

P2-57. Analyzing Transactions Using the Financial Statement Effects Template and Preparing an Income Statement (FSET) **LO2-1, 2, 3, 4**

On December 1, R. Lambert formed Lambert Services, which provides career and vocational counseling services to graduating college students. The following transactions took place during December, and company accounts include the following: Cash, Accounts Receivable, Land, Accounts Payable, Notes Payable, Common Stock, Retained Earnings, Counseling Services Revenue, **Supplies Expense**, Advertising Expense, Interest Expense, Salary Expense, and Utilities Expense.



1. Raised \$21,000 cash through common stock issuance.
2. Paid \$2,250 cash for supplies and training materials.
3. Received \$1,500 invoice for December advertising expenses.
4. Borrowed \$45,000 cash from bank and signed note payable for that amount.
5. Received \$3,600 cash for counseling services rendered.
6. Billed clients \$20,400 for counseling services rendered.
7. Paid \$6,600 cash for secretary salary.
8. Paid \$1,110 cash for December utilities.
9. Declared and paid a \$2,700 cash dividend.
10. Purchased land for \$39,000 cash to use for its own facilities.
11. Paid \$300 cash to bank as December interest expense on note payable.

REQUIRED

- a. Report the effects for each of the separate transactions 1 through 11 using the financial statement effects template. Total all columns and prove that (1) assets equal liabilities plus equity on December 31, and (2) revenues less expenses equal net income for December.
- b. Prepare an income statement for the month of December.

P2-58. Recording Transactions in Journal Entries and T-Accounts**LO2-6**

Use the information in Problem 2-57 to complete the following requirements.

REQUIRED

- a. Prepare journal entries for each of the transactions 1 through 11.
- b. Set up T-accounts for each of the accounts used in part a and post the journal entries to those T-accounts.

**P2-59. Analyzing and Interpreting Balance Sheet Data and Interpreting Liquidity Measures****LO2-1, 7**

Selected balance sheet amounts for **Apple Inc.**, a retail company, for four recent fiscal years follow:

(\$ millions)	Current Assets	Non-current Assets	Total Assets	Current Liabilities	Non-current Liabilities	Total Liabilities	Stockholders' Equity
2017	\$128,645	\$?	\$375,319	\$?	\$140,458	\$241,272	\$134,047
2018	131,339	234,386	?	116,866	?	258,578	107,147
2019	162,819	175,697	?	?	142,310	248,028	?
2020	?	180,175	323,888	105,392	?	258,549	65,339



Apple Inc.
NYSE :: AAPL

REQUIRED

- a. Compute the missing balance sheet amounts for each of the four years shown.
- b. What asset category would you expect to constitute the majority of Apple's current assets? Of its long-term assets?
- c. Is the company conservatively financed; that is, is it financed by a greater proportion of equity than of debt?
- d. Calculate the current ratio for 2017 and 2020.
- e. Assume the industry average is 1.0 for the current ratio. Comment on Apple's current ratio relative to the industry.

P2-60. Analyzing Balance Sheet Numbers from Incomplete Data and Interpreting Liquidity Measures**LO2-1, 7**

Selected balance sheet amounts for **Alibaba Group Holding Ltd**, a China-based online and mobile commerce company, for three recent fiscal years ending March 31 follow:



Alibaba Group Holding Ltd
NYSE :: BABA

P2-63. Recording Transactions in Journal Entries and T-Accounts

Use the information in Problem 2-62 to complete the following requirements.

REQUIRED

- Prepare journal entries for each of the transactions 1 through 12.
- Set up T-accounts for each of the accounts used in part *a* and post the journal entries to those T-accounts.

LO2-6**P2-64. Analyzing and Interpreting Income Statement Numbers from Incomplete Data**

Selected income statement information for **Starbucks Corporation**, a coffee-related restaurant chain, for four recent fiscal years follows.

LO2-3

Starbucks Corporation
NASDAQ :: SBUX

(\$ millions)	Revenues	Cost of Sales	Gross Profit	Operating Expenses	Operating Income	Other Expenses	Net Income
2017	\$?	\$7,065.8	\$15,321.0	\$?	\$4,134.7	\$1,249.8	\$?
2018	24,719.5	?	16,788.8	?	?	(634.7)	4,518.0
2019	26,508.6	8,526.9	?	13,903.8	4,077.9	?	3,594.6
2020	?	7,694.9	15,823.1	14,261.4	1,561.7	637.0	?

REQUIRED

- Compute the missing amounts for each of the four years shown.
- Compute the gross profit margin (gross profit/sales) for each of the four years and comment on its level and any trends that are evident.
- What would you expect to be the major cost categories constituting its operating expenses?

P2-65. Analyzing, Reconstructing, and Interpreting Income Statement Data

Selected income statement information for **Siemens AG**, a global technology company, for four fiscal years follows:

LO2-3

Siemens AG
OTCMKTS :: SIEGY

(€ millions)	Revenues	Cost of Goods Sold	Gross Profit	Operating Expenses	Operating Income	Other Expense	Net Income
2017	82,863	57,820	25,043	?	7,571	?	6,094
2018	83,044	?	24,863	18,677	?	?	6,120
2019	?	36,848	21,635	15,343	6,292	644	?
2020	57,139	36,953	?	15,147	?	839	4,200

REQUIRED

- Compute the missing amounts for each of the four years shown.
- Per the annual report, the company engaged in a restructuring effort effective in 2019 (including changes in reportable segments). Assuming all else constant, what were the effects of the restructuring on the firm's gross profit margin (gross profit/sales)?
- What would we expect to be the major cost categories constituting Siemens' operating expenses?

P2-66. Preparing the Income Statement, Statement of Stockholders' Equity, and Balance Sheet

The records of Geyer, Inc., show the following information after all transactions are recorded for the year.

LO2-1, 3, 5

Notes payable	\$ 8,000	Supplies	\$12,200
Service fees earned	135,200	Cash	29,600
Supplies expense	19,400	Advertising expense	3,400
Insurance expense	3,000	Salaries expense	60,000
Miscellaneous expense	400	Rent expense (short-term lease) ...	15,000
Common stock (beg. year)	8,000	Retained earnings (beg. year)	12,400
Accounts payable	3,600		

In addition, Geyer, Inc., raised \$2,800 cash through the issuance of additional common stock during this year, and it declared and paid a \$27,000 cash dividend near year-end.

