Chapter 8
Current Liabilities

QUESTIONS

Question 8-1
Liabilities have three essential characteristics. Liabilities are: (1) probable future sacrifices of economic benefits; (2) arising from present obligations to other entities; (3) resulting from past transactions or events. The definition of liabilities touches on the present, the future, and the past. A liability is a present responsibility to sacrifice assets in the future due to a transaction or other event that happened in the past.

Question 8-2
In most cases, current liabilities are payable within one year from the date of the balance sheet and long-term liabilities are payable in more than one year. Current liabilities are *usually,* but not always, due within one year. For example, if a company has an operating cycle longer than one year (a winery, for example), its current liabilities are defined by the operating cycle rather than by the length of a year.

Question 8-3
Distinguishing between current and long-term liabilities is important in helping investors and creditors assess the riskiness of a business' obligations. Given a choice, most companies would prefer to report a liability as long-term rather than current because it may cause the firm to appear less risky. In turn, less risky firms may enjoy lower interest rates on borrowing and command higher stock prices for new stock listings.

Question 8-4
Current liabilities common to the airline industry include payroll liabilities, deferred revenue in the form of advance ticket sales, and contingent liabilities due to litigation.

Question 8-5
The accrual basis requires expenses to be recorded when incurred. The cash basis requires expenses to be recorded when the cash is paid. Financial accounting requires use of the accrual basis rather than the cash basis as this best reflects the timing of the expense in the same period as the associated benefits.

Question 8-6
A line of credit is an informal agreement that permits a company to borrow up to a prearranged limit without having to follow formal loan procedures and paperwork. The line of credit works like a note payable except the company is able to borrow without having to go through a formal loan approval process each time it borrows money.

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answers to Questions (continued)

Question 8-7

If a company borrows from another company rather than from a bank, the note is referred to as commercial paper. The interest rate is often lower for commercial paper than a bank loan as the company is effectively bypassing the additional mark-up in interest rates by the bank.

Question 8-8

Four items commonly withheld from employee payroll checks include (1) federal and state income taxes, (2) Social Security and Medicare (FICA), (3) health, dental, disability, and life insurance premiums, and (4) *employee* investments to retirement or savings plans. The first two are required by law and the second two are voluntary.

Question 8-9

Four common employer costs in addition to the employee's salary include (1) federal and state unemployment taxes, (2) the employer portion of Social Security and Medicare (FICA), (3) employer contributions for health, dental, disability, and life insurance, and (4) *employer* contributions to retirement or savings plans. The first two are required by law and the last two are voluntary benefits paid by a company on behalf of its employees.

Question 8-10

Both the employer and the employee pay equal portions of social security taxes. Employers withhold from employee paychecks a 6.2% Social Security tax up to a maximum base amount and a 1.45% Medicare tax with no maximum. Therefore, the total FICA tax is 7.65% (6.2% + 1.45%) on income up to a base amount for Social Security ($128,400 in 2018) and 1.45% on all income above the base amount. Employers then pay an additional (matching) amount equal to the amount withheld from employee paychecks so the government actually is collecting 15.3% (7.65% employee + 7.65% employer) on each employee's salary.

Question 8-11

When a company receives cash in advance through the sale of gift cards, it debits cash and credits a current liability account called deferred revenue. When it provides the goods or services already paid for, the company debits deferred revenue and credits revenue.

Question 8-12

(a) When ***Sports Illustrated*** sells magazine subscriptions, the company will debit cash and credit deferred revenue. (b) As the subscription is provided through the distribution of magazines, the company debits deferred revenue and credits revenue.

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answers to Questions (continued)

Question 8-13

The sales tax rate for Hollister is 6.5% calculated as $325 in sales taxes divided by sales of $5,000. The journal entry to record the transaction would debit cash for $5,325, credit sales for $5,000, and credit sales taxes payable for $325.

Question 8-14

Dell will include $10 million as a current note payable and the remaining $120 million as part of long-term notes payable.

Question 8-15

A contingent liability is an existing, uncertain situation that might result in a loss. Examples include lawsuits, product warranties, environmental problems, and premium offers.

Question 8-16

The likelihood of the loss occurring can be probable, reasonably possible, or remote. Probable means likely to occur while remote means the chance is slight. Reasonably possible fits somewhere in between—more than remote but less than probable.

Question 8-17

A loss contingency is recorded only if a loss is probable and the amount is reasonably estimable.

Question 8-18

If the likelihood of loss is reasonably possible rather than probable, we record no entry but make full disclosure in a disclosure note to the financial statements to describe the contingency. Finally, if the likelihood of loss is *remote*, disclosure is usually not required.

Question 8-19

If one amount within a range of potential losses appears more likely than other amounts within the range, we record that amount. When no amount within the range appears more likely than others, we record the **minimum** amount and disclose information about the potential loss including the potential range of loss.

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answers to Questions (continued)

Question 8-20

In a pending lawsuit, one side—the defendant—faces a loss contingency, while the other side—the plaintiff—has a gain contingency. The $2 million is a gain contingency and the outcome, while promising, is not yet certain. We do not record gain contingencies of this type until the gain is certain. Though firms do not record gain contingencies in the accounts, they sometimes disclose them in notes to the financial statements.

Question 8-21

Liquidity measures the ability of a company to pay current liabilities as they come due. Liquidity can be evaluated by examining the current ratio or the more specific acid-test ratio.

Question 8-22

Working capital is simply the difference between current assets and current liabilities. The current ratio is calculated by dividing current assets by current liabilities. The acid-test ratio is similar to the current ratio but is based on a more conservative measure of current assets available to pay current liabilities. We calculate the acid-test ratio by dividing "quick assets" by current liabilities. Quick assets include only cash, short-term investments, and accounts receivable. By eliminating current assets such as inventories and prepaid expenses that are less readily convertible into cash, the acid-test ratio may provide a better indication of a company's liquidity than does the current ratio.

Question 8-23

(a) The purchase of inventory with cash would have no effect on the current ratio as one current asset (inventory) would increase while another current asset (cash) would decrease. The purchase of inventory with cash would decrease the acid-test ratio due to the decrease in cash. (b) The sale of inventory for more than its cost would increase the current ratio because the increase in cash or accounts receivable from the sale would more than offset the reduction of inventory at its cost. The sale of inventory for more than its cost would also increase the acid-test ratio due to the increase in cash or accounts receivable from the sale.

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BRIEF EXERCISES

Brief Exercise 8-1

November 1	Debit	Credit
Cash	**4,000,000**	
Notes Payable		**4,000,000**

December 31		
Interest Expense (4,000,000 × 0.06 × 2/12)	**40,000**	
Interest Payable		**40,000**

Brief Exercise 8-2

November 1	Debit	Credit
Notes Receivable	**4,000,000**	
Cash		**4,000,000**

December 31		
Interest Receivable	**40,000**	
Interest Revenue (4,000,000 × 0.06 × 2/12)		**40,000**

Brief Exercise 8-3

Interest Expense	=	Face value	×	Annual interest rate	×	Fraction of the year
$4,800	=	$160,000	×	6%	×	6/12

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Brief Exercise 8-4

April 1	Debit	Credit
Cash	**13,000,000**	
Notes Payable - Commercial Paper		**13,000,000**
December 31		
Notes Payable - Commercial Paper	**13,000,000**	
Interest Expense ($13,000,000 × 0.09 × 9/12)	**877,500**	
Cash		**13,877,500**

Brief Exercise 8-5

Total withheld for:

Social Security	$128,400 × 0.062	=	$ 7,961
Medicare	$652,800 × 0.0145	=	9,466
Total			$17,427

The employer will contribute an additional (matching) $17,427.

