial balance.

Post-closing Trial Balance		
	Debit	Credit
Cash		
Accounts Receivable		
Inventory		
Building		
Accumulated Depreciation		
Account Payable		
Note Payable		
Interest Payable		
Taxes Payable		
Stock		
Retained Earnings		
Revenues		
Cost of Goods Sold		
Wage Expense		
Depreciation Expense		
Interest Expense		
Tax Expense		
Total		

Fill in the values for the balance sheet and income statement below:

Balance Sheet		**Income Statement**	
As of 12/31/Year 2		**For the Year Ending 12/31/Year 2**	
Current Assets		Sales	
Cash		Cost of Goods Sold	
Accounts Receivable		Wage Expense	
Inventory		Depreciation Expense	
Total Current Assets		Interest Expense	
Property, Plant, & Equipment		Income Before Tax	
Accumulated Depreciation		Tax Expense	
Total Assets		Net Income	
Current Liabilities			
Accounts Payable			
Interest Payable			
Taxes Payable			
Total Current Liabilities			
Notes Payable			
Total Liabilities			
Owners' Equity			
Stock			
Retained Earnings			
Total Liabilities & Owners' Equity			

Aggregate the cash flows by category of cash flows.

Cash Flow Category For the Year Ending 12/31/Year 2	
Operating Cash Flow	
Investing Cash Flow	
Financing Cash Flow	
Total Change in Cash	

Chapter 3 Q&A: Applied Theoretical Issues

Life Cycle, Pro Forma, Capital Structure (Debt v. Equity)

1. State whether the various categories of cash flows are expected to be positive or negative in the below phases of a firm's life cycle.

	Intro	Growth	Maturity	Decline
Operating Cash Flow				
Investing Cash Flow				
Financing Cash Flow				

2. What are pro forma financial statements and what purpose do they serve?

3. Describe why debt financing is usually cheaper than equity financing.

4. True or False: Stockholders typically want the firm to take risks whereas debtholders do not.

5. Define variable expenses and give an example of one.

6. Define fixed expenses and give an example of one.

7. In the context of leverage, explain how a 10% increase in revenues can result in a more than 10% increase in net income.

8. Explain why firms do *not* use debt exclusively for their financial capital needs, even though it is usually cheaper than equity.

Institutional Structures: SEC, Regulatory Oversight, Incentive Contracting

9. What is a prospectus?

10. Describe three of the major filings that public firms regularly make with the SEC.

11. What is XBRL?

12. What is the purpose of regulatory oversight?

13. Describe generally the relationship between and among stockholders, debtholders, the board of directors, managers, and other constituencies.

14. Describe how the agency problem is mitigated.

15. What is "adverse selection?"

16. What is "moral hazard"?

17. What is the agency cost of debt?

18. Name two forms of equity compensation and how they align the interests of the managers with the interests of the stockholders (owners).

19. Describe a negative unintended consequence of stock option compensation.

20. Define the following terms that are used in the context of stock option compensation:

Term	Definition
Strike price	
At-the-money	
In-the-money	
Out-of-the-money	
Underwater	
Vesting period	
Service period	

Accounting Principles: Revenue; Expense; Cost; Full Disclosure

21. State the Revenue Recognition Principle.

22. State the Expense Recognition (or Matching) Principle.

23. A firm prepays two years of insurance premiums on 7/1/Year 2. The amount paid is $24. The firm's fiscal yearend (FYE) is 12/31. Give the required entries on each of the below dates.

7/1/Year 2

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

12/31/Year 2

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

12/31/Year 3

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

6/30/Year 4

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

24. On January 1, Year 1, a retailer sells a gift card for $100. On March 15, Year 1, the gift card is used by a customer to buy merchandise for $100. The cost of the merchandise sold was $60. Give the entries for the retailer on the below dates:

1/1/Year 1

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

3/15/Year 1 (for the recognition of revenue):

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

3/15/Year 1 (for the recognition of cost of goods sold):

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

25. Give the journal entry for each event below:

a. A firm defers revenue of $40.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

b. The firm earns $20 of the revenue deferred in a. That is, the firm satisfies the performance obligation.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

c. The firm accrues various expenses of $15. (Simply use “Payable” and “Expense.”)

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

d. The firm pays $6 of the amount accrued in c.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

e. The firm prepays $7 of expenses.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

f. The firm expenses $6 of the amount in e. (Simply use "Expense.")

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

g. The firm accrues $90 of revenue. (Ignore any cost of goods sold, COGS).

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

h. The firm collects $70 of the amount accrued in g.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

26. Describe the Cost Principle.

27. A firm buys inventory for $80 cash. In addition, the firm has to pay shipping of $5, as well as insurance while the inventory is in transit of $8. The shipping and insurance charges are also paid in cash. Applying the Cost Principle, give the journal entry to record the purchase of the inventory.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

28. What is the Full Disclosure Principle?

29. How does the Full Disclosure Principle affect the three main financial statements?

30. What is the purpose of classifying assets and liabilities into current and noncurrent categories?

31. What are discontinued operations?

32. Give the names of at least two accounts that would be included in each major section of the balance sheet, shown below:

Current Assets	
Noncurrent Assets	
Current Liabilities	
Noncurrent Liabilities	
Owners' Equity	

33. Give the names of at least two accounts that would be included in each of the below sections of the income statement:

Operating Section	
Non-operating Section	

34. Indicate (by X or ✓) which accounts go on the income statement and which go on the balance sheet.

Account Name	Income Statement	Balance Sheet
1. Accounts Receivable		
2. Accumulated Depreciation		
3. Cash		
4. Cost of Goods Sold		
5. Depreciation Expense		
6. Gain		
7. Tax Payable		
8. Interest Expense		
9. Interest Payable		
10. Inventory		
11. Investments		
12. Note Payable		
13. Prepaid Expense		
14. Property and Equipment		
15. Tax Expense		
16. R&D Expense		
17. Retained Earnings		
18. Revenue		
19. Salaries Expense		
20. Salaries Payable		
21. SG&A Expense		
22. Short Term Debt		
23. Stock		
24. Unearned Revenue		
25. Loss		

35. Fill in the missing numbers (in the grey cells) in the below set of financial statements.

Income Statement		**Cash Flow Statement**	
For the Year Ending 12/31/Year 2		**For the Year Ending 12/31/Year 2**	
Sales		Operating Cash Flow	9
Cost of Goods Sold	-5	Investing Cash Flow	
SG&A Expense	-4	Financing Cash Flow	-1
Depreciation Expense	**-4**	**Total Change in Cash**	**-2**
Operating Income	**7**		
Interest Expense			
Pretax Income	6		
Tax Expense			
Net Income	**4**		
Dividends	3		

Balance Sheet As of 12/31		
	Year 1	**Year 2**
Current Assets		
Cash		8
Accounts Receivable		22
Inventory	15	15
Total Current Assets	**45**	**45**
Investment	5	5
PP&E	50	60
Accumulated Depreciation	-10	-14
Total Assets		
Current Liabilities		
Accounts Payable	15	15
Interest Payable	0	1
Tax Payable	0	2
Total Current Liabilities	**15**	
Note Payable	20	22
Stock	40	40
Retained Earnings	15	
Total Liabilities & Owners' Equity	**90**	

Qualitative Characteristics; Conservatism

36. What are the two main characteristics that financial information should exhibit?

37. How does conservatism affect accounting for R&D expense and for contingencies?

38. Give an example of a contingent loss.

39. Give an example of how the primary attributes of accounting information (relevance and representational faithfulness) are in tension.

40. Describe the auditor's role with respect to representational faithfulness.

41. A firm is sued. Give the journal entry, assuming the estimated damages of $100 are probable.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Alternative Accounting Systems

42. Give a reason why the FASB requires firms to use the accrual system, as well as the fair value system.

43. Name one disadvantage of the accrual system.

44. Why is it important for lenders and investors to be able to predict amounts and timing of future cash flows?

45. Briefly describe the three main accounting systems and the purposes that each serves.

46. How does the fair value system contradict conservatism?

47. A firm buys a short term investment for $40. The investment is a share of stock. The stock price increases to $44. Assuming the firm recognizes the change in value in current income, give the appropriate journal entry.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

More Practice Recording Events and Transactions

48. Journalize the following events. Each entry is independent, except where stated.

a. A firm accrues a $100 sale. The cost of goods sold is $45.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

b. A firm buys inventory on account for $60.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

c. A firm defers revenue of $88 for services to be rendered in the future.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

d. A firm collects $18 from a previously accrued sale.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

e. A firm recognizes revenue of $20 from previously deferred (unearned) revenue.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

f. A firm capitalizes an expenditure of $32. (Simply use "Asset.")

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

g. A firm prepays insurance of $48. (Use "Prepaid Expense.")

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

h. A firm expenses prepaid expenses by $102. (Use SG&A Expense.)

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

i. A firm buys equipment for $92 cash. (Use "PP&E.")

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

j. Refer to the above equipment purchase. After one year of an estimated two year life, the equipment is depreciated by one-half. (Use A/D for accumulated depreciation.)

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

k. A firm accrues wage expense of $78. (Use Wage Payable and SG&A Expense.)