REQUIRED

- Prepare its income statement for the year.
- Prepare its statement of stockholders' equity for the year.
- Prepare its balance sheet at December 31.

LO3-1 M3-23. Recording Transactions in the Financial Statement Effects Template (FSET)

Minute Maid, a firm providing housecleaning services, began business on April 1. The following transactions occurred during the month of April.

- April 1 A. Falcon invested \$13,500 cash to begin the business in exchange for common stock.
 2 Paid \$4,200 cash for six months' lease on van for the business.
 3 Borrowed \$15,000 cash from bank and signed note payable agreeing to repay it in 1 year plus 10% interest.
 3 Purchased \$8,200 of cleaning equipment; paid \$3,800 cash with the remainder due within 30 days.
 4 Paid \$6,400 cash for cleaning supplies.
 7 Paid \$500 cash for advertisements to run in newspaper during April.
 21 Billed customers \$5,500 for services performed.
 23 Paid \$4,400 cash on account to cleaning equipment suppliers (see April 3).
 28 Collected \$4,000 cash from customers on their accounts.
 29 Paid \$1,500 cash for dividends.
 30 Paid \$2,600 cash for April wages.
 30 Paid \$1,480 cash to service station for gasoline used during April.

REQUIRED

Record the above transactions for April using the financial statement effects template.

LO3-1 M3-24. Journalizing Transactions and Posting to T-Accounts

Use the information from M3-23 to complete the following requirements.

- The following accounts in its general ledger are needed to record the transactions for April: Cash; Accounts Receivable; Supplies; Prepaid Van Lease; Equipment; Accounts Payable; Notes Payable; Common Stock; Retained Earnings; Cleaning Fees Earned; Van Fuel Expense; Advertising Expense; and Wages Expense. Record the above transactions for April in journal entry form.
- Set up T-accounts for each of the ledger accounts and post the entries to them (key the numbers in T-accounts by date).

LO3-1, 2 M3-25. Recording Transactions and Adjustments in the Financial Statement Effects Template (FSET)

Deluxe Building Services offers custodial services on both a contract basis and an hourly basis. On January 1, Deluxe collected \$50,250 in advance on a six-month contract for work to be performed evenly during the next six months. Assume that Deluxe closes its books and issues financial reports on a monthly basis.

- Prepare the entry on January 1 to record the receipt of \$50,250 cash for contract work using the financial statements effect template.
- Prepare the adjusting entry to be made on January 31 for the contract work done during January using the financial statements effect template.
- At January 31, a total of 45 hours of hourly rate custodial work was unbilled. The billing rate is \$19 per hour. Prepare the adjusting entry needed on January 31 using the financial statements effect template. (The firm uses the account Fees Receivable to reflect amounts due but not yet billed.)

LO3-1, 2 M3-26. Journalizing Transactions and Adjusting Accounts

Using the information from M3-25, prepare entries for parts *a*, *b*, and *c* in journal entry form.

LO3-2, 5 M3-27. Adjusting Accounts Using the Financial Statement Effects Template (FSET)

Selected accounts of Ideal Properties, a real estate management firm, are shown below as of January 31 before any adjusting entries have been made.

Unadjusted Account Balances	Debits	Credits
Prepaid insurance.	\$10,800	
Supplies inventory	2,895	
Office equipment	8,928	
Unearned rent liability.		\$ 7,860
Salaries expense	4,650	
Rent revenue		22,500

Monthly financial statements are prepared. Using the following information, report the adjusting entries necessary on January 31 using the financial statements effect template.

E4-37. Accounting Sleuth: Reconstructing Entries

Kasznik Ltd. had the following balances for its property, plant, and equipment accounts (in millions of pounds):

	Dec. 31 Year 7	Dec. 31 Year 8
Property, plant, and equipment at cost	£525	£549
Accumulated depreciation	(234)	(249)
Property, plant, and equipment, net	<u>£291</u>	<u>£300</u>

During Year 8, Kasznik Ltd. paid £84 million in cash to acquire property and equipment, and this amount represents all the acquisitions of property, plant, and equipment for the period. The company's income statement reveals depreciation expense of £51 million and a £15 million loss from the disposal of used equipment.

- What was the original cost of the used equipment that Kasznik Ltd. sold during Year 8?
- How much depreciation had been accumulated on the used equipment at the time it was sold?
- How much cash did Kasznik Ltd. receive from its disposal of used equipment?

E4-38. Reconciling Changes in Balance Sheet Accounts

The following table presents selected items from the 2020 and 2019 balance sheets and 2020 income statement of **Walgreens Boots Alliance, Inc.**

WALGREENS BOOTS ALLIANCE, INC. (\$ millions)				
Selected Balance Sheet Data			Selected Income Statement Data	
	2020	2019		2020
Inventories	\$ 9,451	\$ 9,333	Cost of merchandise sold	\$111,520
Property and equipment, less accumulated depreciation	13,342	13,478	Depreciation expense*	1,500
Trade accounts payable	14,458	14,341	Net earnings	424
Retained earnings	34,210	35,815		

*Includes amortization on capitalized system development costs and software included in property, plant, and equipment.

- Compute the cash paid for merchandise inventories in 2020. Assume that trade accounts payable is only for merchandise purchases.
- Compute the net cost of property acquired in 2020.
- Compute the cash dividends paid in 2020.

E4-39. Analyzing Investing and Financing Cash Flows

During the year, Paxon Corporation's long-term investments account (at cost) increased \$30,000, which was the net result of purchasing stocks costing \$160,000 and selling stocks costing \$130,000 at a \$12,000 loss. Also, its bonds payable account decreased \$20,000, the net result of issuing \$260,000 of bonds and retiring bonds with a book value of \$280,000 at an \$18,000 gain. What items and amounts appear in the (a) cash flows from investing activities and (b) cash flows from financing activities sections of its annual statement of cash flows?