Brief Exercise 8-6

December 18	Debit	Credit
Cash	**260,000**	
Deferred Revenue		**260,000**
(to record advance receipt of cash)		
January 23		
Cash	**2,340,000**	
Deferred Revenue	**260,000**	
Sales Revenue		**2,600,000**
Cost of Goods Sold	**1,600,000**	
Inventory		**1,600,000**
(to complete the sale)		

Brief Exercise 8-7

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June	$1,200
July	2,100
August	1,700*

*** Includes gift cards redeemed ($1,400) and gift cards unlikely to be redeemed ($300).**

Brief Exercise 8-8

	Debit	Credit
Accounts Receivable	**3,472**	
Sales Revenue		**3,200**
Sales Taxes Payable (0.085 × $3,200)		**272**

Brief Exercise 8-9

Southwest Airlines
Partial Balance Sheet
December 31, 2021

Current Liabilities:	
Current portion of long-term debt	$ 10,000,000
Long-Term Liabilities:	
Notes payable	31,000,000
Total Liabilities	$41,000,000

Brief Exercise 8-10

	Debit	Credit
Warranty Expense ($31,000,000 x 3%)	**930,000**	
Warranty Liability		**930,000**
Warranty Liability	**300,000**	
Cash		**300,000**

The Warranty Liability at the end of the year is $630,000, calculated using a T-account as follows:

Warranty Liability	
300,000	930,000
	630,000 balance

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Brief Exercise 8-11

The loss contingency is probable and reasonably estimable, so a loss and a liability for $8 million must be recorded. The entry will reduce income before taxes on the income statement and increase total liabilities on the balance sheet by $8 million.

Brief Exercise 8-12

Electronic Innovators has a contingent liability that is probable, and reasonably estimable within a range between $6 and $10 million. Electronic Innovators should record a loss and a liability for the minimum amount ($6 million) and disclose the range between $6 and $10 million in the notes to the financial statements.

Brief Exercise 8-13

Aviation Systems has a contingent gain that is probable and reasonably estimable, within a range between $6 and $10 million. Contingent gains are not recorded until the gain is certain. Though firms do not record contingent gains in the accounts, they sometimes disclose them in the notes to the financial statements.

Brief Exercise 8-14

Northwest Forest Products has a contingent liability that is reasonably possible and reasonably estimable, within a range between $20 and $30 million. Since the loss is reasonably possible, but not probable, we will carefully disclose the situation, but not record the potential loss and liability in the financial records. Details regarding the investigation by the EPA, the reasonable possibility of an assessment, and the range of settlements should be included in the disclosure.

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Brief Exercise 8-15

(1) Not recorded (disclosure only) as the loss is reasonably possible, but not probable.

(2) Not recorded (disclosure only) as the loss is not reasonably estimable.

(3) Recorded because the warranty costs are probable and reasonably estimable.

Brief Exercise 8-16

Current Assets	÷	Current Liabilities	=	**Current Ratio**
($112 + 104 + 192 + 28)	÷	($118 + 45)	=	2.67

Quick Assets	÷	Current Liabilities	=	**Acid-Test Ratio**
($112 + 104)	÷	($118 + 45)	=	1.33

Brief Exercise 8-17

	Current Ratio	Acid-Test Ratio
1. Provide services to customers on account.	Increase	Increase
2. Borrow cash from the bank by signing a long-term note payable.	Increase	Increase
3. Purchase office supplies with cash	No change	Decrease
4. Pay rent for the current period.	Decrease	Decrease

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EXERCISES

Exercise 8-1

Reporting Method
C. Current liability
L. Long-term liability
D. Disclosure note only
N. Not reported

Item

__C__ 1. Accounts payable.
__C__ 2. Current portion of long-term debt.
__C__ 3. Sales tax collected from customers.
__C__ 4. Notes payable due next year.
__L__ 5. Notes payable due in two years.
__C__ 6. Advance payments from customer.
__C__ 7. Commercial paper.
__D__ 8. Unused line of credit.
__C__ 9. A contingent liability with a probable likelihood of occurring within the next year and can be estimated.
__D__ 10. A loss contingency with a reasonably possible likelihood of occurring within the next year and can be estimated.

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Exercise 8-2

1. November 1, 2021	Debit	Credit
Cash	**60,000**	
Notes Payable		**60,000**
(Issuance of notes payable)		

2. December 31, 2021		
Interest Expense ($60,000 × 7% × 2/12)	**700**	
Interest Payable		**700**
(*Interest expense incurred, but not paid*)		

3. January 31, 2022		
Notes Payable	**60,000**	
Interest Payable ($60,000 × 7% × 2/12)	**700**	
Interest Expense ($60,000 × 7% × 1/12)	**350**	
Cash		**61,050**
(*Payment of notes payable and interest*)		

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Exercise 8-3

1. August 1, 2021	Debit	Credit
Cash	**21,000,000**	
Notes Payable		**21,000,000**
(Issuance of notes payable)		

2. December 31, 2021	Debit	Credit
Interest Expense ($21 million × 9% × 5/12)	**787,500**	
Interest Payable		**787,500**
(*Interest expense incurred, but not paid*)		

3. January 31, 2022	Debit	Credit
Notes Payable	**21,000,000**	
Interest Payable ($21 million × 9% × 5/12)	**787,500**	
Interest Expense ($21 million × 9% × 1/12)	**157,500**	
Cash		**21,945,000**
(*Payment of notes payable and interest*)		

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Exercise 8-4

1. August 1, 2021	Debit	Credit
Notes Receivable	**21,000,000**	
Cash		**21,000,000**
(Issuance of notes receivable)		

2. December 31, 2021		
Interest Receivable ($21 × 9% × 5/12)	**787,500**	
Interest Revenue		**787,500**
(Interest revenue earned, but not received)		

3. January 31, 2022		
Cash	**21,945,000**	
Notes Receivable		**21,000,000**
Interest Receivable ($21 × 9% × 5/12)		**787,500**
Interest Revenue ($21 × 9% × 1/12)		**157,500**
(*Collection of notes receivable and interest*)		

Exercise 8-5

1.	$6,000,000	×	0.11	×	6/12	=	$330,000
2.	$6,000,000	×	0.09	×	3/12	=	$135,000
3.	$6,000,000	×	0.10	×	4/12	=	$200,000
4.	$6,000,000	×	0.07	×	7/12	=	$245,000

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Exercise 8-6

January 13
No Entry

February 1

Account	Debit	Credit
Cash	**5,000,000**	
Notes Payable		**5,000,000**

May 1

Account	Debit	Credit
Notes Payable	**5,000,000**	
Interest Expense ($5,000,000 × 0.07 × 3/12)	**87,500**	
Cash		**5,087,500**

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Exercise 8-7

Requirement 1

Total Salary Expense	(100 × 40 hours × $20)		$80,000
Less: Withholdings			
Federal Income Taxes	($80,000 × 0.15)	$12,000	
State Income Taxes	($80,000 × 0.05)	4,000	
FICA Taxes	($80,000 × 0.0765)	6,120	
Total Withholdings			22,120
Actual Direct Deposit			$57,880

Requirement 2

FICA Taxes	($80,000 × 0.0765)	$ 6,120
Unemployment Taxes	($80,000 × 0.062)	4,960
Total Payroll Tax Expense		$11,080

Requirement 3

The company does not make an accounting entry to record the free skiing given to employees on their days off; no additional costs are directly incurred by the company to provide this benefit.