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

l. A firm buys an investment of stock of another firm for $26.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

m. Refer to the above problem. The value of the investment falls to $13, and the firm must recognize the unrealized loss in the income statement.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

n. A firm issues its own stock for $40.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

o. Refer to the above problem. The value of the firm's own stock rises to $50.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Chapter 4 Q&A: Introduction to Financial Statement Analysis

5 Steps; Ratio Warnings; Common Size; YOY

1. Name the five general steps for analyzing a firm.

2. Name at least two warnings or cautions about calculating and interpreting ratios.

3. What are the denominators for "common sizing" the balance sheet and the income statement?

4. What is the purpose of common size financial statements?

5. Calculate the year-over-year (YOY) percentage changes and the common size ratios in the spaces provided.

	Income Statement			Year-over-year (%)		Common Size		
	Year 3	Year 2	Year 1	Year 3	Year 2	Year 3	Year 2	Year 1
Sales	62	56	52					
COGS	- 24	- 23	- 22					
Gross Profit	38	33	30					
SG&A	- 14	- 11	- 10					
EBIT	24	22	20					

6. Refer to the above problem. Tell a brief "story" by providing a description and interpretation of the ratios.

7. Calculate year over year ratios (in %) for the following:

Year	Year 3	Year 2	Year 1
Capital Expenditures	- 1,349	- 2,644	- 3,112
Year over Year			

8. Did the above year-over-year changes exhibit increases or decreases in capital expenditures?

More Terminology and Concepts; Practice Constructing and Interpreting More Ratios

9. What are the main purposes for the subtotal of EBIT on the income statement?

10. What is another name for EBIT?

11. What are the three main margin ratios calculated from data on the income statement?

12. What are the names of the two major tax rates?

13. How do firms sometimes attempt to lower their effective tax rates?

14. Give *the formula* of the ratio that would be appropriate to answer each of the following questions:

Question	Ratio Formula
a. How long does it take a firm to pay its bills (on average)?	
b. How long does it take a firm to sell its inventory (on average)?	
c. How long does it take a firm to get paid by its customers (on average)?	
d. What is the firm's capital structure?	
e. How well did the firm's assets perform in generating net income?	
f. How much of the firm's net income was paid as dividends to the owners?	
g. What does the stock market estimate the value of the firm to be?	
h. What is the approximate cost of the firm's debt on a pretax basis?	
i. What is the approximate cost of the firm's equity?	
j. What is the firm's effective tax rate?	

15. Critique the use of ROE as a measure of management effectiveness.

16. What is the difference between the quick ratio and the current ratio?

17. Interpret the meaning of a positive Cash Conversion Cycle of 75 days.

18. Why is the market-to-book ratio often above 1?

19. Describe briefly (and generally) the meaning of Free Cash Flow to Equity (FCFE).

20. How is Free Cash Flow to Equity actually returned to stockholders?

21. Why do high growth firms not usually return free cash flow to stockholders?

22. What is the difference between the Dividend Payout Ratio and the Dividend Yield?

23. What is a warning about interpreting Total Returns to Shareholders (TRS)?

24. How do potential investors compensate for perceived additional risk associated with an investment?

25. Why is it deemed more difficult to measure the cost of equity compared to the cost of debt?

26. Describe beta in the context of measuring a firm's cost of equity.

27. Interpret a beta of 2. Interpret a beta of 0.5.

28. What is WACC for a firm with $10 of debt and $50 of equity, where the after tax cost of debt is 4% and the cost of equity is 10%?

29. Match each ratio below with its formula, by placing the number (#) of the ratio next to the formula.

#	Formula	#	Name of Ratio
	365 / (Sales / Accounts Receivable)	1	Effective Tax Rate
	1 - COGS / Sales	2	Interest Coverage Ratio
	Current Assets / Current Liabilities	3	Gross Margin Ratio
	Net Income / Assets	4	Return on Assets
	Debt / (Debt + Owners' Equity)	5	SG&A Ratio
	SG&A Expense / Sales	6	Market to Book Ratio
	365 / (COGS / Inventory)	7	Profit Margin Ratio
	Tax Expense / Pretax Income	8	Asset Turnover
	EBIT / Sales	9	Dividend Payout Ratio
	Shares Outstanding * Price per Share	10	Days Sales Outstanding
	(Debt * After-tax Cost of Debt + Market cap * Cost of Equity) / (Debt + Market Cap)	11	Total Return to Shareholders
	Market Capitalization / Owners' Equity	12	Current Ratio
	Risk Free Rate + Beta * Risk Premium	13	Cash Conversion Cycle
	EBIT / Interest Expense	14	Quick Ratio
	365 / (COGS / Accounts Payable)	15	Free Cash Flow to Equity
	Gross Interest Expense / Interest Bearing Debt * (1 - Effective Tax Rate)	16	Days Payable Outstanding
	Dividends / Net Income	17	Dividend Yield
	Operating Cash Flow – Capital Expenditures +/- Change in Debt	18	Operating Margin Ratio (EBIT Margin)
	Net Income / Owners' Equity	19	Debt to Capital Ratio
	1 - Gross Margin Ratio	20	Return on Invested Capital
	Days Sales in Inventory + Days Sales Outstanding - Days Payable Outstanding	21	% of Free Cash Flow to Equity Returned
	EBIT * (1 - Effective Tax Rate)	22	Market Capitalization
	Sales / Assets	23	Weighted Average Cost of Capital
	(Cash + Accounts Receivable + Short Term Investments) / Current Liabilities	24	Days Sales in Inventory
	NOPAT / (Debt + Market Cap)	25	Cost Ratio
	Net Income / Sales	26	Cost of Equity Capital (using CAPM)
	(Dividends + Share Repurchases) / FCFE	27	Net Operating Profit after Tax
	Dividends per Share / Price per Share	28	Cost of Debt Capital (Effective Interest)
	(Δ Price per Share + Dividends per Share) / Beginning Price per Share	29	Return on Equity

30. Below are select financial data items needed to calculate various ratios. (Note: these are only excerpts from the financial statements, not the entire statements.) Calculate the ratios in the spaces provided. Also, give the formula for each ratio.

Income Statement Data Items	**Year 3**	**Balance Sheet Data Items**	**Year 3**
Revenues	4,800	Cash and Cash Equivalents	25
COGS	3,200	Short term Investments	25
SG&A Expense	1,200	Accounts Receivable	400
Depreciation Expense	150	Inventory	620
Operating Income (EBIT)	250	**Total Current Assets**	1,070
Interest Expense	38	**Total Assets**	3,270
Pre Tax Income	212	Accounts Payable	440
Tax Expense	75	**Total Current Liabilities**	700
Net Income	137	Interest Bearing Debt	500
Dividends per Share	0.6	**Owners' Equity**	2,000
		Number of Shares Outstanding	100

Cash Flow Data Items	**Year 3**	**Other Items**	
Operating Cash Flow	400	Beta	1
Capital Expenditures	-140		
Net Change in Interest Bearing Debt	150	Year End Stock Prices (FYE):	
Dividends paid	-60	Year 3	$30.00
Share repurchases (in $)	-200	Year 2	$25.00

Ratio #	**Profitability Measures and Ratios**	**Value**	**Formula**
1	Gross Margin Ratio		
2	Cost Ratio		
3	SG&A Ratio		
4	EBIT Margin Ratio		
5	Profit Margin Ratio		
6	Effective Tax Rate (ETR)		
7	NOPAT		
	Efficiency Ratios		
8	Asset Turnover		
9	Days Sales in Inventory (DSI)		
10	Days Sales Outstanding (DSO)		
11	Days Payable Outstanding (DPO)		
12	Cash Conversion Cycle		

	Management Effectiveness Ratios		
13	Return on Assets		
14	Return on Equity		
15	Market Capitalization (Market Cap)		
16	Return on Invested Capital		
	Financial Strength Ratios		
17	Current Ratio		
18	Quick Ratio		
19	Debt to Capital Ratio		
20	Interest Coverage Ratio		
21	Effective Interest Rate (after tax)		
	Valuation Ratios		
22	Market-to-Book Ratio		
23	Free Cash Flow to Equity (FCFE)		
24	% FCFE Returned		
25	Dividend Payout Ratio		
26	Dividend Yield		
27	Total Return to Shareholders		
28	Cost of Equity, using 3.5% R_f and 6% Risk Premium		
29	WACC		

31. What is the formula for the "DuPont Model"?

EPS: Basic, Diluted, Pro Forma

32. Provide the names and the *general* formulas for the two EPS ratios.

33. Why do some firms and some analysts remove nonrecurring losses from their income statements?

34. What are other names for pro forma EPS?

35. A firm has the following income statement and share count. Calculate basic and diluted EPS.

Income Statement	
Revenues	**$60**
Cost of Goods Sold	- 20
SG&A Expense	- 10
Nonrecurring (Unusual) Loss	- 10
Operating Income	**20**
Interest Expense	- 5
Pre Tax Income	**15**
Tax Expense (Rate is 40%)	- 6
Net Income	**9**
Basic Average Shares Outstanding	20
Diluted Average Shares Outstanding	25
Basic EPS	
Diluted EPS	

36. Refer to the previous problem. Calculate basic and diluted EPS on a pro forma basis (after eliminating the nonrecurring loss).

Income Statement	
Revenues	**$60**
Cost of Goods Sold	- 20
SG&A Expense	- 10
Nonrecurring (Unusual) Loss	0
Operating Income	**30**
Interest Expense	- 5
Pre Tax Income	**25**
Tax Expense (Rate is 40%)	- 10
Net Income	**15**
Basic Average Shares Outstanding	20
Diluted Average Shares Outstanding	25
Pro forma Basic EPS	
Pro forma Diluted EPS	

Chapter 5 Q&A: Working Capital

Cash; Accounts Receivable and Credit Risk; Notes Receivable

1. What are cash equivalents?

2. What is restricted cash?

3. What are accounts receivable?

4. What is the main risk associated with accounts receivable?

5. What is the purpose of the allowance for doubtful accounts?

6. Give the formula to calculate net realizable value of accounts receivable.

7. What are two main methods to calculate credit risk (bad debt expense)?

8. What is another name for Percentage of Receivables Method?

9. A firm has credit sales of $200 and estimates 10% to be uncollectible.

a. Journalize the sales and the estimate of bad debt expense.
Sales:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Estimate of Bad Debt Expense:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

b. Assume that the estimate of 10% is correct, and the firm collects $180. Journalize the collection and the write-off of the uncollectible receivable.

Collection:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Write-off:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

10. A firm has opening balances of accounts receivable and allowance for doubtful accounts of $80 and $8, respectively. The following events occur over the course of the ensuing fiscal period. Journalize each of the below events.

a. A firm makes $400 of credit sales. (Ignore COGS.)

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

b. The firm records bad debt expense related to the above credit sales. The firm uses the Percentage of Credit Sales Method, and it estimates 5% of credit sales to be uncollectible.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

c. The firm collects $140 from credit customers.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

d. The firm writes-off $12 of receivables.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

e. Post the above events to the ledger accounts below (both equations and T-accounts) and derive the ending balances:

Accounts Receivable				
Beginning Balance	Credit Sales	Cash Collections	Write off	Ending Balance

Allowance			
Beginning Balance	Bad Debt Expense	Write off	Ending Balance

Accounts Receivable	

Allowance	

11. A firm's balance sheets at the beginning and end of the year show gross accounts receivable of $32 and $28, respectively. Also, the firm's beginning and ending allowance for uncollectible accounts are -$4 and -$5, respectively. Bad debt expense was $4, which was 2% of credit sales. The firm makes all sales on account. How much cash was collected from customers?