E4-40. Reconciling Changes in Balance Sheet Accounts

The following table presents selected items from the Year 6 (the more recent year) and Year 5 balance sheets and Year 6 income statement of Andrews, Inc.

ANDREWS, INC.				
Selected Balance Sheet Data			Selected Income Statement Data	
	Year 6	Year 5		Year 6
Property and equipment, cost	\$1,050,000	\$1,041,000	Depreciation expense	\$41,600
Accumulated depreciation	815,000	780,000	Gain on sale of property and equipment	600
Retained earnings	215,000	195,000	Net income	34,050

LO4-5**LO4-2, 5**

**Walgreens Boots
Alliance, Inc.**
NYSE :: WBA

LO4-4, 5**LO4-4, 5**

LO5-4**DA5-6. Preparing Tableau Visualizations to Analyze Liquidity Through the Current Ratio**

Refer to PB-27 in Appendix B. This problem uses Tableau to analyze liquidity of S&P 500 companies through the current ratio. The visualization is exported to PowerPoint for communication purposes.

**DATA VISUALIZATION**

Data Visualization Activities are available in myBusinessCourse. These assignments use Tableau Dashboards to expose students to visual depictions of data and introduce students to data analytics through data visualizations. These exercises are easily assignable and auto graded by MBC.

MINI EXERCISES**LO5-2, 3****M5-14. Return on Investment, DuPont Analysis, and Financial Leverage**

The following table presents selected annual financial information for Sunder Company.



SUNDER COMPANY Selected Annual Financial Data	
Balance Sheet:	
Average total assets	\$1,500,000
Average total liabilities	750,000
Average stockholders' equity	750,000
Income statement:	
Sales revenue	\$1,500,000
Earnings before interest (net of tax)	30,000
Interest expense (net of tax)	22,500
Net income	7,500

- Compute Sunder's ROE, ROA, and ROFL for the year.
- Use the DuPont analysis described in the Business Insight on page 230 to disaggregate ROE.
- How did the use of financial leverage affect Sunder's ROE during the year? Explain.

LO5-1**M5-15. Common-Size Balance Sheets**

Following is the balance sheet for **Target Corporation**. Prepare Target's common-size balance sheets as of February 1, 2020, and February 2, 2019.



(\$ millions)	February 1, 2020	February 2, 2019
Assets		
Cash and cash equivalents	\$ 2,577	\$ 1,556
Inventory	8,992	9,497
Other current assets	1,333	1,466
Total current assets	12,902	12,519
Property and equipment, net	26,283	25,533
Operating lease assets	2,236	1,965
Other noncurrent assets	1,358	1,273
Total assets	\$42,779	\$41,290
Liabilities and shareholders' investment		
Accounts payable	\$9,920	\$ 9,761
Accrued and other current liabilities	4,406	4,201
Current portion of long-term debt and other borrowings	161	1,052
Total current liabilities	14,487	15,014
Long-term debt and other borrowings	11,338	10,223
Noncurrent operating lease liabilities	2,275	2,004
Deferred income taxes	1,122	972
Other noncurrent liabilities	1,724	1,780
Total noncurrent liabilities	16,459	14,979
Total shareholders' investment	11,833	11,297
Total liabilities and shareholders' investment	\$42,779	\$41,290

continued from previous page

Year Ended December 31	2020
Income before income taxes	\$1,154
Interest expense	748
Cash flows from operating activities	5,943
Capital expenditures	3,157

- Compute the current ratio and quick ratio for each year and discuss any trend in liquidity. Do you believe the company is sufficiently liquid? ~~How should the balance in restricted cash affect your analysis?~~
- Compute the debt-to-equity ratio for 2020 and 2019 and the times-interest-earned ratio for 2020. Discuss the trend in the debt-to-equity ratio.
- In 2018, Tesla had a cash burn rate of approximately \$8,000 per day. Compute the cash burn rate for 2020. Analyze your results.

L05-4 E5-33. Compute and Interpret Liquidity and Solvency Ratios

Selected balance sheet and income statement information from **Siemens, AG**, for 2018 through 2020 follows (€ millions).



	Total Current Assets	Total Current Liabilities	Cash Flow from Operations	Pretax Income	Interest Expense	Total Liabilities	Stockholders' Equity
2018	€64,570	€47,874	€8,425	€8,050	€1,089	€90,869	€48,046
2019	70,370	50,723	8,456	6,933	965	99,265	50,984
2020	52,968	34,117	8,862	5,672	815	84,074	39,823

- Compute the current ratio for each year and discuss any trend in liquidity. Also compute the operating cash flow to current liabilities (OCFCL) ratio for each year. (In 2017, current liabilities totaled €46,077 million.) Do you believe the company is sufficiently liquid? Explain. What additional information about the accounting numbers comprising this ratio might be useful in helping you assess liquidity? Explain.
- Compute times interest earned and the debt-to-equity ratio for each year and discuss any trends for each.
- What is your overall assessment of the company's liquidity and solvency from the analyses in *a* and *b*? Explain.

L05-2, 3 E5-34. Compute, Disaggregate, and Interpret ROE and ROA

Income statements for **The Gap, Inc.**, follow, along with selected balance sheet information (\$ millions).



THE GAP, INC. Consolidated Statement of Earnings			
Fiscal Year Ended	Feb. 1, 2020	Feb. 2, 2019	
Net sales	\$16,383	\$16,580	
Cost of goods sold and occupancy expenses	10,250	10,258	
Gross profit	6,133	6,322	
Operating expenses	5,559	4,960	
Operating income	574	1,362	
Interest expense	76	73	
Interest income	(30)	(33)	
Income before income taxes	528	1,322	
Income taxes	177	319	
Net income	\$ 351	\$ 1,003	

THE GAP, INC. Selected Balance Sheet Data		
	Feb. 1, 2020	Feb. 2, 2019
Merchandise inventories	\$ 2,156	\$2,131
Total assets	13,679	8,049
Total stockholders' equity	3,316	3,553

- Compute the return on equity (ROE), return on assets (ROA), and return on financial leverage (ROFL) for the fiscal year ended February 1, 2020. Assume a statutory tax rate of 25%.
- Disaggregate ROA into profit margin (PM) and asset turnover (AT).
- Compute the gross profit margin (GPM) and inventory turnover (INVT) ratios for the fiscal year ended February 1, 2020.
- Assess the Gap's performance. What are the most important drivers of the Gap's success?

