

# Fundamental Accounting Principles

24<sup>th</sup>  
edition



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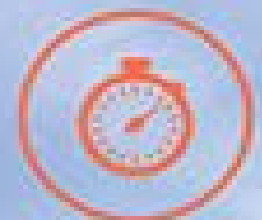
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JOHN J. WILD | KEN W. SHAW

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# Fundamental Accounting Principles

**24**<sup>th</sup> edition

**John J. Wild**

University of Wisconsin at Madison

**Ken W. Shaw**

University of Missouri at Columbia



To my students and family, especially Kimberly, Jonathan, Stephanie, and Trevor.

To my wife Linda and children Erin, Emily, and Jacob.

FUNDAMENTAL ACCOUNTING PRINCIPLES, TWENTY-FOURTH EDITION

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# About the Authors

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Courtesy of John J. Wild

**JOHN J. WILD** is a distinguished professor of accounting at the University of Wisconsin at Madison. He previously held appointments at Michigan State University and the University of Manchester in England. He received his BBA, MS, and PhD from the University of Wisconsin.

John teaches accounting courses at both the undergraduate and graduate levels. He has received numerous teaching honors, including the Mabel W. Chipman Excellence-in-Teaching Award and the departmental Excellence-in-Teaching Award, and he is a two-time recipient of the Teaching Excellence Award from business graduates at the University of Wisconsin. He also received the Beta Alpha Psi and Roland F. Salmonson Excellence-in-Teaching Award from Michigan State University. John has received several research honors, is a past KPMG Peat Marwick National Fellow, and is a recipient of fellowships from the American Accounting Association and the Ernst and Young Foundation.

John is an active member of the American Accounting Association and its sections. He has served on several committees of these organizations, including the Outstanding Accounting Educator Award, Wildman Award, National Program Advisory, Publications, and Research Committees. John is author of *Financial Accounting*, *Managerial Accounting*, *Financial and Managerial Accounting*, and *College Accounting*, all published by McGraw-Hill Education.

John's research articles on accounting and analysis appear in *The Accounting Review*; *Journal of Accounting Research*; *Journal of Accounting and Economics*; *Contemporary Accounting Research*; *Journal of Accounting, Auditing and Finance*; *Journal of Accounting and Public Policy*; *Accounting Horizons*; and other journals. He is past associate editor of *Contemporary Accounting Research* and has served on several editorial boards including *The Accounting Review* and the *Journal of Accounting and Public Policy*.

In his leisure time, John enjoys hiking, sports, boating, travel, people, and spending time with family and friends.



Courtesy of Ken W. Shaw

**KEN W. SHAW** is an associate professor of accounting and the KPMG/Joseph A. Silvosio Distinguished Professor of Accounting at the University of Missouri. He previously was on the faculty at the University of Maryland at College Park. He has also taught in international programs at the University of Bergamo (Italy) and the University of Alicante (Spain). He received an accounting degree from Bradley University and an MBA and PhD from the University of Wisconsin. He is a Certified Public Accountant with work experience in public accounting.

Ken teaches accounting at the undergraduate and graduate levels. He has received numerous School of Accountancy, College of Business, and university-level teaching awards. He was voted the "Most Influential Professor" by four School of Accountancy graduating classes and is a two-time recipient of the O'Brien Excellence in Teaching Award. He is the advisor to his school's chapter of the Association of Certified Fraud Examiners.

Ken is an active member of the American Accounting Association and its sections. He has served on many committees of these organizations and presented his research papers at national and regional meetings. Ken's research appears in the *Journal of Accounting Research*; *The Accounting Review*; *Contemporary Accounting Research*; *Journal of Financial and Quantitative Analysis*; *Journal of the American Taxation Association*; *Strategic Management Journal*; *Journal of Accounting, Auditing, and Finance*; *Journal of Financial Research*; and other journals. He has served on the editorial boards of *Issues in Accounting Education*; *Journal of Business Research*; and *Research in Accounting Regulation*. Ken is co-author of *Financial and Managerial Accounting*,

*Managerial Accounting*, and *College Accounting*, all published by McGraw-Hill Education.

In his leisure time, Ken enjoys tennis, cycling, music, and coaching his children's sports teams.

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## Author Letter

## Using Learning Science and Data Analytics

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We use data to make decisions and maximize performance. Like the mountain biker on the cover who uses data to track his progress, we used student performance data to identify content areas that can be made more direct, concise, and systematic.

Learning science reveals that students do not read large chunks of text, so we streamlined this edition to present it in a more focused, succinct, blocked format to improve student learning and retention. Our new edition delivers the same content in 115 fewer pages. Visual aids and numerous videos offer additional learning aids. New summary Cheat Sheets conclude each chapter to visually reinforce key concepts and procedures.

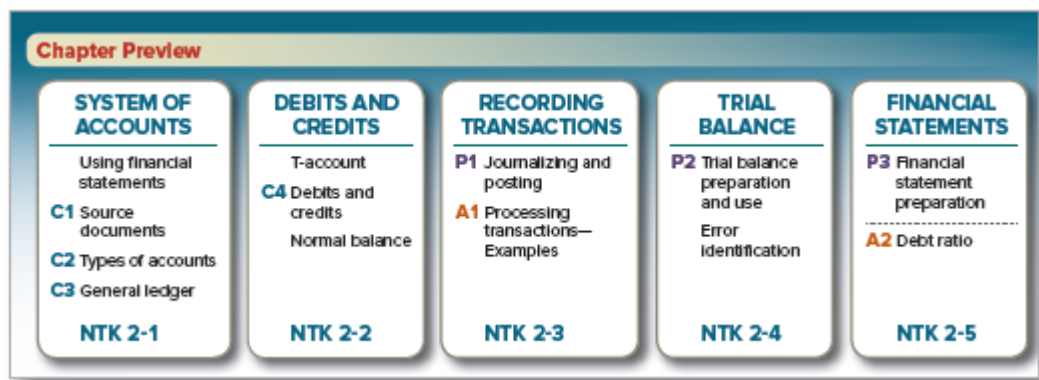
Our new edition has over 1,500 videos to engage students and improve outcomes:

- **Concept Overview Videos**—cover each chapter's learning objectives with multimedia presentations that include Knowledge Checks to engage students and assess comprehension.
- **Need-to-Know Demos**—walk-through demonstrations of key procedures and analysis to ensure success with assignments and tests.
- **Guided Examples (Hints)**—step-by-step walk-through of assignments that mimic Quick Studies, Exercises, and General Ledger.

# Difference Makers in Teaching . . .

## Learning Science

Learning analytics show that students learn better when material is broken into “blocks” of content. Each chapter opens with a visual preview. Learning objective numbers highlight the location of related content. Each “block” of content concludes with a Need-to-Know (NTK) to aid and reinforce student learning. Visual aids and concise, bullet-point discussions further help students learn.



## New Revenue Recognition

- Wild uses the popular gross method for merchandising transactions (net method is covered in an appendix). The gross method is widely used in practice and best for student success.
- Adjusting entries for new revenue recognition rules are included in an appendix. Assignments are clearly marked and separated. Wild is GAAP compliant.

**Sales Discounts, Returns, and Allowances—Adjusting Entries** Revenue recognition rules require sales to be reported at the amount expected to be received. This means that period-end adjusting entries are commonly made for

- Expected sales discounts.
- Expected returns and allowances (revenue side).
- Expected returns and allowances (cost side).