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Exercise 8-8

Requirement 1

January 31

Account	Debit	Credit
Salaries Expense	**3,000,000**	
Income Tax Payable		**637,500**
FICA Tax Payable		**229,500**
Accounts Payable (to Blue Cross/Blue Shield)		**30,000**
Salaries Payable (to balance)		**2,103,000**
(Employee salary expense and withholdings)		

Requirement 2

January 31

Account	Debit	Credit
Salaries Expense (fringe benefits)	**90,000**	
Accounts Payable (to Blue Cross/Blue Shield)		**90,000**
(Employer-provided fringe benefits)		

Requirement 3

January 31

Account	Debit	Credit
Payroll Tax Expense	**415,500**	
FICA Tax Payable		**229,500**
Unemployment Tax Payable		**186,000**
(Employer payroll taxes)		

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Exercise 8-9

January 31

	Debit	Credit
Salaries Expense	**600,000**	
Income Tax Payable		**120,000**
FICA Tax Payable ($600,000 × 0.0765)		**45,900**
Salaries Payable (to balance)		**434,100**
(Employee salary expense)		

January 31

	Debit	Credit
Payroll Tax Expense (total)	**83,100**	
FICA Tax Payable ($600,000 × 0.0765)		**45,900**
Unemployment Tax Payable ($600,000 × 0.062)		**37,200**
(Employer payroll tax expense)		

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Exercise 8-10

Requirement 1

November 30

	Debit	Credit
Cash	**21,000,000**	
Deferred Revenue		**21,000,000**
(Advance collection for gift cards)		

Requirement 2

December 31

	Debit	Credit
Deferred Revenue	**14,000,000**	
Sales Revenue		**14,000,000**
(Revenue recognized when gift cards are redeemed)		

Requirement 3

The ending balance in Deferred Revenue is $7,000,000.

Deferred Revenue

Debit	Credit
14,000,000	21,000,000
	7,000,000 Ending balance

Exercise 8-11

Requirement 1

October 1, 2021

	Debit	Credit
Cash	**100,000**	
Deferred Revenue		**100,000**
(Sale of gift cards)		

Requirement 2

December 31, 2021

	Debit	Credit
Deferred Revenue	**20,000**	
Sales Revenue		**20,000**
(Revenue recognized when gift cards are redeemed)		

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Requirement 3

March 31, 2022

Deferred Revenue	**70,000**	
Sales Revenue		**70,000**

(Revenue recognized when gift cards are redeemed)
($70,000 = $30,000 + $25,000 + $15,000)

Requirement 4

April 1, 2022

Deferred Revenue	**10,000**	
Sales Revenue		**10,000**

(Revenue expiration of gift cards)
($10,000 = $100,000 − $20,000 − $70,000)

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Exercise 8-12

Requirement 1
The contingent liability is probable and reasonably estimable, so it must be reported.

Requirement 2
A $4 million loss should be reported in its 2021 income statement.

Requirement 3
A $4 million liability should be reported in its 2021 balance sheet.

Requirement 4

Loss	**4,000,000**	
Contingent Liability		**4,000,000**
(Record the contingent liability)		

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Exercise 8-13

Requirement 1

The contingent liability is probable and reasonably estimable, so it must be recorded as follows:

Loss	**1,300,000**	
Contingent Liability		**1,300,000**
(Record the contingent liability)		

Requirement 2

Pacific Cruise Lines should record a loss and a liability for the minimum amount ($1.1 million) and disclose the nature of the contingency in the disclosure notes to the financial statements. The journal entry is as follows:

Loss	**1,100,000**	
Contingent Liability		**1,100,000**
(Record the contingent liability)		

Requirement 3

If the likelihood of loss is reasonably possible rather than probable, we record no entry but make full disclosure in a note to the financial statements to describe the contingency.

Requirement 4

If the likelihood of loss is remote, disclosure is usually not required.

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Exercise 8-14

Requirement 1

Yes, it's probable that costs for warranties will be incurred and based on previous experience the amount is reasonably estimable.

Requirement 2

December 31

Warranty Expense ($600,000 × 6%)	**36,000**	
Warranty Liability		**36,000**
(Record contingent liability for warranties)		

Requirement 3

January 31

Warranty Liability	**13,000**	
Cash		**13,000**
(Record actual warranty expenditures)		

Requirement 4

Warranty Liability

	36,000 Expense
Payment 13,000	
	23,000 Balance

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Exercise 8-15

Requirement 1

December 31, 2021

	Debit	Credit
Warranty Expense ($1,600,000 × 2%)	**32,000**	
Warranty Liability		**32,000**
(Record contingent liability for warranties)		

Requirement 2

Summary entry in 2022

	Debit	Credit
Warranty Liability	**25,000**	
Cash		**25,000**
(Record actual warranty expenditures)		

Requirement 3

December 31, 2022

	Debit	Credit
Warranty Expense	**29,000**	
Warranty Liability		**29,000**
(Record contingent liability for warranties)		
($36,000 = $2,400,000 × 1.5%)		
($29,000 = $36,000 − $7,000 current balance in Warranty Liability)		

Requirement 4

Warranty Liability

Debit	Credit
	0
	32,000 Adjusting entry
	32,000 Balance in 2021
Payment in 2022 25,000	
	7,000
	29,000 Adjusting entry
	36,000 Balance in 2022

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Exercise 8-16

Requirement 1
Yes, a contingent liability is an existing, uncertain situation that might result in a loss. The environmental remediation and restoration costs represent an existing uncertain situation that will likely result in a loss to the company.

Requirement 2
Dow would record a contingency if the loss is probable and is reasonably estimable.

Requirement 3

	Debit	Credit
Loss	**381,000,000**	
Contingent Liability		**381,000,000**
(Record the contingent liability)		

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Exercise 8-17

Requirement 1

Current Assets	÷	Current Liabilities	=	Current Ratio
$875	÷	$2,638	=	0.33

Quick Assets	÷	Current Liabilities	=	Acid-Test Ratio
$331 + 63 + 230	÷	$2,638	=	0.24

Requirement 2

Queen's Line has a lower current ratio and a lower acid-test ratio than either United Airlines or American Airlines reported in the text. Queen's Line appears more likely to have difficulty paying its currently maturing debts.