12. Complete the below aging schedule for a firm's accounts receivables:

Aging Schedule	Amount	Percentage Estimated Uncollectible	Amount Estimated Uncollectible
Current (not delinquent)	$200	1%	
30 days past due	20	5%	
60 days past due	60	30%	
90 + days past due	40	40%	
Total Receivable	$320		
Required Balance in Allowance			
Current amount in Allowance after write-offs			- $24 **(given)**
Adjustment to Allowance			

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

13. Describe Big Bath Accounting and why it is considered illegal.

14. What is the main difference between accounts receivable and notes receivable?

15. What is the formula for simple interest?

16. Describe two ways in which a firm can use receivables to accelerate cash flow.

17. What is the difference between factoring and discounting?

18. A firm (Firm A) discounts a note receivable at a financial institution. The discount amounts to 2% of the note's face value of $50. The discount is “with recourse” to Firm A. The customer (Firm B) fails to pay the financial institution on the due date.

a. From Firm A's perspective, journalize the discount of the note.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

b. Again from Firm A's perspective, journalize the repayment of the note to the financial institution due to the customer’s failure to pay.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

19. What was the main reason that the accounting for securitizations changed from sales to financings for most situations?

20. Why was sales accounting so popular with firms who engaged in securitizations?

Sales Discounts, Returns, and Allowances

21. What is a sales discount? Sales allowance? Sales return?

22. Journalize the following, related transactions, from the *seller's* point of view. For this problem, the firm (the seller) did not estimate any returns or allowances in advance, nor anticipate any discounts at the time of recognizing revenue.

a. A firm (the seller) makes a credit sale of $1,000. The cost of goods sold was $600.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

b. One-fourth of the above sale was returned.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

c. The firm offers a $100 allowance to the customer.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

d. The firm also offers a 2% discount on payments made within ten days, and the customer pays the balance in time to receive the discount.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

23. Repeat the previous problem, but make the entries from the *buyer's* point of view.

a. A firm (the buyer) makes a credit purchase of $1,000.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

b. The firm returns one-fourth of the above purchase.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

c. The firm accepts the seller's $100 allowance.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

d. The firm pays the balance within the 2% discount period.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Inventories

Manufacturers

24. What are the three main inventories for a manufacturer?

25. Explain when depreciation Is capitalized, rather than expensed.

26. Fill in the missing numbers below for a manufacturer's inventory accounts:

Direct Materials

Beginning Balance	+ Purchases	- Direct Materials Transferred	Ending Balance
5	+ 6		3

Work-in-Process

Beginning Balance	+ Direct Materials Transferred	+ Direct Labor	+ Overhead	- Cost of Goods Manufactured	Ending Balance
12		+ 4	+ 3 Indirect Labor + 1 Rent + 4 Utilities + 2 Insurance + 5 Depreciation		19

Finished Goods

Beginning Balance	+ Cost of Goods Manufactured	- Cost of Goods Sold	Ending Balance
20			10

27. True or False: Depreciation on factory equipment is expensed during the period incurred. Briefly explain your answer.

Inventory Valuation: Specific ID, LIFO, FIFO, Average

28. When is the special identification method of inventory valuation used?

29. What does LIFO stand for? FIFO?

30. When prices for inventories rise over a period, which inventory costing method should a firm use to reduce taxes?

31. Identify by writing "highest" or "lowest" next to the inventory method that gives the highest or lowest (ending) inventory values under each pricing environment (inflation or deflation).

Highest/ Lowest ***Inventory*** Values		
	Inflation	Deflation
FIFO		
LIFO		

32. Identify by writing "highest" or "lowest" next to the inventory method that gives the highest or lowest net income under each pricing environment (inflation or deflation).

Highest/Lowest ***Net Income***		
	Inflation	Deflation
FIFO		
LIFO		

33. If a firm has 10 units of inventory costing $20 each and 40 units of inventory costing $25 each, what is the weighted average cost of the inventory?

34. Assume the following inventory data for a retailer.

Retail Inventory	# units	$ / unit	Total
Beginning Inventory	1	20	20
Purchase of Inventory	1	22	22
Purchase of Inventory	1	24	24
Purchase of Inventory	1	26	26
Goods Available for Sale (GAFS)	4		92
Sale of Inventory	1	40	40
Ending Inventory	3		

a. Calculate COGS, ending inventory, and gross profit in the schedule below for each of the costing methods listed.

	GAFS ($)	COGS	Ending Inventory	Gross Profit
FIFO	$92			
Average	$92			
LIFO	$92			

b. Refer to a. State the method that gives the highest net income, and briefly describe why.

35. Assume the following inventory data for a retailer.

Retail Inventory	# units	$ / unit	Total
Beginning Inventory	10	$20	$200
Purchase of Inventory	8	$21	$168
Purchase of Inventory	10	$25	$250
Goods Available for Sale (GAFS)	28		$618
Sale of Inventory	15	$30	$450
Ending Inventory	13		

a. Calculate COGS, ending inventory, and gross profit for all three methods.

	GAFS ($)	COGS	Ending Inventory	Gross Profit
FIFO	$618			
Average	$618			
LIFO	$618			

b. Calculate the absolute dollar amount that the LIFO liquidation added to gross profit by recalculating COGS as if the firm had had sufficient number of units in the last layer purchased. The recalculated COGS is referred to as pro forma below.

LIFO COGS (as reported)	
LIFO COGS (pro forma)	
Effect of liquidation	

36. What special disclosures are required when a LIFO liquidation occurs?

37. The data below are similar to that in the previous data set, except that the price of the inventory decreases, rather than increases.

Retail Inventory	# units	$ / unit	Total
Beginning Inventory	10	$25	$250
Purchase of Inventory	8	$21	$168
Purchase of Inventory	10	$20	$200
Goods Available for Sale (GAFS)	28		$618
Sale of Inventory	15	$30	$450
Ending Inventory	13		

Calculate COGS, ending inventory, and gross profit for all three methods.

	GAFS ($)	COGS	Ending Inventory	Gross Profit
FIFO	$618			
Average	$618			
LIFO	$618			

38. What is the purpose of the LIFO Allowance account?

39. What inventory costing test must be applied to see if inventory has lost value due to obsolescence?

Retail and Gross Margin Estimation Methods

40. Describe the “retail method” of inventory valuation.

41. Assume a retailer uses the retail method to estimate inventories for financial reporting purposes. Its beginning inventory and purchases at cost and retail, along with sales (at retail prices) are listed below. Fill in the table with the solutions for ending inventory at retail, ending inventory at cost, and finally, COGS (at cost). Also provide the cost ratio, using the average cost ratio.

	Cost	**Retail**
Beginning inventory	$30	$60
Purchases	70	120
COGS		
Sales		110
Ending inventory		
Average cost ratio		

42. Describe the gross margin method of inventory valuation.

43. Assume a firm uses the gross margin method to estimate its ending inventory. The following data for beginning inventory, purchases, sales, and the gross margin ratio are provided. Calculate the missing amounts.

Beginning inventory	$40
Purchases	90
Sales	80
Gross margin ratio	30%

COGS	
Ending inventory	

Inventory Fraud

44. Explain how the "inventory fraud" works.

45. True or False: If ending inventory is overstated, net income will be overstated. Briefly explain your answer.

Periodic versus Perpetual Inventory Systems

46. What is the main difference between the periodic and perpetual inventory systems?

47. Assume the following inventory data for a retailer. Notice that the firm makes an additional purchase *after* the sale.

Retail Inventory	# units	$ / unit	Total
Beginning Inventory	1	20	20
Purchase of Inventory	1	22	22
Sale of Inventory	1	40	40
Purchase of Inventory	1	24	24
Goods Available for Sale (GAFS)	3		$66
Ending Inventory in Units	2		

Calculate COGS, ending inventory, and gross profit in the schedule below for each of the costing methods listed, using both the periodic and perpetual systems.

		Perpetual			Periodic		
	GAFS ($)	COGS	Ending Inventory	Gross Profit	COGS	Ending Inventory	Gross Profit
FIFO	$66						
Average	$66						
LIFO	$66						

48. Assume the following inventory data for a retailer. Notice that the firm makes an additional purchase *after* the sale.

Retail Inventory	# units	$ / unit	Total
Beginning Inventory	10	20	200
Purchase of Inventory	12	22	264
Sale of Inventory	8	40	320
Purchase of Inventory	4	24	96
Goods Available for Sale (GAFS)	26		$560
Ending Inventory in Units	18		

Calculate COGS, ending inventory, and gross profit in the schedule below for each of the costing methods listed, using both the periodic and perpetual systems.

		Perpetual			Periodic		
	GAFS ($)	COGS	Ending Inventory	Gross Profit	COGS	Ending Inventory	Gross Profit
FIFO	$560						
Average	$560						
LIFO	$560						

Chapter 6 Q&A: Investments and Long-lived Assets

Equity Investments: Passive; Equity Method; Control and Consolidation

1. What are the three levels of ownership of equity securities for accounting purposes?

2. Describe the accounting treatment for passive level of ownership for equity investments

3. What is the name of the accounting method that is used when the level of ownership rises to significant influence?

4. When is the receipt of a dividend *not* considered investment income?

5. At what level of ownership does one firm consolidate its investment in another firm?

6. A firm (an investor) buys the stock of another company by paying $500 cash.

a. Record the purchase of the stock.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Assume that the investor has only a passive interest and also uses fair value accounting. During the year after the acquisition, the stock price rises to $550.

b. Record the increase in value.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

c. Assume that the investor has significant influence over the investee by owning 25% of the shares. Also assume that the investee has total income of $100. Record the investor's investment income.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

d. Assume that the investee pays a $10 cash dividend to the investor. Record the investor's receipt of the dividend, assuming a passive level of ownership.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

e. Repeat part d, but now assume that the investor has significant influence over the investee. Record the investor's receipt of the dividend.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

7. Assume the following information about a firm's investment in a marketable equity security. The firm does not sell the investment at any time, irrespective of any of the classifications of the security.