These three adjustments produce three new accounts: Allowance for Sales Discounts, Sales Refund Payable, and Inventory Returns Estimated. Appendix 5B covers these accounts and the adjusting entries.

## Up-to-Date

This book reflects changes in accounting for revenue recognition, investments, leases, and extraordinary items. It is important that students learn GAAP accounting.

## Less Is More

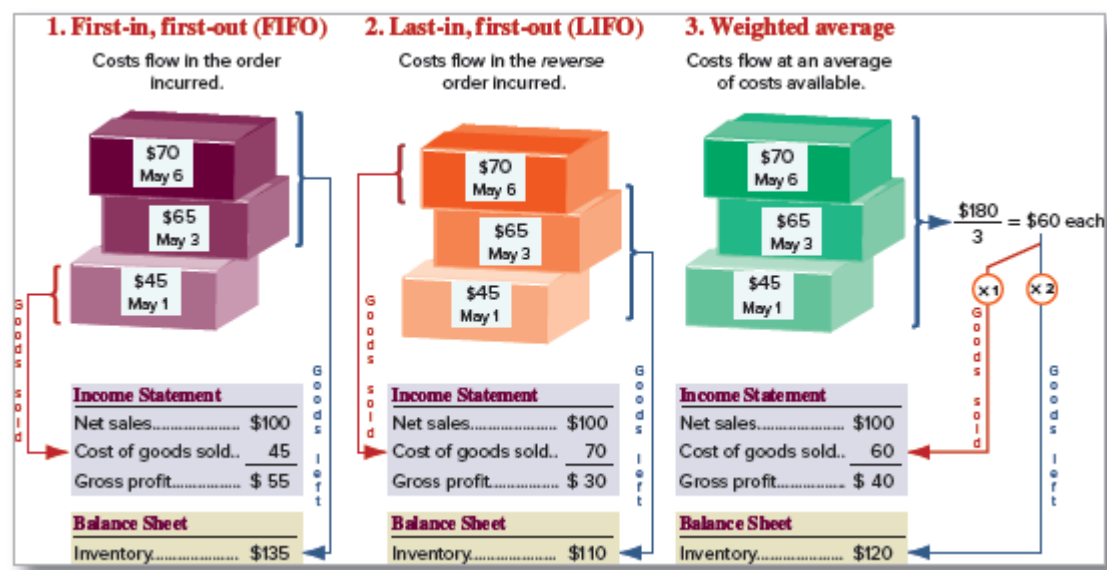
Wild has markedly fewer pages than competing books covering the same material.

- The text is to the point and uses visuals to aid student learning.
- Bullet-point discussions and active writing aids learning.
- The 24th edition has 115 fewer pages than the 23rd edition—a 10% reduction!

## Visual Learning

- Learning analytics tell us today’s students do not read large blocks of text. Wild has adapted to student needs by having informative visual aids throughout. Many visuals and exhibits are new to this edition.





## Videos

- A growing number of students now learn accounting online. Wild offers over 1,500 videos designed to increase student engagement and improve outcomes.
- Hundreds of hint videos or Guided Examples provide a narrated, animated, step-by-step walk-through of select exercises similar to those assigned. These short presentations, which can be turned on or off by instructors, provide reinforcement when students need it most. (Exercise PowerPoints are available for instructors.)
- Concept Overview Videos cover each chapter's learning objectives with narrated, animated presentations that frequently assess comprehension. Wild has concept overview presentations covering 228 Learning Objectives broken down into over 700 videos.



## Need-to-Know Demos

Need-to-Know demonstrations are located at key junctures in each chapter. These demonstrations pose questions about the material just presented—content that students “need to know” to learn accounting. Accompanying solutions walk students through key procedures and analysis necessary to be successful with homework and test materials.

Need-to-Know demonstrations are supplemented with narrated, animated, step-by-step walk-through videos led by an instructor and available via Connect.

A retailer uses the allowance method. Record the following transactions.

Dec. 31 The retailer estimates \$3,000 of its accounts receivable are uncollectible at its year-end.  
 Feb. 14 The retailer determines that it cannot collect \$400 of its accounts receivable from a customer named ZZZ Company.  
 Apr. 1 ZZZ Company unexpectedly pays its account in full to the retailer, which then records its recovery of this bad debt.

**NEED-TO-KNOW 9-3**  
 Entries under Allowance Method  
 P2

**Solution**

Dec. 31	Bad Debts Expense .....	3,000	
	Allowance for Doubtful Accounts .....		3,000
	<i>Record estimated bad debts.</i>		
Feb. 14	Allowance for Doubtful Accounts .....	400	
	Accounts Receivable—ZZZ Co. ....		400
	<i>Write off an account.</i>		
Apr. 1	Accounts Receivable—ZZZ Co. ....	400	
	Allowance for Doubtful Accounts .....		400
	<i>Reinstate an account previously written off.</i>		
Apr. 1	Cash .....	400	
	Accounts Receivable—ZZZ Co. ....		400
	<i>Record cash received on account.</i>		

Do More: QS 9-4, QS 9-5, E 9-5

**Comprehensive Need-to-Know** Comprehensive Need-to-Knows are problems that draw on material from the entire chapter. They include a complete solution, allowing students to review the entire problem-solving process and achieve success.

## Driving Decisions

Whether we prepare, analyze, or apply accounting information, one skill remains essential: decision making. To help develop good decision-making habits and to show the relevance of accounting, we use a learning framework.

- Decision Insight provides context for business decisions.
- Decision Ethics and Decision Maker are role-playing scenarios that show the relevance of accounting.
- Decision Analysis provides key tools to assess company performance.

**Decision Analysis** Debt Ratio

**A2** Compute the debt ratio and describe its use in analyzing financial condition.

It is important to assess a company's risk of failing to pay its debts. Companies finance their assets with either liabilities or equity. A company that finances a relatively large portion of its assets with liabilities is said to have higher financial leverage. Higher financial leverage means greater risk because liabilities must be repaid and often require regular interest payments (equity financing does not). One measure of the risk associated with liabilities is the debt ratio as defined in Exhibit 2.17.

**EXHIBIT 2.17**

$$\text{Debt Ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}}$$

**Decision Insight**

**System's Fine Print** Nintendo's stock increased greatly after the huge success of Pokémon Go. However, few investors read Nintendo's disclosures that said it owned less than one-third of the company that developed the app. When investors realized this, the stock dropped 17%, representing over \$6 billion in value.

**Decision Ethics**

**Payables Manager** As a new accounts payable manager, you are being trained by the outgoing manager. She explains that the system prepares checks for amounts net of favorable cash discounts, and the checks are dated the last day of the discount period. She tells you that checks are not mailed until five days later, adding that "the company gets free use of cash for an extra five days, and our department looks better." Do you continue this policy? **Answer:** One point of view is that the late payment policy is unethical. A deliberate plan to make late payments means the company lies when it pretends to make payment within the discount period. Another view is that the late payment policy is acceptable. Some believe attempts to take discounts through late payments are accepted as "price negotiation."

**Decision Maker**

**Entrepreneur** You open a wholesale business selling entertainment equipment to retail outlets. Most of your customers want to buy on credit. How can you use the balance sheets of customers to decide which ones to extend credit to? **Answer:** We use the accounting equation (Assets = Liabilities + Equity) to identify risky customers to whom we would not want to extend credit. A balance sheet provides amounts for each of these key components. The lower a customer's equity is relative to liabilities, the less likely you would be to extend credit. A low equity means the business already has many creditor claims to it.