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Exercise 8-18

Requirement 1 Transactions during January, 2021

January 2	Debit	Credit
Cash	**8,000**	
Deferred Revenue		**8,000**
(Sell gift cards for cash)		

January 6	Debit	Credit
Inventory	**147,000**	
Accounts Payable		**147,000**
(Purchase inventory on account)		

January 15	Debit	Credit
Accounts Receivable	**135,000**	
Sales Revenue		**135,000**
(*Sell inventory on account*)		
Cost of Goods Sold	**73,800**	
Inventory		**73,800**
(*Record cost of inventory sold*)		

January 23	Debit	Credit
Cash	**125,400**	
Accounts Receivable		**125,400**
(*Receive cash on account*)		

January 25	Debit	Credit
Accounts Payable	**90,000**	
Cash		**90,000**
(*Pay cash on account*)		

January 28	Debit	Credit
Allowance for Uncollectible Accounts	**4,800**	
Accounts Receivable		**4,800**
(*Write off uncollectible accounts*)		

January 30	Debit	Credit
Cash	**11,000**	
Accounts Receivable	**132,000**	
Sales Revenue		**143,000**
(*Sell inventory for cash and on account*)		
Cost of Goods Sold	**79,500**	
Inventory		**79,500**
(*Record cost of inventory sold*)		

January 31	Debit	Credit
Salaries Expense	**52,000**	
Cash		**52,000**
(*Pay monthly salaries*)		

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Exercise 8-18 (continued)

Requirement 2 Adjusting entries at end of January, 2021

(a) January 31	Debit	Credit
Depreciation Expense	**500**	
Accumulated Depreciation		**500**
(Record depreciation for January)		
($500 = [$15,000−$3,000] / 24 months)		

(b) January 31	Debit	Credit
Bad Debt Expense	**12,500**	
Allowance for Uncollectible Accounts		**12,500**
(*Adjust uncollectible accounts)*		
(*$12,500 = [$11,000×30%]+[$172,000*[a]*×5%]+$600*[b])		
[a] *$172,000 = $46,200+$135,000−$125,400−$4,800+$132,000−$11,000*		
[b] *$600 = $4,800−$4,200*		

(c) January 31	Debit	Credit
Interest Expense	**250**	
Interest Payable		**250**
(*Adjust interest expense*)		
(*$250 = $50,000 × 6% × 1/12*)		

(d) January 31	Debit	Credit
Income Tax Expense	**13,000**	
Income Tax Payable		**13,000**
(*Adjust income taxes*)		

(e) January 31	Debit	Credit
Deferred Revenue	**3,000**	
Sales Revenue		**3,000**
(*Adjust revenue for gift cards redeemed*)		

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Exercise 8-18 (continued)

Requirement 3

ACME Fireworks
Adjusted Trial Balance
January 31, 2021

Accounts	Debit	Credit
Cash	$ 27,500	
Accounts Receivable	183,000	
Inventory	13,700	
Land	46,000	
Equipment	15,000	
Allowance for Uncollectible Accounts		$ 11,900
Accumulated Depreciation		2,000
Accounts Payable		85,500
Deferred Revenue (gift cards liability)		5,000
Interest Payable		250
Income Tax Payable		13,000
Notes Payable		50,000
Common Stock		35,000
Retained Earnings		33,100
Sales Revenue		281,000
Cost of Goods Sold	153,300	
Salaries Expense	52,000	
Bad Debt Expense	12,500	
Depreciation Expense	500	
Interest Expense	250	
Income Tax Expense	13,000	
Totals	$516,750	$516,750

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Exercise 8-18 (continued)

Requirement 3 (concluded)

Accounts	Ending Balance		Beginning balance in **bold**, entries during January in blue, and adjusting entries in red.
Cash	$ 27,500	=	**25,100**+8,000+125,400−90,000+11,000−52,000
Accounts Receivable	183,000	=	**46,200**+135,000−125,400−4,800+132,000
Inventory	13,700	=	**20,000**+147,000−73,800−79,500
Land	46,000	=	**46,000**
Equipment	15,000	=	**15,000**
Allow for Unc. Accounts	11,900	=	**4,200**−4,800+12,500
Accumulated Depreciation	2,000	=	**1,500**+500
Accounts Payable	85,500	=	**28,500**+147,000−90,000
Deferred Revenue	5,000	=	8,000−3,000
Interest Payable	250	=	250
Income Tax Payable	13,000	=	13,000
Notes Payable	50,000	=	**50,000**
Common Stock	35,000	=	**35,000**
Retained Earnings	33,100	=	**33,100**
Sales Revenue	281,000	=	135,000+143,000+3,000
Cost of Goods Sold	153,300	=	73,800+79,500
Salaries Expense	52,000	=	52,000
Bad Debt Expense	12,500	=	12,500
Depreciation Expense	500	=	500
Interest Expense	250	=	250
Income Tax Expense	13,000	=	13,000

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Exercise 8-18 (continued)

Requirement 4

ACME Fireworks
Multiple-Step Income Statement
For the year ended January 31, 2021

Sales revenue	$281,000	
Cost of goods sold	153,300	
Gross profit		$127,700
Salaries expense	52,000	
Bad debt expense	12,500	
Depreciation expense	500	
Total operating expenses		65,000
Operating income		62,700
Interest expense		250
Income before taxes		62,450
Income tax expense		13,000
Net income		$ 49,450

Requirement 5

ACME Fireworks
Classified Balance Sheet
January 31, 2021

Assets			**Liabilities**		
			Accounts payable	$ 85,500	
Cash		$ 27,500	Deferred revenue	5,000	
Accounts receivable	183,000		Interest payable	250	
Less: Allowance	(11,900)	171,100	Income tax payable	13,000	
Inventory		13,700	Total current liabilities	103,750	
Total current assets		212,300	Notes payable	50,000	
			Total liabilities	153,750	
Land		46,000	**Stockholders' Equity**		
Equipment		15,000	Common stock	35,000	
Less: Accumulated Depreciation		(2,000)	Retained earnings	82,550	*
			Total stockholders' equity	117,550	
Total assets		$271,300	Total liabilities and stockholders' equity	$271,300	

* Retained earnings = Beginning retained earnings + Net income − Dividends
= $33,100 + $49,450 − $0
= $82,550

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Exercise 8-18 (concluded)

Requirement 6

January 31, 2021	Debit	Credit
Sales Revenue	281,000	
Retained Earnings		281,000
(*Close revenue accounts*)		
Retained Earnings	231,550	
Cost of Goods Sold		153,300
Salaries Expense		52,000
Bad Debt Expense		12,500
Depreciation Expense		500
Interest Expense		250
Income Tax Expense		13,000
(*Close expense accounts*)		

Requirement 7

(a) The current ratio is:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{\$212,300}{\$103,750} = \mathbf{2.05}$$

ACME Fireworks is **more** liquid than the industry average. ACME Fireworks has a greater proportion of current assets to pay current liabilities compared to the industry average of 1.8.