Cost of the investment when purchased (at the beginning of Year 1)	$10
Market value of investment at end of Year 1	$18
Market value of investment at end of Year 2	$8
Investor's % ownership of investee	20%
Investee's earnings for Year 1	$50
Investee's *total* dividend payments for Year 1	$10
Investee's earnings for Year 2 (loss)	- $20
Investee's *total* dividend payments for Year 2	$10

a. If the firm (the investor) is a passive investor, give the effect on the firm's net income from its investment for each of the two years:

Investment Classification: Passive	
Year	Effect on Investor's Net Income
1	
2	

b. If the firm has significant influence over the investee, give the effect on the firm's net income from its investment over the two years:

Investment Classification: Significant Influence	
Year	Effect on Investor's Net Income
1	
2	

8. What does NCI stand for?

9. Calculate the amount of goodwill resulting from an acquisition in which the acquirer buys 100% of a target firm and pays $110 for net identifiable assets valued at $80.

10. Refer to the above problem. Assume the firm buys only 80% and therefore pays $88. Calculate the amount of goodwill and non-controlling interest.

11. Assume the following balance sheet for a firm that will be acquired by another firm. The book values of the assets and liabilities are the same as market values.

Balance Sheet of Target Firm (Book Value = Market Value)	
Cash	$10
Inventory	20
Property, Plant, and Equipment	30
Total Assets	**$60**
Liabilities	20
Stock	30
Retained Earnings	10
Total Liabilities and Owners' Equity	**$60**

An acquirer purchases the above firm by paying $60 cash for 100% of the outstanding shares.

a. Record the acquisition.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

b. Give the acquiring firm's consolidation entry to remove the investment account and to consolidate the acquired firm's balance sheet.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Repeat parts a. and b., but assume that the acquiring firm spends $54 and therefore buys 90% of the acquired firm, rather than 100%.

c. Record the acquisition by the acquiring firm:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

d. Record the consolidation entry:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

e. Assume that the above goodwill was later tested for impairment, and the value of goodwill was estimated to be only $5. Give the journal entry to record the impairment of goodwill.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Investments in Debt Securities

12. What are the three categories of investment in debt, rather than stock?

13. Assume a firm buys the bonds of another firm. The buyer of the bonds is therefore an investor in the other firm's debt, as well as a lender to that firm. The bonds are purchased for $900. At the end of the first reporting period (year), the value of the bonds has increased to $980.

a. If the bonds are classified as trading, give the journal entry to record the change in the value of the bonds.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

b. Refer to the above data. Now assume that the bonds are classified as available-for-sale. Give the journal entry to record the change in the value of the bonds.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

c. Subsequent to the above entry for bonds classified as available-for-sale, assume the bonds were sold for $980. Give the entry to recognize the sale and the gain.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

d. True/False If the above bond investments were classified as held-to-maturity, the bonds would not be marked-to-market and no journal entry would be required to recognize the change in value.

14. What does AOCI stand for, and what is its purpose?

Intangible Assets; Fixed Assets

15. What is the main attribute of an intangible asset that is used to determine whether or not it will be amortized?

16. Which of the below long-lived assets are amortized or depreciated (yes) and which are not (no)?

Account	**Yes or No?**
Buildings	
Land	
Goodwill	
Patents Purchased	
Copyrights	
Trademarks to be renewed indefinitely	
Equipment	

17. A firm buys equipment from a manufacturer. The manufacturer also has a financing division that will finance the firm's purchase. The terms of the sale require the firm to pay the manufacturer for the equipment in one year. The amount to be paid is $220, which includes $20 of interest.

a. Journalize the purchase of the equipment. Use Equipment and Note Payable.

Assets	Liabilities	Owners' Equity	Debit Credit	$	$

b. Journalize the firm's payment of the principal and interest to the manufacturer in one year.

Assets	Liabilities	Owners' Equity	Debit Credit	$	$

18. Under what circumstances is interest capitalized, rather than expensed?

19. Assume that a firm spends $100 to build a building for its own use. This is a self-constructed asset, which, while under construction, is referred to as "Construction in Progress" (CIP). The firm also has debt of $500 that has an interest rate of 6%. Give the journal entry to recognize the amount of interest expensed and the amount of interest capitalized. The firm pays cash for the amount of interest it owes the bank.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Depreciation Methods; Disposition

20. Why do firms sometimes choose accelerated depreciation over straight line depreciation?

21. What is the formula for straight-line depreciation?

22. What is the formula for double declining balance depreciation?

23. Set up a depreciation schedule, using straight line, sum-of-the-years' digits, and double declining balance, for an asset that costs $88, has an $8 salvage value, and has an expected life of 4 years.

	Year				
Depreciation Method	1	2	3	4	Total
Straight line					
Sum-of-the-years' digits					
Double Declining Balance					

24. Refer to the above problem. Explain why depreciation expense for year 4, using double declining balance, is only $3.

25. Assume the firm decides to sell the above asset at the end of Year 3 for $20.

a. Record the sale assuming the firm had used the straight line method.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

b. Record the sale assuming the firm had used the double declining balance method.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

26. A firm buys equipment for $400. The salvage value is expected to be $20, and the expected useful life is ten years.

a. Calculate depreciation expense for the first year and the book value of the equipment at the end of the first year using both of the below methods.

Depreciation Method	**Depreciation Expense**	**Book Value**
Straight Line		
Double Declining Balance		

b. Give the journal entry for straight line depreciation (for the first year) assuming that the depreciation is expensed immediately.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

c. Give the journal entry for straight line depreciation (for the first year) assuming that the depreciation is capitalized as part of inventory.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

d. If the firm sells the equipment after the first year for $350 cash, give the entry assuming that the firm had been using straight line depreciation for the year.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

e. If the firm sells the equipment after the first year for $350 cash, give the journal entry assuming that the firm had been using double declining balance depreciation for the year.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Impairments; Restructuring; Repairs; Discontinued Operations

27. What is an impairment loss?

28. Describe how equipment could become impaired for accounting purposes.

29. What is the main attribute of a repair that determines whether or not it will be capitalized or expensed?

30. A firm spends $1,000 on ordinary repairs and maintenance.

a. Provide the entry. (Use SG&A Expense.)

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

b. Refer to the above. Assume the firm had instead deemed the repairs and maintenance to be extraordinary (i.e., an improvement). Provide the entry:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

31. What are restructuring expenses?

32. What is a “cookie jar” reserve?

33. Assume that a firm has equipment that costs $400 and has a ten year useful life. After three years of straight line depreciation (and no salvage value), accumulated depreciation is $120. The firm estimates that the fair value of the equipment has fallen to $200 and is not likely to recover in value. Journalize the impairment of the equipment.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

34. Why is it important for firms to segregate discontinued operations on all three main financial statements?

35. Describe how discontinued operations affect the three main financial statements.

Chapter 7 Q&A: Noncurrent Liabilities and Owners' Equity

Present Value: Concepts, Annuities, Amortizing Loans, Accreting Loans, Interest Only Loans, NPV, IRR, CAGR, Effective Annual Interest Rate

1. Define present value.

2. Define interest.

3. Define compound interest.

4. Define annuity.

5. Define ordinary annuity.

6. Define annuity due.

7. Define an amortizing loan.

8. Define an accreting loan.

9. Define an interest only loan.

10. Define net present value.

11. A firm borrows money from a bank at the beginning of Year 1. The bank requires the firm to pay both principal and interest in two years in the combined amount of $1,000. The bank charges 6% interest on all loans. This is an accreting loan because no payments are made until the due date in two years.

a. Calculate the original amount of the loan. (Round to the nearest dollar amount.)

b. Complete the accretion table below (or separately in Excel):

Year	Cash Payment	Interest 6%	Principal Adjustment	Principal Balance
1				
2				

c. Journalize the origination of the loan at the beginning of Year 1, the recognition of interest for Years 1 and 2, and the repayment of principal at the end of Year 2.

Origination of Loan at the beginning of Year 1:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Recognition of Interest for Year 1:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Recognition of Interest for Year 2:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Repayment of Principal at the end of Year 2:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

12. A firm borrows money from a bank at the beginning of Year 1. The bank requires the firm to make two, $1,000 payments at the end of each of the next two years (Years 1 and 2). The bank charges 6% interest on all loans. Each payment will be for part interest and part principal; therefore, the loan is an amortizing loan.

a. Calculate the original amount of the loan. (Round to the nearest dollar amount.)

b. Complete the amortization table below (or separately in Excel):

Year	Cash Payment	Interest 6%	Principal Adjustment	Principal Balance
1				
2				

c. Journalize the origination of the loan at the beginning of Year 1 and the two payments at the end of Years 1 and 2.

Origination of Loan at the beginning of Year 1:

Assets	Liabilities	Owners' Equity	Debit Credit	$	$

Payment at the end of Year 1:

Assets	Liabilities	Owners' Equity	Debit Credit	$	$

Payment at the end of Year 2:

Assets	Liabilities	Owners' Equity	Debit Credit	$	$

13. A firm borrows money from a bank at the beginning of Year 1. The terms of the loan require the firm to make payments of $400 per year at the end of the next five years (ordinary annuities). The bank charges interest of 6% per year.

a. Calculate the amount of the loan.

b. Complete the amortization table below (or separately in Excel):

Year	Cash Payment	Interest 6%	Principal Adjustment	Principal Balance
				1,685
1				
2				
3				
4				
5				

c. Record the origination of the loan at the beginning of Year 1 and the entries for payment of principal and interest at the end of Year 1 and Year 2.

Origination of Loan at the beginning of Year 1:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Payment at the end of Year 1:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Payment at the end of Year 2:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

14. A firm borrows $6,000 from a bank at the beginning of Year 1. The terms of the loan require the firm to make equal, yearly (end-of-year) payments over the next five years. The bank charges 6% interest.

a. Calculate the amount of the yearly payment.

b. Complete the amortization table below (or separately in Excel):

Year	Cash Payment	Interest 6%	Principal Adjustment	Principal Balance
				6,000
1				
2				
3				
4				
5				

c. Record the origination of the loan at the beginning of Year 1 and the entries for payment of principal and interest at the end of Year 1 and Year 2.

Origination of Loan at the beginning of Year 1:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Payment at the end of Year 1:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Payment at the end of Year 2:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

15. A bank loans a firm $15,000 at the beginning of Year 1 and requires repayment in the amount of $6,000 per year, at the end of each of the next three years.

a. Calculate the interest rate of the loan.