E5-35.^B Common-Size and Forecast Income Statements

Refer to the income statements for **The Gap, Inc.**, presented in E5-34.

- Prepare common-size income statements for fiscal years 2019 (ending February 1, 2020) and 2018 (ending February 2, 2019).
- Prepare an income statement forecast for the fiscal year 2020 (ending January 30, 2021), based on the following assumptions:
 - Net sales total \$14,000 million.
 - Cost of goods sold and occupancy expenses are 62% of sales.
 - Operating expenses total 35% of sales.
 - Interest income and interest expense are unchanged from the 2019 amounts.
 - The Gap's effective tax rate on income before taxes is 25% in 2020.
- Given the Gap's business strategy, what are the factors that ultimately determine the accuracy of the income statement forecast prepared in b?

LO5-1, 6

The Gap, Inc.
NYSE :: GPS

PROBLEMS**P5-36. Analysis and Interpretation of Return on Investment for Competitors**

Balance sheets and income statements for **Nike, Inc.**, and **Adidas Group** follow. Refer to these financial statements to answer the requirements.

LO5-2, 3

Nike, Inc.
NYSE :: NKE
Adidas Group, AG
OTCMKTS :: ADDYY

	NIKE, INC. Balance Sheets (\$ millions) May 31		ADIDAS GROUP, AG Balance Sheets (€ millions) December 31	
	2020	2019	2019	2018
Assets				
Current assets:				
Cash and cash equivalents	\$ 8,348	\$ 4,466	€ 2,220	€ 2,629
Short-term investments	439	197	836	548
Accounts receivable, net	2,749	4,272	2,625	2,418
Inventories	7,367	5,622	4,085	3,445
Prepaid expenses and other current assets	1,653	1,968	1,170	773
Total current assets	20,556	16,525	10,934	9,813
Property, plant, and equipment, net	4,866	4,744	2,380	2,237
Operating lease right-of-use assets, net	3,097	—	2,931	—
Goodwill and identifiable intangible assets, net	497	437	2,421	2,285
Deferred income taxes and other assets	2,326	2,011	2,013	1,277
Total assets	<u>\$31,342</u>	<u>\$23,717</u>	<u>€20,680</u>	<u>€15,612</u>
Liabilities and shareholders' equity				
Current liabilities:				
Short-term debt	\$ 251	\$ 15	€ 43	€ 66
Accounts payable	2,248	2,612	2,703	2,300
Current portion of operating lease liabilities	445	—	733	—
Accrued liabilities	5,184	5,010	2,437	2,305
Income taxes payable	156	229	618	268
Other current liabilities	—	—	2,219	1,895
Total current liabilities	8,284	7,866	8,754	6,834
Long-term debt	9,406	3,464	1,595	1,609
Operating lease liabilities	2,913	—	2,399	—
Other noncurrent liabilities	2,684	3,347	874	805
Total shareholders' equity	8,055	9,040	7,058	6,364
Total liabilities and shareholders' equity	<u>\$31,342</u>	<u>\$23,717</u>	<u>€20,680</u>	<u>€15,612</u>

Note: Amounts in the Adidas reports are rounded amounts, and thus, they may not exactly sum to totals and subtotals.

UNITED PARCEL SERVICE, INC. Balance Sheet				
December 31 (\$ millions)	2020	2019	2018	
Assets				
Current assets:				
Cash and cash equivalents	\$ 5,910	\$ 5,238	\$ 4,225	
Marketable securities	406	503	810	
Accounts receivable, net.	10,750	9,552	8,958	
Assets held for sale	1,197	—	—	
Other current assets	1,953	1,810	2,217	
Total current assets	20,216	17,103	16,210	
Property, plant, and equipment, net	32,254	30,482	26,576	
Operating lease right-of-use assets	3,073	2,856	—	
Goodwill	3,367	3,813	3,811	
Intangible assets, net	2,274	2,167	2,075	
Investments and restricted cash	25	24	170	
Deferred income tax assets	527	330	141	
Other noncurrent assets	672	1,082	1,033	
Total assets	<u>\$62,408</u>	<u>\$57,857</u>	<u>\$50,016</u>	
Liabilities and shareholders' equity				
Current liabilities:				
Current maturities of long-term debt, commercial paper, and finance leases . .	\$ 2,623	\$ 3,420	\$ 2,805	
Current maturities of operating leases	560	538	—	
Accounts payable	6,455	5,555	5,188	
Accrued wages and withholdings	3,569	2,552	3,047	
Self-insurance reserves	1,085	914	810	
Accrued group welfare and retirement plan contributions	927	793	715	
Other current liabilities	1,797	1,641	1,522	
Total current liabilities	17,016	15,413	14,087	
Long-term debt and finance leases	22,031	21,818	19,931	
Noncurrent operating leases	2,540	2,391	—	
Pension and postretirement benefit obligations	15,817	10,601	8,347	
Deferred income tax liabilities	488	1,632	1,619	
Other noncurrent liabilities	3,847	2,719	2,995	
Total liabilities	61,739	54,574	46,979	
Total shareholders' equity	669	3,283	3,037	
Total liabilities and shareholders' equity	<u>\$62,408</u>	<u>\$57,857</u>	<u>\$50,016</u>	

REQUIRED

- Compute ROA and disaggregate it into profit margin (PM) and asset turnover (AT) for 2020 and 2019. Comment on the drivers of the ROA. Assume a 25% tax rate for this period.
- Compute any expense to sales (ETS) ratios that you think might help explain UPS' profitability.
- Compute return on equity (ROE) for 2020 and 2019.
- Comment on the difference between ROE and ROA. What does this relation suggest about UPS' use of debt?

P5-42. Analysis and Interpretation of Liquidity and Solvency

Refer to the financial information of **United Parcel Service** in P5-41 to answer the following requirements.