## Accounting Analytics

New to this edition, Accounting Analysis assignments have students evaluate the most current financial statements from Apple, Google, and Samsung. Students compute key metrics and compare performance between companies and industry.

These assignments are auto-gradable in Connect and are included after Problem Set B in the text.

**AA 9-2** Comparative figures for Apple and Google follow.

\$ millions	Apple			Google		
	Current Year	One Year Prior	Two Years Prior	Current Year	One Year Prior	Two Years Prior
Accounts receivable, net ..	\$ 17,874	\$ 15,754	\$ 16,849	\$ 18,336	\$14,137	\$11,556
Net sales .....	229,234	215,639	233,715	110,855	90,272	74,989

**Required**

1. Compute the accounts receivable turnover for (a) Apple and (b) Google for each of the two most recent years using the data shown.
2. Compute how many days, on average, it takes to collect receivables for the two most recent years for (a) Apple and (b) Google.
3. Which company more quickly collects its accounts receivable in the current year?

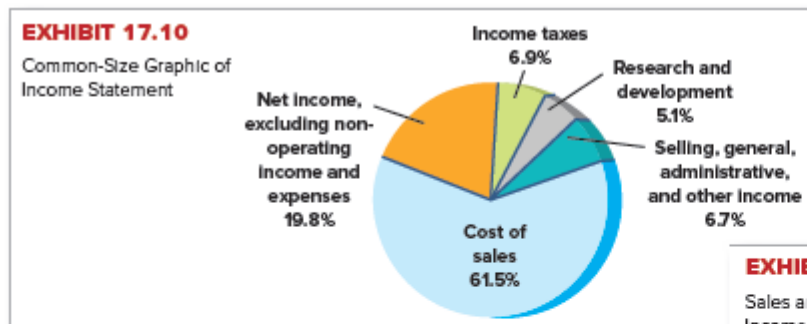
**COMPARATIVE ANALYSIS**  
 A1 P2 I

**APPLE**  
**GOOGLE**

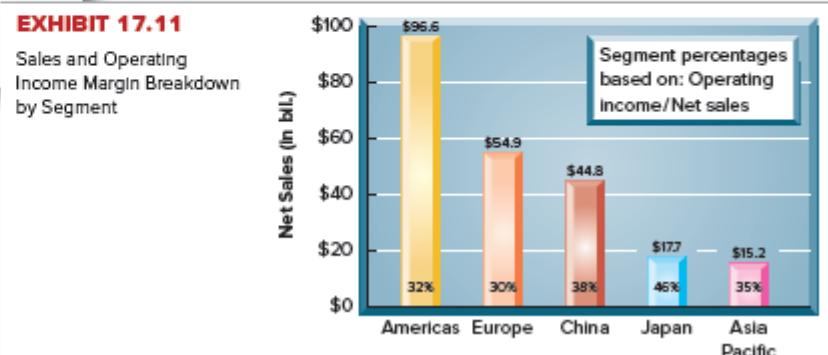
**Hint:** Average collection period equals 365 divided by the accounts receivable turnover.

## Keep It Real

Research shows that students learn best when using current data from real companies. Wild uses the most current data from real companies for assignments, examples, and analysis in the text. See Chapter 17 for use of real data.



**APPLE**  
**GOOGLE**  
**Samsung**



## Cheat Sheets

New to this edition, Cheat Sheets are provided at the end of each chapter. Cheat Sheets are roughly one page in length and include key procedures, concepts, journal entries, and formulas.

**Summary: Cheat Sheet**

### MERCHANDISING ACTIVITIES

**Merchandise:** Goods a company buys to resell.  
**Cost of goods sold:** Costs of merchandise sold.  
**Gross profit (gross margin):** Net sales minus cost of goods sold.  
**Computing net income (service company vs. merchandiser):**

**Service Company**

Revenues  $\xrightarrow{\text{Minus}}$  Expenses  $\xrightarrow{\text{Equals}}$  Net Income

**Merchandiser**

Net sales  $\xrightarrow{\text{Minus}}$  Cost of goods sold  $\xrightarrow{\text{Equals}}$  Gross profit  $\xrightarrow{\text{Minus}}$  Expenses  $\xrightarrow{\text{Equals}}$  Net Income

**Inventory:** Costs of merchandise owned, but not yet sold. It is a current asset on the balance sheet.

**Merchandise Cost Flows:**

```

    graph LR
      NP[Net purchases] --> MAS[Merchandise available for sale]
      BI[Beginning inventory] --> MAS
      MAS --> CGS[Cost of goods sold]
      MAS --> EI[Ending inventory]
  
```

**Perpetual inventory system:** Updates accounting records for each purchase and each sale of inventory.  
**Periodic inventory system:** Updates accounting records for purchases and sales of inventory only at the end of a period.

### MERCHANDISING PURCHASES

**Cash discount:** A purchases discount on the price paid by the buyer, or, a sales discount on amount received for the seller.  
**Credit terms example:** "2/10, n/60" means full payment is due within 60 days, but the buyer can deduct 2% of the invoice amount if payment is made within 10 days.  
**Gross method:** Initially record purchases at gross (full) invoice amounts.

**Purchasing Merchandise for Resale Entries:**

Purchasing merchandise on credit	Merchandise Inventory . . . . .	500	
	Accounts Payable . . . . .		500
Paying within discount period (Inventory reduced by discount taken)	Accounts Payable . . . . .	500	
	Merchandise Inventory . . . . .		10
	Cash . . . . .		490
Paying outside discount period	Accounts Payable . . . . .	500	
	Cash . . . . .		500
Recording purchases returns or allowances	Cash or Accounts Payable . . . . .	30	
	Merchandise Inventory . . . . .		30

**Transportation Costs and Ownership Transfer Rules:**

Shipping Terms	Ownership Transfers at	Goods in Transit Owned by	Transportation Costs Paid by
FOB shipping point	Shipping point	Buyer	<b>Buyer</b> Merchandise Inventory . . . # Cash . . . . . #
FOB destination	Destination	Seller	<b>Seller</b> Delivery Expense . . . . . # Cash . . . . . #

## Doing What's Right

Companies increasingly issue sustainability reports, and accountants are being asked to prepare, analyze, and audit them. Wild includes brief sections in the managerial chapters. This material focuses on the importance of sustainability within the context of accounting, including standards from the Sustainability Accounting Standards Board (SASB). Sustainability assignments cover chapter material with a social responsibility twist.

**SUSTAINABILITY AND ACCOUNTING**

In creating sustainability accounting standards, the Sustainability Accounting Standards Board (SASB) has created reporting guidelines. The SASB considers sustainability information as *material* if its disclosure would affect the views of equity investors on a company's financial condition or operating performance.

Material information can vary across industries; for example, while environmental "planet" issues such as air quality, wastewater management, and biodiversity impacts are important for investments in companies in the nonrenewable resources sectors, such issues are likely not as important for investments in banks. In contrast, "people" issues such as diversity and inclusion, fair labor practices, and employee health are considered material for most sectors, particularly those that use considerable direct labor.

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**QS 23-22**

Sustainability and standard costs

P1 

MM Co. uses corrugated cardboard to ship its product to customers. Management believes it has found a more efficient way to package its products and use less cardboard. This new approach will reduce shipping costs from \$10.00 per shipment to \$9.25 per shipment. (1) If the company forecasts 1,200 shipments this year, what amount of total direct materials costs would appear on the shipping department's flexible budget? (2) How much is this sustainability improvement predicted to save in direct materials costs for this coming year?