9.7010%. The formula in Excel is: =RATE(3,-6000,15000).

b. Complete the amortization table below (or separately in Excel):

Year	Cash Payment	Interest	Principal Adjustment	Principal Balance
				15,000
1	6,000			
2	6,000			
3	6,000			

16. A bank loans a firm $100,000 at the beginning of Year 1. Payments are due at the end of each of the next five years (ordinary annuities). The interest rate is 6%. The loan is an amortizing loan.

a. Calculate the amount of the yearly payment.

b. Complete the amortization table below (or separately in Excel):

Year	Cash Payment	Interest 6%	Principal Adjustment	Principal Balance
				100,000
1				
2				
3				
4				
5				

17. Calculate the present value of a loan that requires a firm to make payments of $5,000 per year for five years, at the end of each year. The interest rate is 6%.

18. Calculate the present value of a loan that requires a firm to make a single payment of $3,000 in two years. The interest rate is 5%.

19. Calculate the interest rate of a loan, in which a lender loans a firm $15,000 and requires repayment of a single amount of $22,000 in five years.

20. If a firm deposits $1,000 in a bank today, how much will it have in four years if the bank pays 6% per year and if the firm makes no withdrawals during the four years?

21. Restate the above problem in terms of a loan from the bank, rather than a deposit to the bank.

22. If a firm deposits $1,000 in the bank at the end of each of the next four years, how much will it have at the end of the fourth year if the bank pays 6% per year, and if the firm makes no withdrawals during the four years?

23. a. If a firm deposits $1,000 in the bank at the *beginning* of each of the next four years, how much will it have at the *end* of the fourth year if the bank pays 6% per year, and if the firm makes no withdrawals during the four years?

b. Complete the below accretion table for the above deposits.

Beginning of Year	Cash Payment	Interest 6%	Principal Adjustment	Principal Balance
1	1,000.00		1,000.00	1,000.00
2			1,060.00	2,060.00
3		123.60	1,123.60	3,183.60
4		191.02	1,191.02	4,374.62

24. How much would a firm be able to borrow from a bank today, if it will be required to pay back $8,000 to the bank in four years, and if the bank charges 6% per year?

25. How much would a firm be able to borrow from a bank today, if it will be required to pay back $8,000 *per year*, at the end of each year for the next four years, and if the bank charges 6% per year?

26. A firm has $1,000,000 in its bank account. The bank pays interest of 6% per year. How much can the firm withdraw in equal amounts each year over the next five years, at the end of each year, and leave a balance of zero?

27. A firm has $1,000,000 in its bank account. The bank pays interest of 6% per year. The firm withdraws $80,000 per year for the next five years, at the end of each year. What is the balance in the account at the end of the fifth year?

28. A firm has $1,000,000 in its bank account. The bank pays interest of 6% per year. What is the maximum withdrawal the firm could make at the end of each of the next five years, without touching the principal?

29. A firm has $1,000,000 in its bank account. If the firm wanted to withdraw $80,000 per year over the next five years, at the end of each year, and if it also wanted to have a balance in the account of $1,200,000 at the end of the fifth year, what interest rate must it receive at the bank?

30. A firm borrows $700,000 to finance the purchase of a building. The *yearly* interest rate is 5.00%. The firm will make *monthly* payments for thirty years, at the end of each month. This is a fully amortizing loan over the thirty years. What is the amount of the monthly payment?

31. A firm deposits $800 in a bank. The bank pays a nominal, yearly interest rate of 4% on this deposit. How much will be in the firm's bank account (assuming no withdrawals or additional deposits) after five years, given the following five compounding frequencies? Also, what are the corresponding effective annual interest rates for each compounding frequency?

Compound Frequency	Future Value =FV(rate, nper, pmt, pv, type)	Effective Annual Interest Rate =EFFECT(nominal_rate, npery)
Yearly		
Semi-annually		
Quarterly		
Monthly		
Daily		

32. Using an interest rate of 10%, calculate the present value of the following series of cash flows: $500, $400, $600, $900, $1,000. Use the NPV function in Excel.

33. Continuing with the previous problem, assume that the above cash flows represent cash inflows from an investment. Also assume that the firm's required rate of return on all investments is 10%.

a. If the firm were to pay $3,000 for the investment, what is the net present value (NPV) of the investment?

b. Refer to a. above. Would the firm purchase the investment given the cost of the investment, the required rate of return, and given the expected cash flows? Why or why not?

c. Refer to a. above. What is the internal rate of return (IRR) of this investment?

d. What is the maximum amount the firm would pay for the investment? Why is this the maximum amount?

34. What is the compound annual growth rate (CAGR) for the following time series?

Year	Year 5	Year 4	Year 3	Year 2	Year 1
Amount	$100	77	82	70	64

Leases

35. What are the names of the two parties in a lease contract?

36. What are the main criteria for a lease to be classified as a finance lease under the new lease accounting standards?

37. A firm leases a building at the beginning of Year 1. The lease qualifies as a finance lease. The lease payments are $100 each for two years, at the end of each year. The appropriate interest rate is 10%. The leased asset is depreciated (amortized) over the two years using straight-line depreciation with no residual value.

a. Calculate the present value of the lease.

b. Complete the amortization table for the lease liability.

Year	Cash Payment	Interest 10%	Principal Adjustment	Principal Balance
1				
2				

c. Provide the lessee's entries at the inception of the lease (at the beginning of Year 1), for the payments at the end of Years 1 and 2, and for the depreciation of the leased asset.

Inception of the Lease at the beginning of Year 1:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Lease Payment at the end of Year 1:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Depreciation (amortization) of leased asset at the end of Year 1:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Lease Payment at the end of Year 2:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Depreciation of leased asset at the end of Year 2:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

38. Refer to the above problem. Assume that the lease is an operating lease, and assume the accounting standards require capitalization of operating leases. Provide the lessee's entries at the inception of the lease and at the end of Year 1 and Year 2 (for the amortization of the liability and amortization of the leased asset).

Inception of the lease at the beginning of Year 1:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Lease payment and depreciation (amortization) of asset at the end of Year 1 (note: total expense provided for informational purposes):

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$
Total Expense =		- 100				

Lease payment and amortization of asset at the end of Year 2 (note: total expense provided for informational purposes):

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$
Total Expense =		- 100				

39. Refer to the above two problems (where the leases were classified as a finance lease and operating lease, respectively). Fill in the below table to illustrate the allocation of total expenses across the lease term for both types of leases.

	Operating Lease (Lessee) Expenses are combined as one expense: Rent Expense in EBIT.)			Finance Lease (Lessee) (Expenses are shown separately--Amortization Expense in EBIT; Interest expense below EBIT.)		
Year	Interest on Liability	Depreciation of Asset	Total	Interest on Liability	Depreciation of Asset	Total
1						
2						
Total						

40. Describe the difference over time of expense recognition between the two types of leases.

Bonds

41. What are alternative terms synonymous with "market rate" of interest on a bond?

42. What are alternative terms synonymous with "stated rate" of interest on a bond?

43. What are alternative terms synonymous with a bond's "par value"?

44. Under what circumstances are bonds issued at a discount? At a premium? At par?

45. For a bond issued at a premium, at a discount, and at par, show the relationship between the stated and market rates of interest by writing <, = , or >.

		<, =, >	
Premium	Stated Rate		Market Rate
Discount	Stated Rate		Market Rate
Par	Stated Rate		Market Rate

46. Are firms allowed to apply fair value accounting to their own debt?

47. Assume a firm issues, at the beginning of Year 1, a bond with a face value of $1,000. The stated rate of interest is 4%. The market rate of interest is 7%. The maturity is in 2 years. Interest is paid yearly.

a. Calculate the issue price of the bond.

b. Complete the bond accretion table below (or separately in Excel):

Year	Cash Payment	Interest 7%	Principal Adjustment	Principal Balance
1				
2				

c. Journalize the bond issue at the beginning of Year 1, the two coupon payments at the end of Years 1 and 2, and the repayment of the principal, also at the end of Year 2.

Issue of Bond at the beginning of Year 1:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Coupon Payment at the end of Year 1:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Coupon Payment at the end of Year 2:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Repayment of Principal at the end of Year 2:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

48. Assume a firm issues, at the beginning of Year 1, a bond with a face value of $1,000. The stated rate of interest is 7%. The market rate of interest is 4%. The maturity is in 2 years. Interest is paid yearly.

a. Calculate the issue price of the bond.

b. Complete the bond amortization table below (or separately in Excel):

Year	Cash Payment	Interest 4%	Principal Adjustment	Principal Balance
1				
2				

c. Journalize the bond issue at the beginning of Year 1, the two coupon payments at the end of Years 1 and 2, and the repayment of the principal, also at the end of Year 2.

Issue of Bond at the beginning of Year 1:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Coupon Payment at the end of Year 1:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Coupon Payment at the end of Year 2:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Repayment of Principal at the end of Year 2:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

49. A firm issues a $5,000 par value bond with a five year maturity and a 6% coupon. The market rate of interest is also 6%, so the bond is issued at par. [The formula in Excel is: = PV(6%,5,-6%*5000,-5000)]. After one year, the market interest rate rises to 8% due to firm specific credit risk.

a. Calculate the new value of the bond using the new interest rate and *four* years remaining until maturity.

b. Provide the entry the bond *issuer* would make, if it exercises the fair value option:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

*Accumulated Other Comprehensive Income

c. Provide the entry the bond *investor* would make if the investor classifies the bond as a trading security.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

d. Provide the entry the bond *investor* would make if the investor classifies the bond as an available-for-sale security.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

e. Provide the entry the bond *investor* would make if the investor classifies the bond as a held-to-maturity security.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

50. Repeat the above problem, assuming that the market rate of interest falls to 4%, rather than rises to 8%, after one year.

a. Calculate the new value of the bond with the new interest rate and four years remaining until maturity.

b. Provide the entry the bond *issuer* would make, under current accounting rules, if it exercises the fair value option:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

c. Provide the entry the bond *investor* would make if the investor classifies the bond as a trading security.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

d. Provide the entry the bond *investor* would make if the investor classifies the bond as an available-for-sale security.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

e. Provide the entry the bond *investor* would make if the investor classifies the bond as a held-to-maturity security.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Owners' Equity: Common and Preferred Stock; Dividends, Splits, Treasury Stock

51. Name two preferences that preferred stock has over common stock.

52. Name two reasons why a firm would buy back its own stock.

53. What does APIC stand for? Give an example of when the account is used.

54. What is a stock dividend, and what is the difference in the accounting treatments for large versus small stock dividends?