REQUIRED

- Compute its current ratio and quick ratio for 2020 and 2019. Comment on any observed trends.
- Compute its times interest earned and its debt-to-equity ratios for 2020 and 2019. Comment on any trends observed.
- Summarize your findings in a conclusion about the company's liquidity and solvency. Do you have any concerns about its ability to meet its debt obligations?

P5-43.^A Computing and Analyzing Operating Returns

Refer to the financial statements of **United Parcel Service** in P5-41 to answer the following requirements.

REQUIRED

- Compute net operating profit after taxes (NOPAT) for 2020 and net operating assets (NOA) for 2020 and 2019. Assume a tax rate of **25%**.

L05-4

United Parcel Service
NYSE :: UPS

L05-5

United Parcel Service
NYSE :: UPS

continued from previous page

Membership—The Company charges a membership fee to its customers. That fee allows customers to shop in the Company's clubs, shop on the Company's website, and purchase gasoline at the Company's gas stations for the duration of the membership, which is generally 12 months. Because the Company has the obligation to provide access to its clubs, website, and gas stations for the duration of the membership term, the Company recognizes membership fees on a straight-line basis over the life of the membership . . .

The following data were extracted from income statement, balance sheet, and disclosure notes of BJ's 10-K annual report for 2020:

	Fiscal Year Ended	
(\$ millions)	February 1, 2020	
Net sales	\$12,889	
Membership fee income	302	
Total revenues	<u>\$13,191</u>	
	February 1, 2020	February 2, 2019
Deferred revenue—membership fees	\$ 144.0	\$134.4

- Explain BJ's accounting for membership fees.
- Report (1) membership fees collected in cash in the first half of fiscal year 2020 and (2) membership fee revenue recognized over that period using the financial statement effects template.

E6-50. Accounting for Membership Fees and Rewards Program

Using the information from E6-49:

- Prepare journal entries to record (1) membership fees collected in cash in the first half of fiscal year 2020 and (2) membership fee revenue recognized over that period.
- Explain BJ's accounting for its BJ's Perks Rewards program that provides 2% cash back, up to a maximum of \$500 per year on qualified purchases made at BJ's.

LO2



PROBLEMS

P6-51.^A Identifying Operating and Nonrecurring Income Components

The following information comes from recent **DowDuPont, Inc.**, income statements.

(In millions, except per share amounts) For the Years Ended December 31	2019	2018
Net sales	\$42,951	\$49,604
Cost of sales	36,657	41,074
Research and development expenses	765	800
Selling, general, and administrative expenses	1,590	1,782
Amortization of intangibles	419	469
Restructuring, goodwill impairment, and asset-related charges—net	3,219	221
Integration and separation costs	1,063	1,179
Equity in earnings (losses) of nonconsolidated affiliates	(94)	555
Sundry income (expense)—net	461	96
Interest income	81	82
Interest expense and amortization of debt discount	933	1,063
Income (loss) from continuing operations before income taxes	(1,247)	3,749
Provision for income taxes on continuing operations	470	809
Income (loss) from continuing operations, net of tax	(1,717)	2,940
Loss from discontinued operations, net of tax	445	1,835
Net income (loss)	<u>\$ (1,272)</u>	<u>\$ 4,775</u>

REQUIRED

- Identify the components in its statement that you would consider operating.

LO5, 7



DowDuPont Inc.
NYSE :: DWDP

LO2, 4, 5**C6-62. Accounting for Doubtful Accounts and Returns (FSET)**

John Wiley and Sons,
Inc.
NYSE :: JW



John Wiley and Sons, Inc., publishes books, periodicals, software, and other digital content. Its April 30, 2020, balance sheet reported the following amounts for accounts receivable (\$ thousands):

April 30	2020	2019
Accounts receivable, net.	\$309,384	\$306,631

Wiley's income statement provided the following detail of operating income (\$ thousands):

Year Ended April 30	2020	2019
Revenue	\$1,831,483	\$1,800,069
Costs and Expenses		
Cost of sales	591,024	554,722
Operating and administrative expenses	997,355	963,582
Impairment of goodwill and intangible assets	202,348	0
Restructuring and related charges	32,607	3,118
Amortization of intangibles	62,436	54,658
Operating expenses	<u>\$1,885,770</u>	<u>\$1,576,080</u>

Wiley normally charges operating and administrative expenses for estimated doubtful accounts. The company provided the following supplemental information concerning doubtful accounts and returns in its disclosure notes (\$ thousands):

	Balance at Beginning of Period	Charged to Expenses and Other	Deductions from Reserves	Balance at End of Period
Year ended April 30, 2020				
Allowance for sales returns	\$18,542	\$48,829	\$47,729	\$19,642
Allowance for doubtful accounts	14,307	5,470	1,442	18,335
Year ended April 30, 2019				
Allowance for sales returns	\$18,628	\$37,483	\$37,569	\$18,542
Allowance for doubtful accounts	10,107	5,279	1,079	14,307

Net sales return reserves are reflected in the following accounts of the Consolidated Statements of Financial Position—increase (decrease):

April 30	2020	2019
Increase in inventories, net.	\$ 8,686	\$ 3,739
Decrease in accrued royalties	(4,441)	(3,653)
Increase in contract liabilities	32,769	25,934
Print book sales return reserve net liability balance	<u>\$(19,642)</u>	<u>\$(18,542)</u>

REQUIRED

- Using the financial statement effects template, report bad debts expense and accounts receivable write-offs for 2019 and 2020.
- Compute the allowance for doubtful accounts as a percentage of accounts receivable. What might account for the change from 2019 and 2020?
- Wiley has also established an allowance for returns. How do returns differ from doubtful accounts? Under what circumstances might this difference affect the accounting for returns?
- Calculate the accounts receivable turnover ratio and average collection period for 2020 using net accounts receivable.

LO2, 4**C6-63. Accounting for Doubtful Accounts and Returns**

Use the information from C6-62 to complete the following requirements.

- Prepare journal entries to record bad debts expense and accounts receivable write-offs for 2019 and 2020.
- Post the entries from part a to the Allowance for doubtful accounts T-account.