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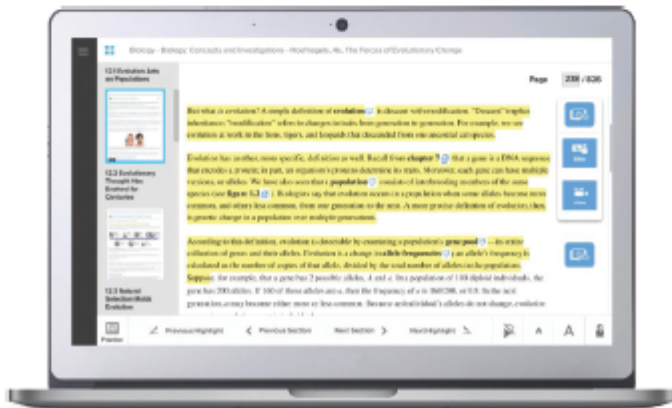
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“I really liked this app—it made it easy to study when you don't have your textbook in front of you.”

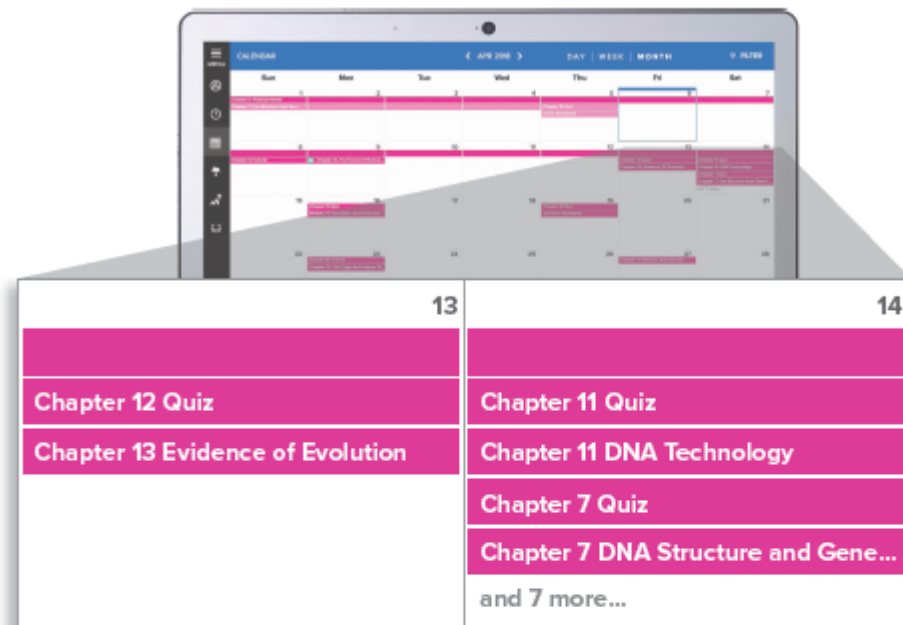
- Jordan Cunningham,  
Eastern Washington University

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# SUPERIOR ASSIGNMENTS

Connect helps students learn more efficiently by providing feedback and practice material when they need it, where they need it. Connect grades homework automatically and gives immediate feedback.

- Wild has auto-gradable and algorithmic assignments; most focus on one learning objective and are targeted at introductory students.
- 90% of Wild's Quick Study, Exercise, and Problem Set A assignments are available in Connect with algorithmic options.
- Over 210 assignments new to this edition—all available in Connect with algorithmic options. Nearly all are Quick Studies (brief exercises) and Exercises.

Apr. 2 Purchased \$5,000 of merchandise from Lyon Company with credit terms of 2/15, n/60, invoice dated April 2, and FOB shipping point.  
 3 Paid \$210 cash for shipping charges on the April 2 purchase.  
 4 Returned to Lyon Company unacceptable merchandise that had an invoice price of \$500.  
 17 Sent a check to Lyon Company for the April 2 purchase, net of the discount and the returned merchandise.  
 18 Purchased \$8,500 of merchandise from Frist Corp. with credit terms of 1/10, n/30, invoice dated April 18, and FOB destination.  
 21 After negotiations, received from Frist a \$400 allowance toward the \$8,500 owed on the April 18 purchase.  
 28 Sent check to Frist paying for the April 18 purchase, net of the allowance and the discount.

View transaction list

**Journal entry worksheet**

1 2 3 4 5 6 7

Purchased \$5,000 of merchandise from Lyon Company with credit terms of 2/15, n/60, invoice dated April 2, and FOB shipping point.

Note: Enter debits before credits.

Date	General Journal	Debit	Credit
Apr 02	Merchandise inventory	5,000	
	Accounts payable—Frist		
	Accounts payable—Lyon		
	Accounts receivable—Frist		
	Accounts receivable—Lyon		

View general journal

## NEW! Concept Overview Videos

**Concept Overview Videos** teach each chapter's learning objectives through an engaging multimedia presentation. These learning tools enhance the text through video, audio, and checkpoint questions that can be graded—ensuring students complete and comprehend the material. Concept Overview Videos harness the power of technology to appeal to all learning styles and are ideal in all class formats. The Concept Overview Videos replace the previous edition's Interactive Presentations.

1

Required Information

Return on assets is computed as net income divided by average assets. For example, if you have an average balance of \$100 in a savings account and it earns \$5 interest for the year, the return on assets is \$5/\$100, or 5%.



Return on assets =  $\frac{\text{Net Income}}{\text{Average total assets}}$

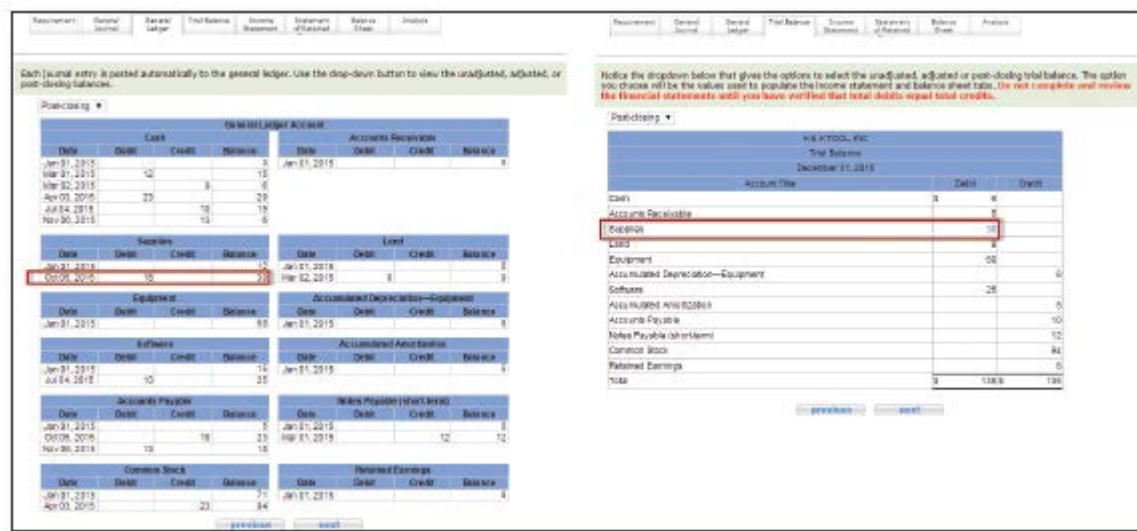
Knowledge Check 01

Return on assets measures a company's ability to generate an adequate return on its investment in