55. What is a stock split, and how does a stock split contrast with a stock dividend?

56. Assume a firm declares a total cash dividend of $50. Payment will be made at a later date.

a. Give the journal entry on the declaration date.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

b. Provide the entry on the payment date.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

c. Assume that the above firm has twenty shares of preferred stock outstanding, each with a $5 par value. The preferred stock's dividend rate is 6%. Calculate the amount of the $50 dividend that will be allocated to both preferred and common stockholders.

Class of Stock	Amount of Dividend
Preferred	
Common	

57. Journalize the following transactions.

a. A firm issues ten shares of $3 par value common stock for $20 per share.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

b. The firm buys back two shares for $30 per share. (Use Treasury Stock.)

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

c. The firm sells one of the treasury shares for $50 per share.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

d. The firm sells the other treasury share for $25 per share.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

58. A firm has 500 shares of common stock issued and outstanding. The par value of the stock is $1 per share. The market value per share of the stock is $80.

a. Assume the firm issues a 10% stock dividend. Provide the journal entry, if one is required.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

b. After the above 10% dividend, assume the firm issues a 40% stock dividend. Provide the journal entry, if one is required.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

c. After both dividends above, assume the firm issues a 2 for 1 stock split. Provide the journal entry, if one is required.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

d. After the respective transactions in a-c, above, what is the par value per share, the total number of shares outstanding, and the total par value?

		Par Value Per Share	Total Shares Outstanding	Total Par Value
a.	10% dividend			
b.	40% dividend			
c.	2 for 1 split			

Stock Compensation: Stock Options and Restricted Stock

59. What does the phrase "at-the-money" mean with regard to stock options?

60. Define a stock option's "intrinsic value."

61. What are two reasons why stock options usually have zero intrinsic value to their recipients when they are granted?

62. How was the problem of assigning an *ex ante* stock option value, for purposes of measuring compensation expense, resolved, since the intrinsic value of the stock option is zero (on the grant date)?

63. How is the value of compensation expense determined for restricted stock?

64. At the beginning of the year, a firm awards one stock option to its only employee. The option is awarded at-the-money when the stock is trading at $14 per share. The Black-Scholes value of the option is $6. The option vests after two years. Upon vesting, the stock is trading at $20 per share and the employee exercises the option. The par value of the firm's stock is $1 per share.

a. Journalize the option on the grant date.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

b. Journalize compensation expense for both years of the vesting period.

Year 1:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Year 2:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

c. Journalize the exercise of the option.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

65. At the beginning of the year, a firm awards one share of restricted stock to its only employee. The restricted share is awarded when the stock is trading at $14 per share. The share vests after two years. Upon vesting the stock is trading at $20 per share. The par value of the firm's stock is $1 per share.

a. Journalize the award of the restricted stock.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

b. Journalize compensation expense for both years of the vesting period.

Year 1:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Year 2:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

c. Provide the entry the firm would make when the restrictions lapse, at the end of the vesting period.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Chapter 8 Q&A: Statement of Cash Flows Revisited

Conceptual Issues; Identification of Cash Flows

1. What is a major purpose of the cash flow statement?

2. Why are firms required to give accrual-based statements (income statements and balance sheets), as well as cash flow statements?

3. Name the cash flow categories (operating, investing, or financing) associated with each of the below balance sheet accounts.

Bonds Payable	
Property, Plant, and Equipment	
Stock and APIC	
Long term Investments	
Accounts Payable	
Intangibles	
Deferred Revenue	
Short term and Long term Debt	
Accounts Receivable	

4. What is the formula for calculating operating cash flow using the indirect method?

5. Why are gains subtracted and losses added to net income using the indirect method?

6. Why are increases in PP&E assumed to be cash *outflows*?

7. Why are increases in notes payable assumed to be cash *inflows*?

8. Why are increases in stock and APIC assumed to be cash inflows?

9. Label the below cash flows (under U.S. GAAP) as operating, investing, or financing.

a. Cash received from customers.	
b. Cash paid to suppliers of inventory.	
c. Cash paid for a building.	
d. Cash received from stockholders upon the sale of the firm's stock.	
e. Cash paid to stockholders in the form of a dividend.	
f. Cash paid to stockholders to buy back their stock.	
g. Cash received from the sale of a building.	
h. Cash received from a bank as a loan.	
i. Cash paid to employees as salaries and wages.	
j. Cash paid to the utility company for electricity.	
k. Cash paid to the government for taxes.	
l. Cash paid to the bank as interest on a loan.	
m. Cash paid to the bank as principal repayment.	
n. Cash received as interest on an investment in a bond.	
o. Cash received as a dividend on an investment in stock.	

Direct Method: Practice Finding Individual Cash Flows; Transaction Analysis

10. A firm's beginning and ending balances for accounts receivable are $100 and 120, respectively. Credit sales were $180. Assuming no other activity in the receivables account, calculate the amount of cash collected. Both the equation and the T-account are provided.

Accounts Receivable			
Beginning	Credit Sales	Cash	Ending
100	+ 180		120

Accounts Receivable	
100	
180	
120	

11. A firm's beginning and ending balances for accrued expenses (such as wages and salaries payable) are $50 and $40, respectively. SG&A Expense was $20. Calculate the amount of cash paid for these expenses. Both the equation and the T-account are provided.

Accrued Expenses (Payables)			
Beginning	Expense	Cash	Ending
50	+ 20		40

Accrued Expenses	
	50
	20
	40

12. A firm's beginning and ending balances in retained earnings are $80 and $90, respectively. Net Income was $50. Assuming no other activity in retained earnings, calculate the amount of dividends declared. Both the equation and the T-account are provided.

Retained Earnings			
Beginning	Net Income	Dividends	Ending
80	+ 50		90

Retained Earnings

Debit	Credit
	80
	50
	90

13. A firm's beginning and ending balances in inventory are $10 and $12, respectively. Cost of goods sold was $20. Calculate the amount of inventory purchased. Both the equation and the T-account are provided.

Inventory			
Beginning	Purchases	COGS	Ending
10		- 20	12

Inventory

Debit	Credit
10	
	20
12	

14. Refer to the previous problem. Assume that the same firm has beginning and ending balances in accounts payable of $15 and $11, respectively. Also assume that all purchases of inventory are credit purchases and therefore increase accounts payable. Calculate the amount of cash subsequently paid to suppliers of inventory. Both the equation and the T-account are provided.

Accounts Payable			
Beginning	Purchases	Cash Paid	Ending
15	+ 22		11

Accounts Payable

Debit	Credit
	15
	22
	11

15. Recreate the transaction of a sale of equipment that resulted in a gain of $10. The equipment's original cost was $80, and, on the date of the sale, the equipment's book value was $60.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

16. Recreate the transaction of a sale of equipment that resulted in a loss of $10. The equipment's original cost was $80, and, on the date of the sale, the equipment's book value was $60.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

17. What does EBITDA stand for, and what does it proxy for? What are the reasons why the proxy is not a perfect substitute?

Direct and Indirect Methods: Practice Problems

18. Consider the following consecutive balance sheets and income statement for a firm. In the space provided, derive the statement of cash flows, using the indirect method for operating cash flows.

Balance Sheet	**Year 1**	**Year 2**	**Income Statement for Year 2**	
Cash	9	11	Revenues (all on credit)	20
Accounts Receivable	10	15	SG&A Expense	-14
PP&E	4	10	Depreciation Expense	-1
Accumulated Depreciation	-1	-2	Tax Expense	-2
Total Assets	22	34	Net Income	3
Accounts Payable	10	16	Dividends (declared and paid)	2
Stock	5	10		
Retained Earnings	7	8		
Total Liabilities & Owners' Equity	22	34		

Statement of Cash Flows for Year 2	
Net Income	
Depreciation Expense	
Increase in Accounts Receivable	
Increase in Accounts Payable	
Operating Cash Flow	
Investing Cash Flow	
Purchase of PP&E	
Issuance of stock	
Dividends paid	
Financing Cash Flow	
Total change in cash	
Beginning cash balance	
Ending cash balance	

19. Refer to the previous problem. Calculate operating cash flow using the direct method. Also, in the space provided, show the calculation.

Cash Flow	**Amount**	**Explanation/Calculation**
Cash received from customers		
Cash paid to suppliers of various services		
Cash paid for taxes		
Operating Cash Flow		

20. Consider the following consecutive balance sheets and income statement for a firm. In the space provided, derive the statement of cash flows, using the indirect method for operating cash flows.

Balance Sheet	**Year 1**	**Year 2**	**Income Statement for Year 2**	
Cash	10	9	Revenues (all on credit)	20
Accounts Receivable	15	10	SG&A Expense	-14
PP&E	4	10	Depreciation Expense	-3
Accumulated Depreciation	-1	-4	Tax Expense	-1
Total Assets	28	25	Net Income	2
Accounts Payable	16	10	Dividends (declared and paid)	4
Stock	5	10		
Retained Earnings	7	5		
Total Liabilities & Owner's Equity	28	25		

Statement of Cash Flows for Year 2	
Net Income	
Depreciation Expense	
Decrease in Accounts Receivable	
Decrease in Accounts Payable	
Total Operating Cash Flow	
Investing Cash Flow	
Purchase of PP&E	
Issuance of stock	
Dividends paid	
Total Financing Cash Flow	
Total change in cash	
Beginning cash balance	
Ending cash balance	

21. Refer to the previous problem. Calculate operating cash flow using the direct method. Also, in the space provided, show any calculations.

Cash Flow	**Amount**	**Explanation/Calculation**
Cash received from customers		
Cash paid to suppliers of various services		
Cash paid for taxes		
Operating Cash Flow		

Indirect Method: More Practice Problems

22. Given the below income statement and consecutive balance sheets, complete the cash flow statement in the space provided.