(b) The acid-test ratio is:

$$\text{Acid-Test Ratio} = \frac{\text{Quick Assets*}}{\text{Current Liabilities}} = \frac{\$27,500 + \$0 + \$171,100}{\$103,750} = \mathbf{1.91}$$

*Quick Assets = Cash + Current Investments + Accounts Receivable

ACME Fireworks is **less** likely to have difficulty paying its currently maturing debts. ACME Fireworks has a greater proportion of quick assets to pay current liabilities compared to the industry average of 1.5.

(c) The current ratio, assuming the notes payable are current liabilities, is:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{\$212,300}{\$153,750} = \mathbf{1.38}$$

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Assuming the notes payable were due on April 1, 2021, they would be included in total current liabilities. This would increase current liabilities and **decrease** the current ratio, since dividing by a larger number reduces the ratio.

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PROBLEMS: SET A

Problem 8-1A

	List A	List B
_i__	1. An IOU promising to repay the amount borrowed plus interest.	a. Recording of a contingent liability
_d__	2. Payment amount is reasonably possible and is reasonably estimable.	b. Deferred revenue
_h__	3. Mixture of liabilities and equity a business uses.	c. The riskiness of a business's obligations
_a__	4. Payment amount is probable and is reasonably estimable.	d. Disclosure of a contingent liability
_b__	5. A liability that requires the sacrifice of something other than cash.	e. Interest on debt
_j__	6. Long-term debt maturing within one year.	f. Payroll taxes
_f__	7. FICA and FUTA.	g. Line of credit
_g__	8. Informal agreement that permits a company to borrow up to a prearranged limit	h. Capital structure
_c__	9. Classifying liabilities as either current or long-term helps investors and creditors assess this.	i. Notes payable
_e__	10. Amount of note payable x annual interest rate x fraction of the year.	j. Current portion of long-term debt

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Problem 8-2A

Requirement 1

(a). October 1, 2021

	Debit	Credit
Cash	**41,000,000**	
Notes Payable		**41,000,000**
(Issuance of notes payable)		

(b). October 1, 2021

	Debit	Credit
Notes Receivable	**41,000,000**	
Cash		**41,000,000**
(Acceptance of notes receivable)		

Requirement 2

(a). December 31, 2021

	Debit	Credit
Interest Expense ($41 million × 9% × 3/12)	**922,500**	
Interest Payable		**922,500**
(*Interest expense incurred, but not paid*)		

(b). December 31, 2021

	Debit	Credit
Interest Receivable	**922,500**	
Interest Revenue		**922,500**
(*Interest revenue earned, but not received)*		

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Requirement 3

(a) September 30, 2022

Notes Payable	**41,000,000**	
Interest Payable ($41 million × 9% × 3/12)	**922,500**	
Interest Expense ($41 million × 9% × 9/12)	**2,767,500**	
Cash		**44,690,000**
(*Payment of notes payable and interest*)		

(b). September 30, 2022

Cash	**44,690,000**	
Interest Receivable ($41 million × 9% × 3/12)		**922,500**
Interest Revenue ($41 million × 9% × 9/12)		**2,767,500**
Notes Receivable		**41,000,000**
(*Collection of notes receivable and interest*)		

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Problem 8-3A

Requirement 1

January 31

	Debit	Credit
Salaries Expense	**600,000**	
Income Tax Payable		**60,000**
FICA Tax Payable		**45,900**
Salaries Payable (to balance)		**494,100**
(Employee salary expense and withholdings)		

Requirement 2

January 31

	Debit	Credit
Salaries Expense (fringe benefits)	**34,800**	
Accounts Payable (to Blue Cross)		**10,800**
Accounts Payable (to Fidelity)		**24,000**
(Employer-provided fringe benefits)		

Requirement 3

January 31

	Debit	Credit
Payroll Tax Expense (total)	**83,100**	
FICA Tax Payable		**45,900**
Unemployment Tax Payable		**37,200**
(Employer payroll taxes)		

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Problem 8-4A

Requirement 1

February 14

	Debit	Credit
Salaries Expense	**1,500,000**	
Income Tax Payable		**375,000**
FICA Tax Payable		**114,750**
Accounts Payable (Retirement Plan)		**63,000**
Salaries Payable (to balance)		**947,250**
(Employee salary expense and withholdings)		

Requirement 2

February 14

	Debit	Credit
Salaries Expense (fringe benefits)	**100,500**	
Accounts Payable (Medical Insurance)		**31,500**
Accounts Payable (Life Insurance)		**6,000**
Accounts Payable (Retirement Plan)		**63,000**
(Employer-provided fringe benefits)		

Requirement 3

February 14

	Debit	Credit
Payroll Tax Expense (total)	**207,750**	
FICA Tax Payable		**114,750**
Unemployment Tax Payable		**93,000**
(Employer payroll taxes)		

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Problem 8-5A

Requirement 1

$$\frac{\$102{,}600{,}000}{114{,}000} = \$900 \text{ per season ticket}$$

$$\frac{\$900}{6 \text{ games}} = \$150 \text{ per individual game ticket}$$

Requirement 2

	Debit	Credit
Cash	**102,600,000**	
Deferred Revenue		**102,600,000**
(Advance collection of ticket sales)		

Requirement 3

	Debit	Credit
Deferred Revenue	**17,100,000**	
Sales Revenue ($102,600,000/6)		**17,100,000**
(Revenue recognized after first home game)		

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Problem 8-6A

Requirement 1

	Debit	Credit
Cash	**3,500**	
Deferred Revenue		**3,500**
(Sale of gift cards)		

Requirement 2

	Debit	Credit
Deferred Revenue	**728**	
Sales Revenue ($728 / 1.04)		**700**
Sales Taxes Payable		**28**
(Redemption of gift certificates)		

Requirement 3

Deferred Revenue		
	3,500	
728		
	2,772	**Balance**

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Problem 8-7A

Requirement 1

The likelihood of loss is reasonably possible rather than probable, so no journal entry is recorded. However, full disclosure of the contingent liability is made in a note to the financial statements.

Requirement 2

Environmental Printing has a contingent gain that is probable, and is reasonably estimable within a range between $6.5 and $9 million. Contingent gains are not recorded until the gain is certain. Though firms do not record contingent gains in the accounts, they sometimes disclose them in notes to the financial statements.

Requirement 3

Environmental Printing should record a loss and a liability for the minimum amount ($500,000) and disclose the range between $500,000 and $900,000 in the notes to the financial statements. The entry is as follows:

	Debit	Credit
Loss	**500,000**	
Contingent Liability		**500,000**
(Record the contingent liability)		

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Problem 8-8A

Requirement 1

The reporting for this situation depends on the likelihood of loss occurring. If the likelihood of loss is reasonably possible rather than probable, no journal entry is recorded. However, if the likelihood of loss is probable, the following entry would be recorded:

	Debit	Credit
Loss	**130,000,000**	
Contingent Liability		**130,000,000**
(Record the contingent liability)		

Requirement 2

The contingent loss is probable and reasonably estimable, so it would be recorded as follows:

	Debit	Credit
Loss	**150,000,000**	
Contingent Liability		**150,000,000**
(Record the contingent liability)		

Requirement 3

Dinoco has a contingent gain that is probable, and is reasonably estimable at $150 million. Contingent gains are not recorded until the gain is certain. Though firms do not record contingent gains in the accounts, they sometimes disclose them in notes to the financial statements.