## General Ledger Problems

**General Ledger Problems** offer students the ability to record financial transactions and see how these transactions flow into financial statements. Easy minimal-scroll navigation, instant "Check My Work" feedback, and fully integrated hyperlinking across tabs show how inputted data affects each stage of the accounting process. General Ledger Problems expose students to general ledger software similar to that in practice, without the expense and hassle of downloading additional software. Algorithmic versions are available. **All are auto-gradable.**



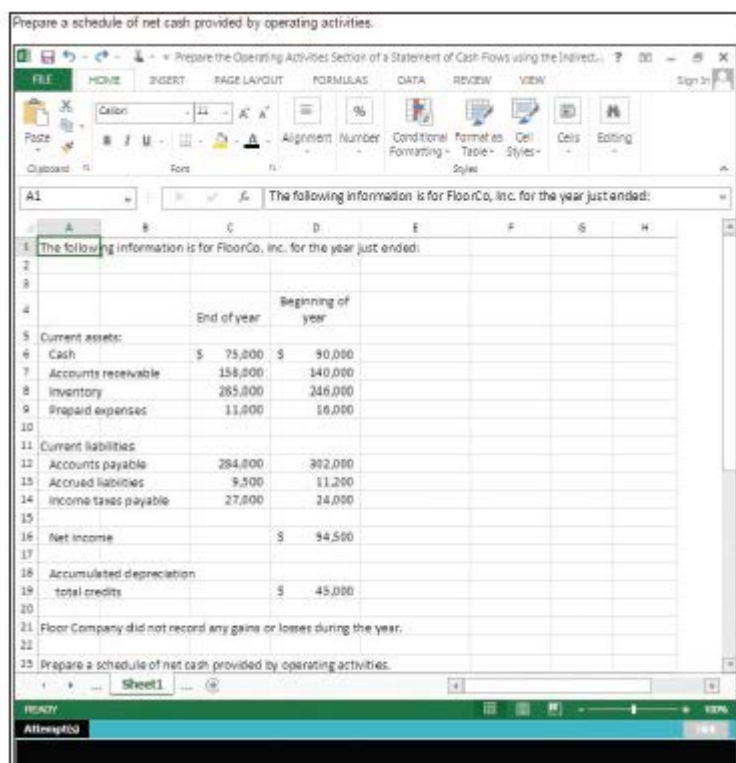


## Applying Excel

**Applying Excel** enables students to work select chapter problems or examples in Excel. These problems are assignable in Connect and give students instant feedback as they work through the problem in Excel. Accompanying Excel videos teach students how to use Excel and the primary functions needed to complete the assignment. Short assessments can be assigned to test student comprehension of key Excel skills.

## Excel Simulations

**Simulated Excel Questions**, assignable within Connect, allow students to practice their Excel skills—such as basic formulas and formatting—within the context of accounting. These questions feature animated, narrated Help and Show Me tutorials (when enabled), as well as automatic feedback and grading for both students and professors. These questions differ from Applying Excel in that students work in a simulated version of Excel. *Downloading the Excel application is not required to complete Simulated Excel Questions.*



## Guided Examples

The **Guided Examples (Hints)** in Connect provide a narrated, animated, step-by-step walk-through of most Quick Studies, Exercises, and General Ledger Problems similar to those assigned. These short presentations can be turned on or off by instructors and provide reinforcement when students need it most.

## Exercise Presentations

Animated PowerPoints, created from text assignments, enable instructors to be fully prepared for in-class demonstrations. Instructors also can use these with Tegrity (in Connect) to record online lectures.

# Content Revisions Enhance Learning

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## Instructors and students guided this edition's revisions. Revisions include

- New **Cheat Sheets** at each chapter-end visually reinforce key chapter concepts.
- More concise text covering the same content. New 24th edition has 115 fewer pages than 23rd edition.
- Over 210 new assignments—all available in Connect with algorithmic options.
- Gross method is used for merchandising transactions, reflecting practice—adjusting entries for new revenue recognition rules are set in an appendix.
- Many new **Need-to-Know (NTK)** demos and accompanying videos to reinforce learning.
- Revised the Investments chapter for the new standard.
- New assignments that focus on financial statement preparation.
- Many new and revised **General Ledger** and **Excel** assignments.
- New **Accounting Analysis** assignments—all available in Connect—using real-world data from **Apple**, **Google**, and **Samsung**.
- Updated videos for each learning objective in new **Concept Overview Video** format.

### Chapter 1

Updated opener—**Apple** and entrepreneurial assignment.

Updated salary info for accountants.

Revised business entity section along with adding LLC.

Updated section on FASB objectives and accounting constraints.

New layout for introducing the expanded accounting equation.

New layout for introducing financial statements.

Updated **Apple** numbers for NTK 1-5.

New Cheat Sheet reinforces chapter content.

Updated return on assets analysis using **Nike** and **Under Armour**.

Added a new Exercise assignment and Quick Study assignment.

Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

### Chapter 2

NEW opener—**Fitbit** and entrepreneurial assignment.

New visual for process to get from transactions to financial statements.

New layout on four types of accounts that determine equity.

Improved presentation of “Double-Entry System” section.

Updated **Apple** data for NTK 2-4.

Updated debt ratio analysis using **Costco** and **Walmart**.

New Cheat Sheet reinforces chapter content.

Added four new Quick Studies.

Added three new Exercises.

Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

### Chapter 3

NEW opener—**Urban One** and entrepreneurial assignment.

Revised learning objectives and chapter preview—each type of adjusting entry is assigned its own learning objective.

Updated “Recognizing Revenues and Expenses” section.

New streamlined “Framework for Adjustments” section.

Continued emphasis of 3-step adjusting process.

Enhanced Exhibit 3.12 on summary of adjustments.

Updated profit margin analysis using **Visa** and **Mastercard**.

Improved layouts for Exhibits 3A.1 through 3A.5.

New Cheat Sheet reinforces chapter content.

Added three new Quick Studies.

Added two new Exercises.

Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

#### Chapter 4

NEW opener—**Snapchat** and entrepreneurial assignment.

New Decision Insight on women in accounting.

Shortened discussion of closing entries.

Exhibit 4.5 color-coded all adjustments.

Enhanced Exhibit 4.7 on steps of accounting cycle with images.

Streamlined section on classified balance sheet.

Updated current ratio analysis using **Costco** and **Walmart**.

New Cheat Sheet reinforces chapter content.

Added two new Quick Studies.

Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

#### Chapter 5

NEW opener—**Build-A-Bear** and entrepreneurial assignment.

Updated introduction for servicers vs. merchandisers using **Liberty Tax** and **Nordstrom**.

Revised NTK 5-1 covers basics of merchandising.

Reorganized “Purchases” section to aid learning.

New Decision Insight on growing number of returns for businesses.

Enhanced entries on payment of purchases within discount period vs. after discount period.

Improved discussion of entries for sales with discounts vs. sales without discounts.

Color-coded Exhibit 5.12 highlights different merchandising transactions.

Updated acid-test ratio and gross margin analysis using **Nike** and **Under Armour**.

Appendix 5B explains adjusting entries for future sales discounts, returns, and allowances.