Income Statement for Year 2	
Revenues	180
Cost of Goods Sold	-90
Depreciation Expense	-10
Interest Expense	-10
Income before Tax	70
Tax Expense	-28
Net Income	42
Dividends	0

Balance Sheet	**Year 1**	**Year 2**	**Change**
Cash	58	80	+ 22
Accounts Receivable	32	50	+ 18
Inventory	35	50	+ 15
Investment (Available for Sale)	20	12	- 8
Property, Plant, and Equipment	130	150	+ 20
Accumulated Deprecation	-50	-60	- 10
Total Assets	225	282	+ 57
Accounts Payable	30	38	+ 8
Tax Payable	15	8	- 7
Notes Payable	100	120	+ 20
Stock	40	40	0
Retained Earnings	40	82	+ 42
Treasury Stock	0	-6	- 6
Total Liabilities & Owners' Equity	225	282	+ 57

Statement of Cash Flows for Year 2	
Net Income	
Depreciation Expense	
Increase in Accounts Receivable	
Increase in Inventory	
Increase in Accounts Payable	
Decrease in Tax Payable	
Operating Cash Flow	
Sale of Investment	
Purchase of PP&E	
Investing Cash Flow	
Issue of Notes Payable	
Repurchase of Stock	
Financing Cash Flow	
Total Change in Cash	
Beginning Cash	
Ending Cash	

23. Given the below income statement and consecutive balance sheets, calculate the amount of the dividend, and then complete the cash flow statement in the space provided.

Income Statement for Year 2	
Revenues	180
Cost of Goods Sold	- 90
Depreciation Expense	- 10
Interest Expense	- 10
Income before Tax	70
Tax Expense	- 28
Net Income	42
Dividends (declared and paid)	

Balance Sheet	**Year 1**	**Year 2**	**Change**
Cash	58	74	+ 16
Accounts Receivable	32	50	+ 18
Inventory	35	50	+ 15
Investment (Available for Sale)	20	12	- 8
Property, Plant and Equipment	130	150	+ 20
Accumulated Depreciation	-50	-60	- 10
Total Assets	225	276	+ 51
Accounts Payable	30	38	+ 8
Tax Payable	15	8	- 7
Notes Payable	100	120	+ 20
Stock	40	40	0
Retained Earnings	40	76	+ 36
Treasury Stock	0	-6	- 6
Total Liabilities & Owners' Equity	225	276	+ 51

Statement of Cash Flows for Year 2	
Net Income	
Depreciation Expense	
Increase in Accounts Receivable	
Increase in Inventory	
Increase in Accounts Payable	
Decrease in Tax Payable	
Operating Cash Flow	
Sale of Investment	
Purchase of PP&E	
Investing Cash Flow	
Issue of Notes Payable	
Repurchase of Stock	
Dividends	
Financing Cash Flow	
Total Change in Cash	
Beginning Cash	
Ending Cash	

24. Perform a transaction analysis to determine the amount of cash received in the sale of an investment that cost $8. The sale resulted in a gain of $5, as reported on the income statement below.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Complete the cash flow statement below, incorporating the information about the sale of the investment above.

Income Statement for Year 2	
Revenues	180
Cost of Goods Sold	- 90
Depreciation Expense	- 10
Interest Expense	- 10
Gain	+ 5
Income before Tax	75
Tax Expense	- 30
Net Income	45
Dividends (declared and paid)	6

Balance Sheet	Year 1	Year 2	Change
Cash	58	77	+ 19
Accounts Receivable	32	50	+ 18
Inventory	35	50	+ 15
Investment	20	12	- 8
Property, Plant, and Equipment	130	150	+ 20
Accumulated Depreciation	-50	-60	- 10
Total Assets	225	279	+ 54
Accounts Payable	30	38	+ 8
Tax Payable	15	8	- 7
Notes Payable	100	120	+ 20
Stock	40	40	0
Retained Earnings	40	79	+ 39
Treasury Stock	0	-6	- 6
Total Liabilities & Owners' Equity	225	279	+ 54

Statement of Cash Flows for Year 2	
Net Income	
Depreciation Expense	
Gain	
Increase in Accounts Receivable	
Increase in Inventory	
Increase in Accounts Payable	
Decrease in Tax Payable	
Operating Cash Flow	
Sale of Investment	
Purchase of PP&E	
Investing Cash Flow	
Issue of Notes Payable	
Repurchase of Stock	
Dividends	
Financing Cash Flow	
Total Change in Cash	
Beginning Cash	
Ending Cash	

25. Perform a transaction analysis to determine the amount of cash received in a sale of an investment that cost $8. The sale resulted in a loss of $5, as reported on the income statement below.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Complete the cash flow statement below, incorporating the information about the sale of the investment above.

Income Statement for Year 2	
Revenues	180
Cost of Goods Sold	- 90
Depreciation Expense	- 10
Interest Expense	- 10
Loss	- 5
Income before Tax	65
Tax Expense	- 26
Net Income	39
Dividends (declared and paid)	6

Balance Sheet	Year 1	Year 2	Change
Cash	58	71	+ 13
Accounts Receivable	32	50	+ 18
Inventory	35	50	+ 15
Investment	20	12	- 8
Property, Plant, and Equipment	130	150	+ 20
Accumulated Depreciation	-50	-60	- 10
Total Assets	225	273	+ 48
Accounts Payable	30	38	+ 8
Tax Payable	15	8	- 7
Notes Payable	100	120	+ 20
Stock	40	40	0
Retained Earnings	40	73	+ 33
Treasury Stock	0	-6	- 6
Total Liabilities & Owner's Equity	225	273	+ 48

Statement of Cash Flows for Year 2	
Net Income	
Depreciation Expense	
Loss	
Increase in Accounts Receivable	
Increase in Inventory	
Increase in Accounts Payable	
Decrease in Tax Payable	
Operating Cash Flow	
Sale of Investment	
Purchase of PP&E	
Investing Cash Flow	
Issue of Notes Payable	
Repurchase of Stock	
Dividends	
Financing Cash Flow	
Total Change in Cash	
Beginning Cash	
Ending Cash	

Chapter 9 Q&A: Special Topics (Taxes, Pensions, Foreign Currency)

Income Taxes: Conceptual Issues; Permanent and Temporary Differences

1. What are the names of the two major tax rates?

2. Define permanent differences between the income statement and tax return, and describe the effects of permanent differences.

3. Define temporary differences between the income statement and tax return, and describe the effects of temporary differences.

4. Give an example of a permanent difference that makes the effective tax rate lower than the statutory tax rate.

5. Give an example of a permanent difference that makes the effective tax rate higher than the statutory tax rate.

6. Give an example of a temporary difference that gives rise to a deferred tax asset.

7. Give an example of a temporary difference that gives rise to a deferred tax liability.

8. Describe how a deferred tax liability that arises from differences between depreciation on the income statement and on the tax return could theoretically never be paid.

9. Why are deferred tax assets and liabilities not recorded on the balance sheet at their respective present values?

10. Describe how net operating losses give rise to deferred tax assets.

11. What is a deferred tax asset valuation allowance, and when is it used?

12. A firm reports the following pre-tax income, tax expense, and net income.

Pre-Tax Income	150
Tax Expense	- 40
Net Income	110

Calculate the effective tax rate.

13. True or False: Tax free municipal bond interest will result in a firm's effective tax rate being higher than the statutory tax rate.

14. Assume a firm has the following income statement and tax return for the current period, the firm's first year of operations. Complete both the income statement and the tax return, and provide the entry to recognize tax expense. Assume that taxes owed are immediately paid.

	Income Statement	Tax Return	Difference: <u>None</u>
Revenues	400	400	
Cost of Goods Sold	- 150	- 150	
SG&A Expense	- 50	- 50	
Depreciation Expense	- 20	- 20	
Interest Income	+ 20	+ 20	
Pre-Tax Income	200		
Taxable Income		200	
Statutory Rate		40%	
Tax Expense			
Tax Paid			
Deferred Tax			

Tax Expense:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

15. Redo the above problem but assume the interest income is *permanently* non-taxable. Complete both the income statement and the tax return, provide the entry to recognize tax expense, and calculate the effective tax rate.

	Income Statement	**Tax Return**	**Difference: <u>Permanent</u>**
Revenues	400	400	
Cost of Goods Sold	- 150	- 150	
SG&A Expense	- 50	- 50	
Depreciation Expense	- 20	- 20	
Interest Income	20	0	
Pre-Tax Income	200		
Taxable Income		180	
Statutory Rate		40%	
Tax Expense			
Tax Paid			
Deferred Tax			

Tax Expense:

Assets	Liabilities	Owners' Equity	Debit Credit $ $

Effective Tax Rate:

16. Redo the above problem but assume the interest income is *temporarily* non-taxable. Complete both the income statement and the tax return, provide the entry to recognize tax expense, and calculate the effective tax rate.

	Income Statement	**Tax Return**	**Difference: <u>Temporary</u>**
Revenues	400	400	
Cost of Goods Sold	- 150	- 150	
SG&A Expense	- 50	- 50	
Depreciation Expense	- 20	- 20	
Interest Income	20	0	
Pre-Tax Income	200		
Taxable Income		180	
Statutory Rate		40%	
Tax Expense			
Tax Paid			
Deferred Tax			

Tax Expense:

Assets	Liabilities	Owners' Equity	Debit Credit $ $

Effective Tax Rate:

17. Assume a firm has the following income statement and tax return for the current period, the firm's first year of operations. Complete both statements and provide the entry to recognize tax expense. Assume that taxes owed are immediately paid.

	Income Statement	**Tax Return**	**Difference: <u>None</u>**
Revenues	400	400	
Cost of Goods Sold	- 150	- 150	
SG&A Expense	- 50	- 50	
Depreciation Expense	- 20	- 20	
Other Expense	- 20	- 20	
Pre-Tax Income	160		
Taxable Income		160	
Statutory Rate		40%	
Tax Expense			
Tax Paid			
Deferred Tax			

Tax Expense:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

18. Redo the above problem, but assume that the "Other Expense" is permanently non-deductible. For example, it could represent a fine or penalty for some sort of safety violation, and the tax code does not allow any deduction (ever) for such an infraction. Complete both the income statement and the tax return, provide the entry to recognize tax expense, and calculate the effective tax rate.