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Problem 8-9A

Requirement 1

($ in millions)	Total Current Assets	÷	Total Current Liabilities	=	Current Ratio
ACME Corporation	$15,372	÷	$11,462	=	1.34
Wayne Enterprises	$9,784	÷	$7,708	=	1.27

ACME Corporation has a better current ratio than Wayne Enterprises.

Requirement 2

($ in millions)	Quick Assets	÷	Total Current Liabilities	=	Acid-Test Ratio
ACME Corporation	$3,889	÷	$11,462	=	0.34
Wayne Enterprises	$883	÷	$7,708	=	0.11

ACME Corporation also has a higher acid-test ratio than Wayne Enterprises.

Requirement 3

The purchase of additional inventory on credit would increase current assets (inventory) and current liabilities (accounts payable) by the same amount. This transaction would cause the current ratios for ACME Corporation and Wayne Enterprises to *decrease* towards 1.0. This transaction would also cause the acid-test ratios to decrease as quick assets would remain the same, but current liabilities would increase.

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PROBLEMS: SET B

Problem 8-1B

	List A	List B
_i__	1. Interest expense is recorded in the period interest is incurred rather than in the period interest is paid.	a. The riskiness of a business's obligations
_d__	2. Payment is reasonably possible and is reasonably estimable.	b. Current portion of long-term debt
_h__	3. Cash, current investments, and accounts receivable all divided by current liabilities.	c. Recording a contingent liability
_c__	4. Payment is probable and is reasonably estimable.	d. Disclosure of a contingent liability
_j__	5. Gift cards.	e. Interest expense
_b__	6. Long-term debt maturing within one year.	f. FICA
_f__	7. Social Security and Medicare.	g. Commercial paper
_g__	8. Unsecured notes sold in minimum denominations of $25,000 with maturities up to 270 days.	h. Acid-test ratio
_a__	9. Classifying liabilities as either current or long-term helps investors and creditors assess this.	i. Accrual accounting
_e__	10. Incurred on a notes payable.	j. Deferred revenue

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Problem 8-2B

Requirement 1

(a). November 1, 2021

	Debit	Credit
Cash	**21,000,000**	
Notes Payable		**21,000,000**
(Issuance of notes payable)		

(b). November 1, 2021

	Debit	Credit
Notes Receivable	**21,000,000**	
Cash		**21,000,000**
(Acceptance of notes receivable)		

Requirement 2

(a). December 31, 2021

	Debit	Credit
Interest Expense ($21 million × 7% × 2/12)	**245,000**	
Interest Payable		**245,000**
(*To record interest expense incurred, but not paid*)		

(b). December 31, 2021

	Debit	Credit
Interest Receivable ($21 million × 7% × 2/12)	**245,000**	
Interest Revenue		**245,000**
(*Interest revenue earned, but not received)*		

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Requirement 3

(a). April 30, 2022

Notes Payable	**21,000,000**	
Interest Payable ($21 million × 7% × 2/12)	**245,000**	
Interest Expense ($21 million × 7% × 4/12)	**490,000**	
Cash		**21,735,000**
(*Payment of notes payable and interest*)		

(b). April 30, 2022

Cash	**21,735,000**	
Notes Receivable		**21,000,000**
Interest Receivable ($21 million × 7% × 2/12)		**245,000**
Interest Revenue ($21 million × 7% × 4/12)		**490,000**
(*Collection of notes receivable and interest*)		

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Problem 8-3B

Requirement 1

January 31

Salaries Expense	**500,000**	
Income Tax Payable		**135,000**
FICA Tax Payable		**38,250**
Salaries Payable (to balance)		**326,750**
(Employee salary expense and withholdings)		

Requirement 2

January 31

Salaries Expense (fringe benefits)	**73,000**	
Accounts Payable (to Blue Cross)		**13,000**
Accounts Payable (to Fidelity)		**60,000**
(Employer-provided fringe benefits)		

Requirement 3

January 31

Payroll Tax Expense (total)	**69,250**	
FICA Tax Payable		**38,250**
Unemployment Tax Payable		**31,000**
(Employer payroll taxes)		

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Problem 8-4B

Requirement 1

January 24

Account	Debit	Credit
Salaries Expense	**2,500,000**	
Income Tax Payable		**537,500**
FICA Tax Payable		**191,250**
Accounts Payable (Retirement Plan)		**125,000**
Salaries Payable (to balance)		**1,646,250**
(Employee salary expense and withholdings)		

Requirement 2

January 24

Account	Debit	Credit
Salaries Expense (fringe benefits)	**201,250**	
Accounts Payable (Medical Insurance)		**50,000**
Accounts Payable (Dental Insurance)		**17,500**
Accounts Payable (Life Insurance)		**8,750**
Accounts Payable (Retirement Plan)		**125,000**
(Employer-provided fringe benefits)		

Requirement 3

January 24

Account	Debit	Credit
Payroll Tax Expense (total)	**346,250**	
FICA Tax Payable		**191,250**
Unemployment Tax Payable		**155,000**
(Employer payroll taxes)		

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Problem 8-5B

Requirement 1

$$\frac{\$9{,}128{,}000}{16{,}300} = \$560 \text{ per season ticket}$$

$$\frac{\$560}{16 \text{ games}} = \$35 \text{ per individual game ticket}$$

Requirement 2

Cash	**9,128,000**	
Deferred Revenue		**9,128,000**
(Advance collection of ticket sales)		

Requirement 3

Deferred Revenue	**570,500**	
Sales Revenue ($9,128,000/16)		**570,500**
(Revenue recognized after first home game)		

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Problem 8-6B

Requirement 1

	Debit	Credit
Cash	**2,300**	
Deferred Revenue		**2,300**
(Sale of gift cards)		

Requirement 2

	Debit	Credit
Deferred Revenue	**742**	
Sales Revenue ($742/1.06)		**700**
Sales Taxes Payable		**42**
(Redemption of gift certificates)		

Requirement 3

Deferred Revenue		
	2,300	
742		
	1,558	**Balance**

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Problem 8-7B

Requirement 1

	Debit	Credit
Bad Debt Expense ($29 million × 3%)	**870,000**	
Allowance for Uncollectible Accounts		**870,000**
(Estimated uncollectible accounts)		

Requirement 2

Compact Electronics has a contingent gain that is probable and reasonably estimable. Contingent gains are not recorded until the gain is certain. Though firms do not record contingent gains in the accounts, they sometimes disclose them in notes to the financial statements.

Requirement 3

	Debit	Credit
Loss	**600,000**	
Contingent Liability		**600,000**
(Record the loss contingency)		

Requirement 4

The likelihood of loss is reasonably possible rather than probable, so no journal entry is recorded. However, full disclosure of the contingent liability and the estimated range of loss between $2.5 and $3.5 million is disclosed in notes to the financial statements.