Appendix 5C covers the net method.

Appendix 5D moved to online only.

New Cheat Sheet reinforces chapter content.

Added three new Quick Studies.

Added four new Exercises.

Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

#### Chapter 6

NEW opener—**Shake Shack** and entrepreneurial assignment.

New Ethical Risk on the alleged fraud of **Homex**.

Simplified introduction to inventory costing.

Shortened explanation for specific identification.

Enhanced layout to explain effects of inventory errors across years.

Updated inventory turnover and days' sales in inventory analysis using **Costco** and **Walmart**.

Added colored arrow lines to Exhibits 6A.3 and 6A.4 to show cost flows from purchases to sales.

New Cheat Sheet reinforces chapter content.

Added one new Quick Study.

Added two new Exercises.

Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

#### Chapter 7

Updated opener—**Box** and entrepreneurial assignment.

Revised learning objectives and chapter preview—each type of journal is assigned its own learning objective.

New Decision Insight on financial impact of *Pokémon Go* for **Nintendo**.

Streamlined presentation of system principles and system components.

Enhanced “Basics of Special Journals” and “Subsidiary Ledgers” sections to improve learning.

New simplified designs for Exhibits 7.5, 7.7, 7.9, and 7.11 to improve student comprehension.

Removed discussion of sales tax and postponed it to the current liabilities chapter.

New section on Data Analytics and Data Visualization.

New days' payable outstanding analysis using **Costco** and **Walmart**.

New Cheat Sheet reinforces chapter content.

Added five new Quick Studies.

Added three new Exercises.

Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

## Chapter 8

NEW opener—**Care.com** and entrepreneurial assignment.

New COSO framework to guide internal control, including COSO cube.

New discussion of internal control failure at **Amazon** that cost customers \$150 million.

Simplified bank statement for learning.

Revised “Bank Reconciliation” section to separate bank balance adjustments and book balance adjustments.

New summary image on adjustments for bank balance and for book balance.

Removed collection expenses and NSF fees—most are immaterial and covered in advanced courses.

Updated days’ sales uncollected analysis using **Starbucks** and **Jack in the Box**.

New Cheat Sheet reinforces chapter content.

Added three new Quick Studies.

Added eight new Exercises.

Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

## Chapter 9

NEW opener—**Facebook** and entrepreneurial assignment.

Updated company data in Exhibit 9.1.

Streamlined direct write-off method.

Enhanced Exhibit 9.6 showing allowances set aside for future bad debts along with journal entries.

New calendar graphic added as learning aid with Exhibit 9.12.

New Excel demo to compute maturity dates.

Updated accounts receivable analysis using **Visa** and **Mastercard**.

New Cheat Sheet reinforces chapter content.

Added five new Quick Studies.

Added one new Exercise.

Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

## Chapter 10

NEW opener—**New Glarus Brewery** and entrepreneurial assignment.

Updated company data in Exhibit 10.1.

Added entry with Exhibit 10.3 and Exhibit 10.4.

Simplified “Partial-Year Depreciation” section.

Added margin table to Exhibit 10.14 as a learning aid.

New Decision Insight box on extraordinary repairs to **SpaceX**’s reusable orbital rocket.

New simple introduction to finance leases and operating leases for the new standard.

Updated asset turnover analysis using **Starbucks** and **Jack in the Box**.

Simplified Appendix 10A by postponing exchanges without commercial substance to advanced courses.

New Cheat Sheet reinforces chapter content.

Added two new Quick Studies.

Added one new Exercise.

Added two new Problems.

Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

## Chapter 11

NEW opener—**Pandora** and entrepreneurial assignment.

Updated data in Exhibit 11.2.

Streamlined “Short-Term Notes Payable” section.

Simplified explanation of FICA taxes.

Updated payroll tax rates and explanations.

Revised NTK 11-4.

New W-4 form added to Appendix 11A.

New Cheat Sheet reinforces chapter content.

Added two new Quick Studies.

Added four new Exercises.

Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

### Chapter 12

Updated opener—**Scholly** and entrepreneurial assignment.

Streamlined partnership characteristics and types of organizations.

Simplified graphic on business entity characteristics.

Enhanced partnership formation example to emphasize partner investments are recorded at market value.

Revised NTK 12-1.

Shortened “Partner Withdrawal” section.

New Cheat Sheet reinforces chapter content.

Added one new Quick Study.

Added four new Exercises.

Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

### Chapter 13

NEW opener—**Yelp** and entrepreneurial assignment.

New Decision Insight on bots investing in stocks based on erroneous news.

New **AT&T** stock quote explanation.

New graphic visually depicting cash dividend dates.

New table summarizing differences between small stock dividends, large stock dividends, and stock splits.

Updated **Apple** statement of equity in Exhibit 13.10.

Updated PE ratio and dividend yield using **Amazon, Altria, Visa, and Mastercard**.

Simplified book value per share explanation and computations.

New Cheat Sheet reinforces chapter content.

Added six new Quick Studies.

Added four new Exercises.

Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

### Chapter 14

NEW opener—**e.l.f. Cosmetics** and entrepreneurial assignment.

Updated **IBM** bond quote data.

Simplified numbers in Exhibit 14.7.

Simplified Exhibit 14.10 on premium bonds.

Simplified numbers in Exhibit 14.11.

Bond pricing moved to Appendix 14A.

Simplified Exhibit 14.12 for teaching the note amortization schedule.

Updated debt-to-equity analysis using **Nike** and **Under Armour**.

New Excel computations for bond pricing in Appendix 14A.

Simplified numbers in Exhibits 14B.1 and 14B.2.

Revised Appendix 14C for new standard on finance leases and operating leases.

New Cheat Sheet reinforces chapter content.

Added five new Quick Studies.

Added four new Exercises.

Added four new Problems.

Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

### Chapter 15

Updated opener—**Echoing Green** and entrepreneurial assignment.

New learning objective P4 for new category of stock investments.

Revised and simplified Exhibit 15.2 for new standard on investments.

Reorganized text to first explain debt securities and then stock securities.

Revised trading and available-for-sale securities to cover only debt securities given the new standard.

New section on stock investments with insignificant influence.

New Exhibit 15.6 to describe accounting for equity securities by ownership level.

Updated component-returns analysis using **Costco** and **Walmart**.

Investments in international operations set online as Appendix 15A.

New Cheat Sheet reinforces chapter content.



Added three new Quick Studies.

Added four new Exercises.

Added two new Problems.

Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

### Chapter 16

NEW opener—**Vera Bradley** and entrepreneurial assignment.

New box on **Tesla**'s cash outflows and growing market value.

Slightly revised infographics on cash flows from operating, investing, and financing.

Streamlined sections on analyzing the cash account and noncash accounts.

New presentation to aid learning of indirect adjustments to income.

Simplified T-accounts to reconstruct cash flows.

Simplified reconstruction entries to help compute cash flows.

Updated cash flow on total assets analysis using **Nike** and **Under Armour**.

New Cheat Sheet reinforces chapter content.

Added ten new Quick Studies.

Added four new Exercises.

Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

### Chapter 17

Updated opener—**Morgan Stanley** and entrepreneurial assignment.

Updated data for all analyses of **Apple** using horizontal, vertical, and ratio analysis.

Updated comparative analysis using **Google** and **Samsung**.

Streamlined section on ratio analysis.

Streamlined the "Analysis Reporting" section.

Shortened Appendix 17A.

New Cheat Sheet reinforces chapter content.