	Income Statement	**Tax Return**	**Difference: <u>Permanent</u>**
Revenues	400	400	
Cost of Goods Sold	- 150	- 150	
SG&A Expense	- 50	- 50	
Depreciation Expense	- 20	- 20	
Other Expense	- 20	0	
Pre-Tax Income	160		
Taxable Income		180	
Statutory Rate		40%	
Tax Expense			
Tax Paid			
Deferred Tax			

Tax Expense:

Assets	Liabilities	Owners' Equity	Debit Credit $ $

Effective Tax Rate:

19. Redo the above problem, but assume that the Other Expense is temporarily non-deductible. It could, for example, represent severance pay for employees that is not deductible until it is actually paid, even though under accounting standards it must be accrued as an expense in advance of payment. Complete both the income statement and the tax return, provide the entry to recognize tax expense, and calculate the effective tax rate.

	Income Statement	**Tax Return**	**Difference: Temporary**
Revenues	400	400	
Cost of Goods Sold	- 150	- 150	
SG&A Expense	- 50	- 50	
Depreciation Expense	- 20	- 20	
Other Expense	- 20	0	
Pre-Tax Income	160		
Taxable Income		180	
Statutory Rate		40%	
Tax Expense			
Tax Paid			
Deferred Tax			

Tax Expense:

Assets	Liabilities	Owners' Equity	Debit Credit $ $

Effective Tax Rate:

20. A firm has $500 of revenues that are also fully taxable and $100 of expenses that are also fully deductible in the current year (the first year of operations). The firm also has $40 of restructuring expenses, but these are not deductible in the current year, but are expected to be deductible in the next year. The statutory tax rate is 35%. Complete both the income statement and the tax return, and provide the entry to recognize tax expense. Assume that taxes owed are immediately paid.

	Income Statement	**Tax Return**	**Difference: <u>Temporary</u>**
Revenues	500	500	
Various Expenses	- 100	- 100	
Restructuring Expense	- 40	0	
Pre-tax Income	360		
Taxable Income		400	
Statutory Rate		35%	
Tax Expense			
Tax Paid			
Deferred Tax			

Tax Expense:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

21. True or False? Deferred tax liabilities are recognized in the balance sheet at the present value of cash payments owed to the government in the future.

22. A firm has $500 of GAAP revenues that are also fully taxable and $100 of GAAP expenses that are also fully deductible in the current year (the first year of operations). The firm also has $40 of depreciation expense for GAAP, but $80 of depreciation deduction for the current year's tax return. The statutory tax rate is 35%. Complete both the income statement and the tax return, and provide the entry to recognize tax expense. Assume that taxes owed are immediately paid.

	Income Statement	**Tax Return**	**Difference: <u>Temporary</u>**
Revenues	500	500	
Various Expenses	- 100	- 100	
Depreciation Expense	- 40	- 80	
Pre-tax Income	360		
Taxable Income		320	
Statutory Rate		35%	
Tax Expense			
Tax Paid			
Deferred Tax			

Tax Expense:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Pensions: Defined Benefit and Defined Contribution Plans

23. Describe the two main types of pension plans.

24. Give the journal entry to recognize a firm's payment of $50 to a defined contribution plan.

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

25. What is the definition of "funded status" for a defined benefit pension plan?

26. In the current year, a firm begins a defined benefit pension plan that stipulates a pension benefit of 2% of its only employee's final salary, estimated to be $60,000. The employee is expected to work for two years beyond the current year, and then live for three years after retiring. The appropriate interest rate is 8%.

a. Calculate the present value of the benefit (2% of $60,000 for an estimated three years) as of the retirement date, and also as of the current yearend.

Present value of benefit as of the retirement date:

Present value of benefit as of current yearend (today):

b. Set up a table to show the accretion and amortization of the above amount.

Year	Cash Payment	Interest 8%	Principal Adjustment	Principal Balance
1				
2				
3				
4				
5				

27. Below are the three main accounts for a defined benefit pension plan.

a. Fill in the missing amounts for each account. Both the equation form of the accounts and the T-accounts are provided.

Pension Fund

Beginning Balance	Cash Funding by the Firm	Actual Investment Income	Payments to Retirees	Ending Balance
	2	5	- 15	42

Pension Obligation

Beginning Balance	Service	Interest	Payments to Retirees	Changes in Assumptions	Ending Balance
	9	5		0	49

Pension Expense

Service	Interest	Expected Investment Income	Total Expense
		- 10	4

Pension Fund

2	15
5	
42	

Pension Obligation

	9
	5
	49

Pension Expense

	10
4	

b. Provide the entry to recognize pension expense, as well as the entry to recognize the full amount of the funded status on the firm's balance sheet. (For the pension obligation, simply use "Liability.")

Pension Expense:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Adjustment to recognize funded status:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

c. Describe the cause of underfunded status.

28. Below are the three main accounts for a defined benefit pension plan.

a. Fill in the missing amounts for each account. Both the equation form of the accounts and the T-accounts are provided.

Pension Fund				
Beginning Balance	Cash Funding by the Firm	Actual Investment Income	Payments to Retirees	Ending Balance
20	2	5		

Pension Obligation					
Beginning Balance	Service	Interest	Payments to Retirees	Changes in Assumptions	Ending Balance
20			-15	6	

Pension Expense			
Service	Interest	Expected Investment Income	Total Expense
10	2		7

Pension Fund	
20	
2	
5	

Pension Obligation	
	20
15	
	6

Pension Expense	
10	
2	
7	

b. Provide the entry to recognize pension expense, as well as the entry to recognize the full amount of the funded status on the firm's balance sheet. (For the pension obligation, simply use "Liability.")

Pension Expense:

Assets	Liabilities	Owners' Equity	Debit Credit $ $

Adjustment to recognize funded status:

Assets	Liabilities	Owners' Equity	Debit Credit $ $

c. Describe the cause of underfunded status.

29. Below are the three main accounts for a defined benefit pension plan.

a. Fill in the missing amounts for each account. Both the equation form of the accounts and the T-accounts are provided.

Pension Fund

Beginning Balance	Cash Funding by the Firm	Actual Investment Income	Payments to Retirees	Ending Balance
100	20	- 15		

Pension Obligation

Beginning Balance	Service	Interest	Payments to Retirees	Changes in Assumptions	Ending Balance
100	24		- 25	14	

Pension Expense

Service	Interest	Expected Investment Income	Total Expense
24	6	- 8	

Pension Fund	
100	
20	15

Pension Obligation	
	100
	24
25	
	14

Pension Expense	
24	
6	8

b. Provide the entries to recognize pension expense, as well as the full amount of the funded status on the firm's balance sheet. (For the pension obligation, simply use "Liability.")

Pension Expense:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

Adjustment to recognize funded status:

Assets	Liabilities	Owners' Equity	Debit	Credit	$	$

c. Describe the cause of underfunded status.

Foreign Currency Translation

30. What is the U.S. dollar equivalent for a foreign currency amount of FC80, when the exchange rate is $1.1/FC?

31. Describe why an imbalance usually occurs *on the balance sheet* during the translation process.

32. Describe why an articulation problem occurs *on the cash flow statement* during the translation process.

33. Give the breakdown of factors affecting the translation of a foreign subsidiary's revenues.

34. A foreign subsidiary has the following transactions during its first year of operations (Year 1).

At the beginning of the year, the subsidiary borrows FC15 (where FC stands for foreign currency, which is the local currency of the subsidiary). The journal entry is provided below:

Assets	Liabilities	Owners' Equity	Debit	Credit	**FC**	**FC**

Over the course of Year 1, the subsidiary has FC50 in cash sales and FC40 in cash expenses. The sales and expenses are journalized below:

Assets	Liabilities	Owners' Equity	Debit	Credit	**FC**	**FC**

The parent firm that owns the above subsidiary reports in U.S. dollars. The applicable exchange rates are below:

Accounts	Applicable FC Rates ($ / FC)
Sales	1.5
Expenses	1.5
Operating Cash Flow	1.5
Financing Cash Flow	1.0
Assets	2.0
Liabilities	2.0

Create the three financial statements in both FC and U.S. dollars below:

Financial Statements (Year 1)	**FC**	**Rate**	**$**
Income Statement			
Sales		1.5	
Expenses		1.5	
Net Income		1.5	
Balance Sheet			
Assets (Cash)		2.0	
Liabilities (Note Payable)		2.0	
Retained Earnings			
FC Adjustment (AOCI)			

Retained Earnings	**FC**	**Rate**	**$**
Beginning Balance			
Net Income		1.5	
Ending Balance			

Cash Flow Statement	**FC**	**Rate**	**$**
Operating Cash Flow		1.5	
Investing Cash Flow			
Financing Cash Flow		1.0	
FC Adjustment			
Total Increase in Cash			
Beginning Cash Balance			
Ending Cash Balance			

35. Repeat the above translation. However, assume the following applicable exchange rates.

Accounts	Applicable FC Rates ($ / FC)
Sales	1.5
Expenses	1.5
Operating Cash Flow	1.5
Financing Cash Flow	2.0
Assets	1.0
Liabilities	1.0

Financial Statements (Year 1)	**FC**	**Rate**	**$**
Income Statement			
Sales		1.5	
Expenses	- 40	1.5	- 60
Net Income	10	1.5	15
Balance Sheet			
Assets (Cash)		1.0	
Liabilities (Notes Payable)		1.0	
Retained Earnings			
FC Adjustment (AOCI)			

Retained Earnings	**FC**	**Rate**	**$**
Beginning Balance			
Net Income		1.5	
Ending Balance			

Cash Flow Statement	**FC**	**Rate**	**$**
Operating Cash Flow		1.5	
Investing Cash Flow			
Financing Cash Flow		2.0	
FC Adjustment			
Total Increase in Cash			
Beginning Cash Balance			
Ending Cash Balance			

36. Refer to the above two problems. Describe the relationship between exchange rates and the FC adjustments on the balance sheet.

U.S. GAAP v. IFRS

37. Label each accounting treatment as being a part of U.S. GAAP (GAAP) or IFRS.

Accounting Issue	**GAAP or IFRS?**
Write downs/impairments generally are not reversed.	
Reserves for contingencies are recognized if "more likely than not."	
Capitalization of R&D begins once a high threshold has been reached in the development phase.	
Property, Plant, and Equipment may be revalued to fair value (that is, marked to market).	
Operating cash flows are usually calculated using the indirect method, commencing with Net Income. Cash interest (i.e., interest paid) is disclosed in a note.	
LIFO is not allowed.	
Prescriptive accounting treatment is the norm. There is tremendous literature on accounting guidance and implementation procedures across a wide array of industries.	
All firms using the standards must adhere to the full set of standards. There are no "carve outs."	