LO7**C6-64.^A Interpreting Restructuring Charges**

3M Company
NYSE: MMM

The following is from the most recent 10-K report of **3M Company** for the year ended December 31, 2020.

Review 6-5

a.

(\$ millions)	Comcast (Xfinity)	Charter Communications
NOPAT	$\$13,323 - [(\$438 - \$4,567) \times (1 - 0.25)]$ $= \$16,419.75$	$\$1,992 - [(\$0 - \$4,080) \times (1 - 0.25)]$ $= \$5,052.00$
Average net operating assets	$[(\$261,165 - \$70,785) +$ $(\$249,538 - \$66,123)]/2 = \$186,897.5$	$[(\$148,188 - \$30,299) +$ $(\$146,130 - \$29,031)]/2 = \$117,494.00$
Return on net operating assets	$\$16,419.75/\$186,897.5 = 0.088$	$\$5,052.00/\$117,494 = 0.043$
Net operating profit margin	$\$16,419.75/\$108,942.00 = 0.151$	$\$5,052.00/\$45,764 = 0.110$
Accounts receivable turnover	$\$108,942/[(\$11,292 + \$11,104)/2] = 9.73$	$\$45,764/[(\$2,227 + \$1,733)/2] = 23.11$
Average collection period	$365/9.73 = 37.5$ days	$365/23.11 = 15.8$ days

- b. Comcast is considerably bigger, with revenues almost two-and-a-half times of Charter and NOPAT roughly three times bigger. But average operating assets was only about 60% higher. So, it appears that Comcast is able to leverage its size to produce greater returns, in relation to both its operating assets and its revenues. The difference might be ascribed to competitive environment or management capabilities.

There is a significant difference in the companies' handling of receivables, with Charter waiting about 15.8 days to collect, while Comcast is more than twice as long (37.5 days). Both companies collect more quickly than the industry median ART of 5.27 (69.3 days) from Exhibit 5.13.

Review 6-6

	Revenues	Impact on Expenses	Net Income
a.	No impact	Understatement	Overstatement
b.	Overstatement	Overstatement	Overstatement
c.	No impact	Overstatement	Understatement
d.	No impact	Overstatement	Understatement
e.	Overstatement	Overstatement	Overstatement

Review 6-7

- a. A loss from discontinued operations of \$105,000 would be reported below income from continuing operations. The loss is net of tax and is calculated as follows:
 $\$105,000 = (\$120,000 + \$12,000 + \$18,000) \times (1 - 30\%).$
- b. A restructuring charge of \$30,000 (\$12,000 + \$18,000) would be reported as part of operating income. The loss is before taxes. The tax effect of the restructuring charge would be included in the provision for income taxes (income tax expense).
- c. Singh could report this loss as discontinued operations only if the closure represented a separate business unit within the company and the closure represents a strategic shift in operations. Otherwise, it must be reported as a restructuring charge.

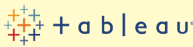
**LO7-5****DA7-2. Preparing Excel Visualizations of Gross Profit Data Over Time**

Financial information for the following five retailers is included in the Excel file associated with this chapter: **The Home Depot, Inc.** (Home Depot), **Lowe's Companies, Inc.** (Lowe's), **Target Corporation** (Target), **The ODP Corporation** (ODP), and **Costco Wholesale Corporation** (Costco). In this problem we analyze the gross profit percentage of retail companies with different business models. The gross profit percentage measures a company's ability to cover its operating costs from revenues after allowing for costs of goods and services sold. A gross profit percentage will vary by industry (some industries require extensive manufacturing operations for example) and is also affected by a company's business strategy. For example, a company with a lower gross profit percentage (a grocery store) will make up for profits with higher sales volume. A company with a high gross profit percentage (high-end jewelry store) can afford to sell fewer products when each item has a higher gross profit percentage.

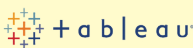
REQUIRED

1. Download Excel file DA7-2 found in myBusinessCourse.
2. Calculate the gross profit percentage for each of the three years (with Year 3 being the most recent year).
3. Create a line chart showing the trend of the gross profit percentage for each company over the three-year period.
4. List the companies in order from the highest to the lowest gross profit percentage for each of the three years.
5. Add a trendline to the line chart for each company and forecast one additional period. *Hint:* Right-click on each line in your chart and add trendline. In the format trendline area under Forecast, forward 1 period.
6. List the companies in order from the highest to the lowest gross profit percentage for the forecasted year.
7. Describe the trends in the line chart.
8. Describe the likely source of the difference between the company with the highest gross profit percentage and the lowest gross profit percentage.

$$\frac{\text{Gross Profit Percentage}}{\text{Sales revenue} - \text{Cost of goods sold}} \\ \text{Sales revenue}$$

**LO7-5****DA7-3. Preparing Tableau Visualizations to Analyze Inventory Management**

Refer to PB-22 in Appendix B. This problem uses Tableau to create and analyze visualizations of inventory ratios of certain market segments of S&P 500 companies.

**LO7-5****DA7-4. Preparing Tableau Visualizations to Analyze Gross Profit**

Refer to PB-21 in Appendix B. This problem uses Tableau to create and analyze visualizations of gross profit percentages of S&P 500 companies.

DATA VISUALIZATION



Data Visualization Activities are available in myBusinessCourse. These assignments use Tableau Dashboards to expose students to visual depictions of data and introduce students to data analytics through data visualizations. These exercises are easily assignable and auto graded by MBC.

MINI EXERCISES

LO7-1**M7-13. Recording an Inventory Purchase FSET**

Shields Company has purchased inventories incurring the following costs: (a) the invoice amount of \$300, financed through a \$250 note with the remainder paid in cash, (b) shipping charges of \$15 on account, (c) interest of \$5 accrued on the \$250 borrowed to finance the purchase, and (d) \$4 on account for the cost of moving the inventory to the company's warehouse.

REQUIRED

- a. Determine the cost to be assigned to the inventory.
- b. Record the transactions using the financial statement effects template.

M7-25. Inferring Purchases Using Cost of Goods Sold and Inventory Balances (FSET)**LO7-2**

Penno Company reported ending inventories of \$2,945,000 and beginning inventories of \$3,223,750. Cost of goods sold totaled \$17,848,750 for the year.