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Problem 8-8B

Requirement 1

The contingent liability is reasonably possible and can be reasonably estimated within a range. Because the loss is not probable, no journal entry for a loss and liability is required. Authors Academic Press must disclose a description of the loss contingency in its notes to the financial statements.

Requirement 2

The contingent liability is probable and reasonably estimable, so it must be reported. Because the estimate of the loss is a range where no amount within the range is a better estimate than any other amount, the minimum amount of the range will be recorded as follows:

	Debit	Credit
Loss	**1,500,000**	
Contingent Liability		**1,500,000**
(Record the loss contingency)		

The range of the potential loss (from $1.5 to $2.25 million) should also be disclosed.

Requirement 3

Authors Academic Press has a contingent gain that is probable and can be reasonably estimated at $3 million. Contingent gains are not recorded until the gain is certain. Though firms do not record contingent gains in the accounts, they sometimes disclose them in notes to the financial statements.

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Problem 8-9B

Requirement 1

($ in millions)	Total Current Assets	÷	Total Current Liabilities	=	Current Ratio
Ferris Air	$4,227	÷	$4,650	=	0.91
Oceanic Airlines	$8,272	÷	$13,270	=	0.62

Ferris Air has a better current ratio than Oceanic Airlines.

Requirement 2

($ in millions)	Quick Assets	÷	Total Current Liabilities	=	Acid-Test Ratio
Ferris Air	$3,548	÷	$4,650	=	0.76
Oceanic Airlines	$5,905	÷	$13,270	=	0.44

Ferris Air also has a better acid-test ratio than Oceanic Airlines.

Requirement 3

The purchase of additional inventory with cash would not affect the current ratio as total current assets would remain unchanged. One current asset (inventory) would increase while another current asset (cash) would decrease by the same amount. The purchase of additional inventory with cash would decrease the acid-test ratio due to the decrease in cash. Recall that inventory is excluded from the acid-test ratio.

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ADDITIONAL PERSPECTIVES

Continuing Problem: Great Adventures

AP8-1

Requirement 1

Account	Debit	Credit
Interest Expense	**750**	
Interest Payable		**750**
(Accrue interest on note)		
($750 = $30,000 × 6% × 5/12)		
Notes Payable (long-term)	**10,000**	
Notes Payable (current)		**10,000**
(Reclassify portion of long-term debt as current)		
Deferred Revenue	**20,000**	
Sales Revenue		**20,000**
(Record gift cards redeemed)		
Loss	**12,000**	
Contingent Liability		**12,000**
(Record a contingent liability)		
Warranty Expense	**4,000**	
Warranty Liability		**4,000**
(Estimate future warranty costs)		

Requirement 2

No entry would be required.

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Additional Perspective 8-1 *(in General Ledger)*

Students will be given the following existing trial balance.

Great Adventures, Inc.
Trial Balance
December 31, 2022

Accounts	Debit	Credit
Cash	$ 89,070	
Accounts Receivable	50,000	
Allowance for Uncollectible Accounts		$ 2,400
Inventory	7,000	
Prepaid Insurance	900	
Equipment	62,000	
Accumulated Depreciation		25,250
Accounts Payable		20,800
Deferred Revenue		25,000
Warranty Liability		-0-
Contingent Liability		-0-
Income Tax Payable		14,500
Interest Payable		-0-
Notes Payable (current)		-0-
Notes Payable (long-term)		30,000
Common Stock		20,000
Retained Earnings		33,450
Service Revenue		44,500
Sales Revenue		100,000
Interest Revenue		120
Sales Discounts	350	
Cost of Goods Sold	38,500	
Depreciation Expense	17,250	
Insurance Expense	5,700	
Rent Expense	2,400	
Salaries Expense	24,000	
Supplies Expense	500	
Bad Debt Expense	2,400	
Repairs and Maintenance Expense	400	
Warranty Expense	-0-	
Loss	-0-	

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Interest Expense	1,050	
Income Tax Expense	14,500	
Totals	$316,020	$316,020

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Additional Perspective 8-1 (in General Ledger, continued)

Account	Debit	Credit
Interest Expense	**750**	
Interest Payable		**750**
(Accrue interest on note)		
(\$750 = \$30,000 × 6% × 5/12)		
Notes Payable (long-term)	**10,000**	
Notes Payable (current)		**10,000**
(Reclassify portion of long-term debt as current)		
Deferred Revenue	**20,000**	
Sales Revenue		**20,000**
(Record gift cards redeemed)		
Loss	**12,000**	
Contingent Liability		**12,000**
(Record a contingent liability)		
Warranty Expense	**4,000**	
Warranty Liability		**4,000**
(Estimate future warranty costs)		

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Additional Perspective 8-1 (in General Ledger, continued)

Great Adventures, Inc.
Income Statement
For the period ended December 31, 2022

Service revenue	$ 44,500	
Sales revenue	120,000	
Sales discounts	(350)	
Net sales	164,150	
Cost of goods sold	38,500	
Gross profit		$125,650
Depreciation Expense	17,250	
Insurance Expense	5,700	
Rent Expense	2,400	
Salaries Expense	24,000	
Supplies Expense	500	
Bad Debt Expense	2,400	
Repairs and Maintenance Expense	400	
Warranty Expense	4,000	
Loss	12,000	
Total operating expenses		68,650
Operating income (loss)		57,000
Interest revenue		120
Interest expense		(1,800)
Income before income taxes		55,320
Income tax expense		14,500
Net income		$ 40,820

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Additional Perspective 8-1 (in General Ledger, continued)

Great Adventures, Inc.
Balance Sheet
December 31, 2022

Assets		**Liabilities**	
Current assets:		Current liabilities:	
Cash	$ 89,070	Accounts payable	$ 20,800
Accounts receivable	50,000	Deferred Revenue	5,000
Allow for Uncoll Accts	(2,400)	Warranty Liability	4,000
Inventory	7,000	Contingent Liability	12,000
Prepaid Insurance	900	Income tax payable	14,500
Total current assets	144,570	Interest payable	750
		Notes Payable (current)	10,000
		Total current liabilities	67,050
		Notes payable (long-term)	20,000
		Total liabilities	87,050
Long-term assets:			
Equipment	62,000	**Stockholders' Equity**	
Accumulated depreciation	(25,250)	Common stock	20,000
		Retained earnings	74,270
		Total stockholders' equity	94,270
Total assets	$181,320	Total liabilities and stockholders' equity	$181,320

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Additional Perspective 8-1 (in General Ledger, concluded)

Dec. 31, 2022	Debit	Credit
Service Revenue	**44,500**	
Sales Revenue	**120,000**	
Interest Revenue	**120**	
Sales Discounts		**350**
Retained Earnings		**164,270**
(*Close revenue accounts*)		
Dec. 31, 2022		
Retained Earnings	**123,450**	
Cost of Goods Sold		**38,500**
Depreciation Expense		**17,250**
Insurance Expense		**5,700**
Rent Expense		**2,400**
Salaries Expense		**24,000**
Supplies Expense		**500**
Bad Debt Expense		**2,400**
Repairs and Maintenance Expense		**400**
Warranty Expense		**4,000**
Loss		**12,000**
Interest Expense		**1,800**
Income Tax Expense		**14,500**
(*Close expense accounts*)		

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Financial Analysis: American Eagle

AP8-2

($ in thousands)

Requirement 1

	Total Current Assets	÷	Total Current Liabilities	=	Current Ratio
2018	$968,530	÷	$485,221	=	2.00
2017	$901,229	÷	$493,783	=	1.83

The current ratio **improved** in the more recent year.