Added eight new Quick Studies.

Added two new Exercises.

Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

### Chapter 18

NEW opener—**MoringaConnect** and entrepreneurial assignment.

Added discussion on role of managerial accounting for nonaccounting and nonbusiness majors.

Added equation boxes for total manufacturing costs and cost of goods manufactured.

New margin exhibit showing product and period cost flows.

Added lists of common selling and administrative expenses.

Updated and edited several exhibits for clarity.

New Cheat Sheet reinforces chapter content.

Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

### Chapter 19

NEW opener—**HoopSwagg** and entrepreneurial assignment.

Revised discussions of manufacturing costs and link between job cost sheets and general ledger.

Added graphic linking job cost sheets and general ledger accounts.

Enhanced exhibit of 4-step overhead process.

Added formula for computing applied overhead.

New short discussion of cost-plus pricing.

Added margin T-accounts and calculations for clarity.

New Cheat Sheet reinforces chapter content.

Added one new Quick Study.

Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

### Chapter 20

NEW opener—**Azucar Ice Cream** and entrepreneurial assignment.

Revised discussion comparing process and job order costing systems.

Added cost flow graphic.

New margin graphic illustrating EUP.

Revised discussion of weighted-average versus FIFO method of process costing.  
Revised discussion of using the process cost summary.  
New graphic on FIFO goods flow.  
Added margin T-accounts and calculations for clarity.  
New Cheat Sheet reinforces chapter content.  
Added one new Exercise.  
Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

### **Chapter 21**

NEW opener—**Ellis Island Tropical Tea** and entrepreneurial assignment.  
Added margin graphs of fixed, variable, and mixed costs.  
New Excel steps to create a line chart.  
Moved details of creating scatter plot to Appendix 21A, with Excel steps.  
Revised discussion of scatter plots.  
Moved details of creating a CVP chart to Appendix 21C, with Excel steps.  
New Cheat Sheet reinforces chapter content.  
Added one new Exercise.  
Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

### **Chapter 22**

NEW opener—**Misfit Juicery** and entrepreneurial assignment.  
Added T-accounts and steps to exhibit margins.  
Added numbered steps to several exhibits.  
Expanded discussion of cost of goods sold budgeting.  
New exhibit for calculation of cash paid for interest.  
Expanded discussion with bulleted list on use of a master budget.  
New Cheat Sheet reinforces chapter content.  
Added one new Quick Study.  
Added one new Exercise.  
New assignment on CMA exam budgeting coverage.  
Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

### **Chapter 23**

NEW opener—**Away** and entrepreneurial assignment.  
Added graph to flexible budget exhibit.  
Revised discussion of flexible budget.  
New exhibit and discussion of computing total cost variance.  
Edited discussion of direct materials cost variance.  
Edited discussion of evaluating labor variances.  
Edited discussion of overhead variance reports.  
New exhibit for summary of variances.  
New Cheat Sheet reinforces chapter content.  
Added two new Exercises.  
Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

### **Chapter 24**

NEW opener—**Jibu** and entrepreneurial assignment.  
Updated **Walt Disney** ROI example.  
New Decision Analysis on cash conversion cycle.  
New Cheat Sheet reinforces chapter content.  
Added two new Quick Studies.  
Added two new Exercises.  
Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

### **Chapter 25**

NEW opener—**Solugen** and entrepreneurial assignment.  
Organized decision scenarios into three types: production, capacity, and pricing.  
Expanded discussion of product pricing.

Added other pricing methods: value-based, auction-based, and dynamic.

New Decision Analysis on time and materials pricing of services.

New Decision Insight on blockchain technology.

New Cheat Sheet reinforces chapter content.

Added four new Quick Studies.

Added one new Exercise.

Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

### **Chapter 26**

NEW opener—**Fellow Robots** and entrepreneurial assignment.

New discussion of postaudit of investment decisions.

Added example of investment in robotics.

New Cheat Sheet reinforces chapter content.

Added two new Exercises.

Added new analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

### **Appendix A**

New financial statements for **Apple**, **Google**, and **Samsung**.

### **Appendix B**

New Decision Maker on postponed retail pricing.

Continued Excel demos for PV and FV of lump sums.

Continued Excel demos for PV and FV of annuities.

### **Appendix C**

New Cheat Sheet reinforces appendix content.

### **Appendix D**

NEW appendix on lean principles and accounting.

Describes lean business principles.

Measures production efficiency.

Illustrates how to account for product costs using lean accounting.

New: 13 Discussion Questions, 14 Quick Studies, 14 Exercises, and 3 Problems.



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---

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# 1 Accounting in Business

*Chapter Preview is organized by “blocks” of key content and learning objectives followed by **Need-To-Know (NTK)** guided video examples*

## Chapter Preview

### ACCOUNTING USES

---

- C1** Purpose of accounting
  - C2** Accounting information users
    - Opportunities in accounting
- NTK 1-1**

### ETHICS AND ACCOUNTING

---

- C3** Ethics
  - C4** Generally accepted accounting principles
    - Conceptual framework
- NTK 1-2**

### TRANSACTION ANALYSIS

---

- A1** Accounting equation and its components
    - Expanded accounting equation
  - P1** Transaction analysis—Illustrated
- NTK 1-3 , 1-4**

### FINANCIAL STATEMENTS

---

- P2** Income statement
    - Statement of owner’s equity
    - Balance sheet
    - Statement of cash flows
  - A2** Financial analysis
- NTK 1-5**

*Learning Objectives are classified as conceptual, analytical, or procedural*

## Learning Objectives

### CONCEPTUAL

- C1** Explain the purpose and importance of accounting.

- C2** Identify users and uses of, and opportunities in, accounting.
- C3** Explain why ethics are crucial to accounting.
- C4** Explain generally accepted accounting principles and define and apply several accounting principles.
- C5** [Appendix 1B](#)—Identify and describe the three major activities of organizations.

## ANALYTICAL

- A1** Define and interpret the accounting equation and each of its components.
- A2** Compute and interpret return on assets.
- A3** [Appendix 1A](#)—Explain the relation between return and risk.

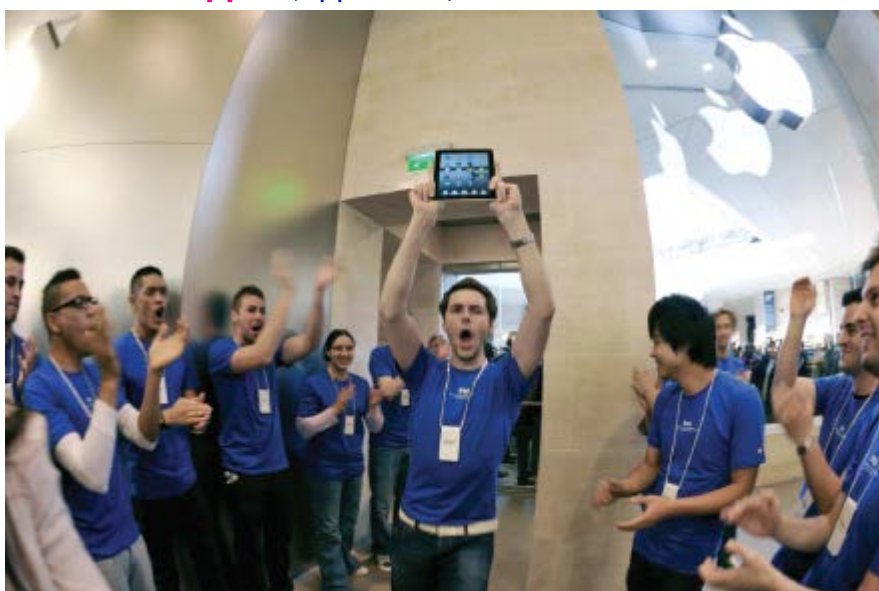
## PROCEDURAL

- P1** Analyze business transactions using the accounting equation.
- P2** Identify and prepare basic financial statements and explain how they interrelate.