- Calculate inventory purchases for the year.
- Using the financial statement effects template, show the effects of (a) the purchase of inventory during the year, and (b) cost of goods sold on the balance sheet and income statement.

M7-26. Inferring Purchases Using Cost of Goods Sold and Inventory Balances**LO7-2**

Use the information from M7-25 to complete the following.

- Prepare the journal entry to record cost of goods sold.
- Set up a T-account for inventory and post the cost of goods sold entry from part *a* to this account.
- Using the T-account from *b*, determine the amount of inventory that was purchased in 2020. Prepare a journal entry to record those purchases.

M7-27. Determining Lower of Cost or Net Realizable Value (NRV)**LO7-3**

The following data refer to Froning Company's ending inventory.

Item Code	Quantity	Unit Cost	Unit NRV
LXC	84	\$45	\$48
KWT	295	38	34
MOR	420	22	20
NES	140	27	32

Determine the ending inventory amount by applying the lower of cost or net realizable value rule to (a) each item of inventory and (b) the total inventory.

EXERCISES**E7-28. Analyzing Inventory and Margin in a Seasonal Business****LO7-5**

Power Marine Supply, opened its first boating supply store over 30 years ago. Since that time, the company has grown to be one of the largest boating supply companies in the world, with fiscal year 4 revenues in excess of \$1,350 million. The accompanying table provides financial information for two recent years. Power Marine Supply's fiscal year is closely aligned with the calendar year. All amounts are in millions.

Time Period	Net Revenues	Cost of Goods Sold	Ending Inventory
Fiscal Year 4	—	—	\$428
First quarter Year 5	\$ 254	\$ 200	514
Second quarter Year 5	506	324	516
Third quarter Year 5	388	276	474
Fourth quarter Year 5	260	204	446
Fiscal Year 5	1,408	1,004	446
First quarter Year 6	260	196	538
Second quarter Year 6	504	324	508
Third quarter Year 6	384	274	464
Fourth quarter Year 6	260	202	424
Fiscal Year 6	1,408	996	424

- Using the fiscal year (annual) information for Year 5 and Year 6, calculate the gross profit margin and the inventory turnover ratio.
- Power Marine Supply is in a seasonal business, in which the sales total for the second and third quarters is substantially higher than the sales total for the first and fourth quarters. Calculate the company's gross profit margin by quarter. What do you learn from the seasonal pattern in the gross profit margin?
- What is the seasonal pattern in inventory balances? What effect does Power Marine Supply's choice of fiscal year-end have on the inventory turnover ratio calculated in *a*?
- Recalculate Power Marine Supply's inventory turnover ratios for Year 5 and Year 6 using a weighted average of the company's inventory investment over the year.

E7-29.^A Applying and Analyzing Inventory Costing Methods**LO7-2, 4, 6**

At the beginning of the current period, Chen carried 3,000 units of its product with a unit cost of \$20. A summary of purchases during the current period follows:

- e. Kroger reported merchandise costs (cost of goods sold) of \$95,294 million in fiscal year 2020. Compute its inventory turnover for the year.
- f. How would the inventory turnover ratio differ if the FIFO costing method had been used?

L07-5 P7-38. Calculating Gross Profit and Inventory Turnover

The following table presents sales revenue, cost of goods sold, and inventory amounts for three computer/electronics companies, **Samsung Electronics Co.**, **HP Inc.**, and **Apple Inc.**

Samsung Electronics Co. Ltd.
KRX :: 005930
HP Inc.
NYSE :: HPQ
Apple Inc.
NASDAQ :: AAPL

(\$ millions)	Fiscal year ending		
Samsung Electronics Co. Ltd. (S. Korean won)	Dec. 31, 2020	Dec. 31, 2019	Dec. 31, 2018
Revenues	236,806,988	230,400,881	243,771,415
Cost of goods sold	144,488,296	147,239,549	132,394,411
Inventory	32,043,145	26,766,464	28,984,704
HP Inc. (US dollar)	Oct. 31, 2020	Oct. 31, 2019	Oct. 31, 2018
Revenues (products only)	56,639	58,756	58,472
Cost of goods sold	46,202	47,586	47,803
Inventory	5,963	5,734	6,062
Apple Inc. (US dollar)	Sept. 26, 2020	Sept. 28, 2019	Sept. 29, 2018
Revenues	274,515	260,174	265,595
Cost of goods sold	169,559	161,782	163,756
Inventory	4,061	4,106	3,956

REQUIRED

- a. Compute the gross profit margin (GPM) for each of these companies for all three fiscal years.
- b. Compute the inventory turnover ratio and the average inventory days outstanding for each company for the last two fiscal years. (All three firms use FIFO inventory costing.)
- c. What factors might determine the differences among these three companies' ratios?

L07-2, 4, 6 P7-39.^A Analyzing and Interpreting Inventories and Its Related Ratios and Disclosures

The current asset section from **Seneca Foods Corporation**, a low-cost producer and distributor of quality fruits and vegetables, March 31, 2020 annual report follows:

Seneca Foods Corporation
NASDAQ :: SENE

(\$ thousands)	March 31, 2020	March 31, 2019
Current Assets		
Cash and cash equivalents	\$ 10,702	\$ 11,480
Accounts receivable, less allowance for doubtful accounts		
of \$1,598 and \$57, respectively	109,802	84,122
Contracts receivable	7,610	—
Assets held for sale-discontinued operations	182	98
Inventories	411,631	501,684
Assets held for sale	—	1,568
Refundable income taxes	4,350	1,221
Other current assets	7,323	3,075
Total current assets	551,600	603,248

Seneca reports the following related to its gross profit:

(\$ thousands)	Fiscal Years	
	2020	2019
Net sales	\$1,335,769	\$1,199,581
Cost of sales	1,193,881	1,160,085
Gross profit	\$ 141,888	\$ 39,496

Seneca further reports the following disclosure note:

11. Inventories

Effective December 30, 2007 (beginning of 4th quarter of Fiscal Year 2008), the Company changed its inventory valuation method from the lower of cost, determined under the FIFO method, or market to the lower of cost, determined under the LIFO method, or market. In the high inflation environment that the Company was experiencing, the Company believed that the LIFO inventory method was preferable over the FIFO method because it better compares the cost of current production to

continued

- a. As shown in this schedule, applying the lower of cost or NRV rule to each item of the inventory results in an ending inventory amount of \$46,380.
- b. Applying the lower of cost or NRV rule to each major category of the inventory results in an ending inventory amount of \$48,350, calculated as follows:

Fans	\$22,100
Heaters.....	26,250
	<u>\$48,350</u>

- c. As shown in this schedule, applying the lower of cost or NRV rule to the total inventory results in an ending inventory amount of \$48,750.
2. The LCM procedure that results in the lowest ending inventory amount also results in the lowest net income for the year (the lower the ending inventory amount, the higher the cost of goods sold). Applying the lower of cost or NRV rule to each item of the inventory results in the lowest net income for the year.

Review 7-4

- a. \$35,000
- b. \$50,000
- c. \$97,000 (\$100,000 - (\$15,000 - \$12,000))
- d. \$750 (\$3,000 × 25%)
- e. (1) lower (2) higher (3) same (4) lower (5) lower

Review 7-5

- a. The gross profit margin and inventory turnover are calculated as follows:

Gross profit margin
2018: \$ 9,783 / \$36,094 = 0.271 (or 27.1%)
2019: \$10,376 / \$38,116 = 0.272 (or 27.2%)
2020: \$12,509 / \$44,864 = 0.279 (or 27.9%)
Inventory turnover
2019: \$27,740 / [(\$1,913 + \$1,849)/2] = 14.75 times
2020: \$32,355 / [(\$2,034 + \$1,913)/2] = 16.39 times

- b. Cost of goods sold and gross profit must be adjusted by the change in the LIFO reserve to convert to FIFO.

Cost of goods sold
2019: \$27,740 - (\$529 - \$489) = \$27,700
2020: \$32,355 - (\$549 - \$529) = \$32,335
Gross profit
2019: \$10,376 + (\$529 - \$489) = \$10,416
2020: \$12,509 + (\$549 - \$529) = \$12,529

The use of LIFO resulted in a lower cost of goods sold and a higher gross profit in 2019 and 2020 because the LIFO reserve grew larger each year.

- c. Restated inventory turnover calculations:

Inventory turnover
2019: \$27,700 / [(\$2,442 + \$2,338)/2] = 11.6 times
2020: \$32,335 / [(\$2,583 + \$2,442)/2] = 12.9 times

Because inventory values are higher and cost of goods sold is lower in 2019 and 2020 under FIFO, the inventory turnover ratio is lower when FIFO numbers are used.

Notice that the “Total minimum lease payments” is the present value of the lease payments because imputed interest is subtracted. This present value is the liability recorded in the balance sheet as shown in Deere’s disclosures above where they show that \$305 million is included in “Accounts payable and accrued expenses” in the balance sheet.

Going forward, all firms will report operating leases under this standard. Financial statement users need to be cautious, however, if comparing a year where leases are reported under the new standard to a year where leases are reported under the old standard. For example, 2020 was Deere’s first year of adoption so comparing 2020 to 2019 could be misleading because in 2020 the operating lease assets and the associated liabilities are included in the balance sheet and in 2019 the operating lease assets and their associated liabilities are not included in the balance sheet. Many ratios, such as debt-to-equity, debt-to-assets, return-on-assets, and others would be impacted.

Financial statement users could perform better year-over-year analysis in the year of adoption by adjusting the prior year financial statement numbers to ‘as if’ amounts—‘as if’ the new standard applied in 2019. We cover this notion of analyzing financial statements after adjusting them such that off-balance sheet debt is treated as if it were on-balance sheet debt below in our discussion of commitments and contingencies.⁶

Leases and the Statement of Cash Flows A lease results in an increase to long-term operating assets and an increase in liabilities. However, in many cases, there is no effect on cash flows at the inception of the lease—see entry (1) on page 10-7. As a consequence, the initial inception of the lease should be reported as a material noncash transaction and not presented in the statement of cash flows under either investing or financing cash flows. Subsequently, the amortization of the leased asset for a finance lease is added (in an indirect method statement of cash flows) to cash flow from operations (an expense that does not require a cash outlay), and the principal portion of the lease payment is treated as debt repayment under cash flows from financing activities. Note that because amortization is added back to earnings to compute operating cash flows in the indirect method Statement of Cash flows, and the principal repayment is a financing cash flow, operating cash flows will likely be higher for a finance lease relative to an operating lease. This is because, again, in the case of the operating lease, the lease expense is in the operating section of the Statement of Cash Flows either as part of net income in an indirect method statement or as a cash outflow in a direct method statement. In a direct method Statement of Cash Flows, the interest on a finance lease is an operating cash flow and the principal repayment is a financing cash flow. For an operating lease when the direct method Statement of Cash Flows is used, the full lease payment is shown as an operating cash flow.

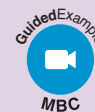
YOU MAKE THE CALL

You are the CEO While implementing the new lease accounting standard, your CFO gathers more information on your lease contracts than your company has ever had before. What are some decisions and potential outcomes that this information might lead to? [Answer on page 10-40]

Accounting for Leases

LO10-1 Review 10-1

Assume that **The Gap Inc.** leased a vacant retail space with the intention of opening another store. The lease calls for annual lease payments of \$32,000, due at the end of each of the next ten years. Assume the appropriate discount rate is 7%.



continued

⁶ Estimating the liability and asset amounts for operating leases under the old standard when only the future payments were disclosed and no asset or liability was included in the balance sheet would require the following steps (briefly stated): 1) estimate a discount rate, such as the rate on comparable debt, 2) compute the present value of the disclosed required future lease payments as of the end of the current reporting period, 3) estimate the associated asset value (could do this several ways but most easily one could look at the relative asset to liability ratio of the leases under the new standard), and 4) assume the difference between the ‘as if’ asset and ‘as if’ liability under the old standard reduces shareholder equity.