Requirement 2

	Quick Assets	÷	Total Current Liabilities	=	Acid-Test Ratio
2018	$491,917	÷	$485,221	=	1.01
2017	$465,247	÷	$493,783	=	0.94

The acid-test ratio also **improved** in the more recent year.

Requirement 3

If American Eagle used $100 million in cash to pay $100 million in accounts payable, its current ratio and acid-test ratio will **improve** since they are greater than 1. The calculations are provided as follows:

	Total Current Assets	÷	Total Current Liabilities	=	Current Ratio
Before	$968,530	÷	$485,221	=	2.00
After	$968,530 − $100,000	÷	$485,221 − $100,000	=	2.25

	Quick Assets	÷	Total Current Liabilities	=	Acid-Test Ratio
Before	$491,917	÷	$485,221	=	1.01
After	$491,917 − $100,000	÷	$485,221 − $100,000	=	1.02

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Financial Analysis: The Buckle

AP8-3

($ in thousands)

Requirement 1

	Total Current Assets	÷	Total Current Liabilities	=	Current Ratio
2018	$360,584	÷	$97,906	=	3.68
2017	$386,457	÷	$98,616	=	3.92

The current ratio **weakens** in the more recent year.

Requirement 2

	Quick Assets	÷	Total Current Liabilities	=	Acid-Test Ratio
2018	$224,507	÷	$97,906	=	2.29
2017	$254,740	÷	$98,616	=	2.58

The acid-test ratio also **weakens** in the more recent year.

Requirement 3

If Buckle purchased $50 million of inventory by debiting inventory and crediting accounts payable, its current ratio and acid-test ratio would **weaken**. The calculations are provided as follows:

	Total Current Assets	÷	Total Current Liabilities	=	Current Ratio
Before	$360,584	÷	$97,906	=	3.68
After	$360,584 + $50,000	÷	$97,906 + $50,000	=	2.78

	Quick Assets	÷	Total Current Liabilities	=	Acid-Test Ratio
Before	$224,507	÷	$97,906	=	2.29
After	$224,507 + $50,000	÷	$97,906 + 50,000	=	1.86

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Comparative Analysis: American Eagle vs. The Buckle

AP8-4

($ in thousands)

Requirement 1

	Total Current Assets	÷	Total Current Liabilities	=	Current Ratio
American Eagle	$968,530	÷	$485,221	=	2.00
Buckle	$360,584	÷	$97,906	=	3.68

Buckle has a better current ratio. Both American Eagle and Buckle have **better** ratios than United and American Airlines. The clothing industry maintains a higher current ratio.

Requirement 2

	Quick Assets	÷	Total Current Liabilities	=	Acid-Test Ratio
American Eagle	$491,917	÷	$485,221	=	1.01
Buckle	$224,507	÷	$97,906	=	2.29

Buckle also has a better acid-test ratio. Both American Eagle and Buckle have **better** ratios than United and American Airlines. The clothing industry maintains a higher acid-test ratio.

Requirement 3

The purchase of additional inventory with accounts payable will **decrease** the current ratio for American Eagle and Buckle because their current ratio is above 1.0.

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Ethics

AP8-5

1. Eugene's decision will have no effect on current assets but will understate current liabilities.
Under either assumption, cash (current asset) is collected. Deferred revenue is a liability. Eugene's decision not to record the deferred revenue will understate current liabilities.

2.

($ in millions) Treatment	Total Current Assets	÷	Total Current Liabilities	=	Current Ratio
Service Revenue	$10.1	÷	$10	=	1.01
Deferred Revenue	$10.1	÷	$10 + $1	=	0.92

3. Yes.
By recording the cash received as revenue, the reported current ratio remains above 1.0. First Federal Bank will not consider Caribbean Cruise Lines to be in violation of its debt covenant.

4. No.
Receiving cash in advance from customers is considered a liability. While Caribbean Cruise Line has received the cash, it remains obligated to provide services to customers in the following year. By not recording this obligation, the company provides the false appearance of adequate liquidity. Eugene may justify his decision based on the company's history and the fact that cash has been received. These factors may suggest a high likelihood that the bank will be fully repaid. However, at this point there are no guarantees that the economy will not worsen further, preventing loan repayment by even the most well-meaning borrowers.

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Internet Research

AP8-6

This case provides an opportunity for students to research stock price and accounting information on a publicly traded company of their choice. This case also allows students to access key statistics on companies and compare accounting information with competitors in the same industry. Answers to the assignment will vary depending on the company chosen.

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Written Communication

AP8-7

a. In order to record a contingent liability, the loss must be probable and the amount must be reasonably estimable. A loss and liability will not be recorded for the employee strikes, even though the likelihood of loss is probable (virtually certain), because the loss **cannot** be reasonably estimated. However, careful disclosure of the situation should be provided in the notes to the financial statements.

b. Western should record warranty expense of $40,000 (2% x $2 million in sales) rather than just the $25,000 in warranty expense recorded for expenditures incurred so far. It is probable that costs for warranties will be incurred and, based on their experience with previous product introductions, the company can reasonably estimate the amount. Therefore, the following additional amount should be recorded:

Warranty Expense	**15,000**	
Warranty Liability		**15,000**
(Loss contingency for warranties)		

c. The likelihood of loss is reasonably possible rather than probable, so a contingent liability is not recorded. However, full disclosure of the contingent liability is made in a note to the financial statements.

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Earnings Management

AP8-8

Requirement 1

Yes.

Quattro can use the estimate for warranty expense to manage the reported amount of net income. Quattro can report lower net income in 2021 by recording more warranty expense and building up the warranty liability in that year. The company can then run down the warranty liability in 2022 and record less warranty expense, boosting net income in that year. Total net income over the two-year period is unaffected, but the reported amount of net income in each year is affected.

Requirement 2

($ in millions)	Net Income Before Warranty Expense	−	Warranty Expense	=	Net Income
2021	$210	−	$50	=	$160
2022	$210	−	$30	=	$180

Requirement 3

Yes.

By recording $50 million in warranty expense in 2021 and $30 million in warranty expense in 2022, rather than $40 million each year, Quattro is able to report steadier growth in net income. Net income increases by $20 million each year over the four year period ($120, $140, $160, and $180 million). Using $40 million in warranty expense in 2021 and 2022 would have resulted in reported net income of $120, $140, $170, and $170 million over the four-year period, which provides a less stable, upward pattern.

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