## Big Apple

*“We ran the business . . . with just a few hundred bucks”* —**STEVE WOZNIAK**

CUPERTINO, CA—“When I designed the Apple stuff,” says Steve Wozniak, “I never thought in my life I would have enough money to fly to Hawaii or make a down payment on a house.” But some dreams do come true. Woz, along with Steve Jobs and Ron Wayne, founded **Apple** ([Apple.com](#)) when Woz was 25 and Jobs was 21.



©Miguel Medina/AFP/Getty Images

The young entrepreneurs faced challenges, including how to read and interpret accounting data. They also needed to finance the company, which they did by selling Woz’s HP calculator and Jobs’s Volkswagen van. The \$1,300 raised helped them purchase the equipment Woz used to build the first Apple computer.

In setting up their company, the owners chose between a partnership and a corporation. They decided on a partnership that included Ron as a third partner with 10% ownership. Days later, Ron withdrew when he considered the unlimited liability of a partnership. He sold his 10% share to Woz and Jobs for \$800. Within nine months, Woz and Jobs converted Apple to a corporation.

As Apple grew, Woz and Jobs had to learn more accounting, along with details of preparing and interpreting financial statements. Important questions involving transaction analysis and financial reporting arose, and the owners took care to do things right. “Everything we did,” asserts Woz, “we were setting the tone for the world.”

Woz and Jobs focused their accounting system to provide information for Apple’s business decisions. Today, Woz believes that Apple is key to the language of technology, just as accounting is the language of business. In retrospect, Woz says, “Every dream I have ever had in life has come true ten times over.”

Sources: *Apple website*, January 2019; *Woz.org*, January 2019; *Apple 2016 Sustainability Report*, April 2016; *Greenbiz*, October 2014; *iWoz: From Computer Geek to Cult Icon*, W.W. Norton & Co., 2006; *Founders at Work*, Apress, 2007

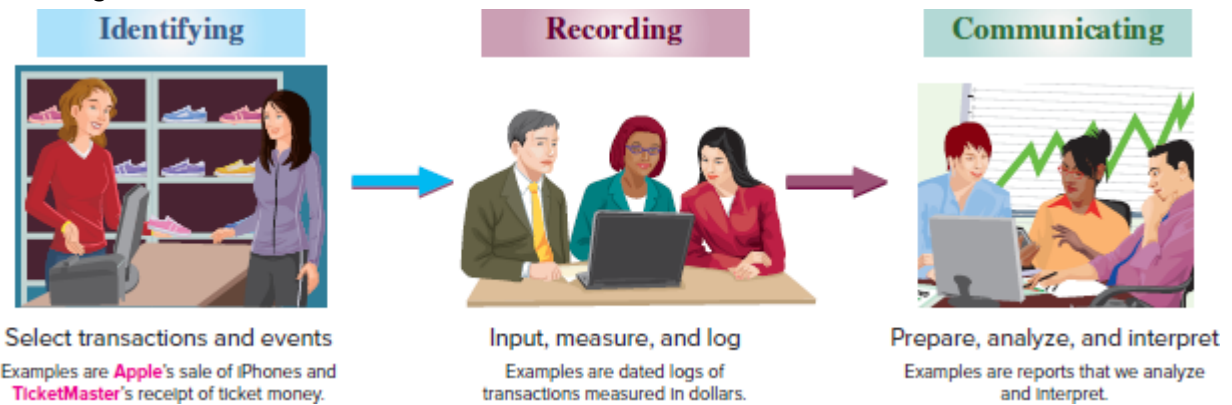
**Decision Feature** launches each chapter showing the relevance of accounting for a real entrepreneur; **Entrepreneurial Decision assignment** returns to this feature with a mini-case

## C1

Explain the purpose and importance of accounting.

Why is accounting so popular on campus? Why are there so many openings for accounting jobs? Why is accounting so important to companies? The answer is that we live in an information age in which accounting information impacts us all.

**Accounting** is an information and measurement system that identifies, records, and communicates an organization's business activities. [Exhibit 1.1](#) shows these accounting functions.



**EXHIBIT 1.1** Accounting Functions

Our most common contact with accounting is through credit checks, checking accounts, tax forms, and payroll. These experiences focus on **recordkeeping**, or **bookkeeping**, which is the recording of transactions and events. This is just one part of accounting. Accounting also includes analysis and interpretation of information.

**Point:** Technology is only as useful as the accounting data available, and users' decisions are only as good as their understanding of accounting.

Page 4

Technology plays a major role in accounting. Technology reduces the time, effort, and cost of recordkeeping while improving accuracy. As technology makes more information available, the demand for accounting knowledge increases. Consulting, planning, and other financial services are closely linked to accounting.

## Users of Accounting Information

### C2

Identify users and uses of, and opportunities in, accounting.

Accounting is called the *language of business* because it communicates data that help people make better decisions. People using accounting information are divided into two groups: *external users* and *internal users*. **Financial accounting** focuses on the needs of external users, and **managerial accounting** focuses on the needs of internal users.

**External Users** External users of accounting information do *not* directly run the organization and have limited access to its accounting information. These users get accounting information from general-purpose financial statements. Following is a partial list of external users and decisions they make with accounting information.



- **Lenders** (creditors) loan money or other resources to an organization. Banks, savings and loans, and mortgage companies are lenders. Lenders use information to assess if an organization will repay its loans.
- **Shareholders** (*investors*) are the owners of a corporation. They use accounting reports to decide whether to buy, hold, or sell stock.
- **Boards of directors** oversee organizations. Directors use accounting information to evaluate the performance of executive management.
- **External** (independent) *auditors* examine financial statements to verify that they are prepared according to generally accepted accounting principles.
- **Nonmanagerial** and **nonexecutive employees** and **labor unions** use external information to bargain for better wages.
- **Regulators** have legal authority over certain activities of organizations. For example, the Internal Revenue Service (IRS) requires accounting reports for computing taxes.
- **Voters** and **government officials** use information to evaluate government performance.
- **Contributors** to nonprofits use information to evaluate the use and impact of donations.
- **Suppliers** use information to analyze a customer before extending credit.
- **Customers** use financial reports to assess the stability of potential suppliers.

**Internal Users** Internal users of accounting information directly manage the organization. Internal reports are designed for the unique needs of managerial or executive employees, such as the chief executive officer (CEO). Following is a partial list of internal users and decisions they make with accounting information.



- *Purchasing managers* need to know what, when, and how much to purchase.
- *Human resource managers* need information about employees' payroll, benefits, and performance.
- *Production managers* use information to monitor costs and ensure quality.
- *Distribution managers* need reports for timely and accurate delivery of products and services.
- *Marketing managers* use reports to target consumers, set prices, and monitor consumer needs.
- *Service managers* use reports to provide better service to customers.
- *Research and development managers* use information on projected costs and revenues of innovations.

## Opportunities in Accounting

Accounting has four areas of opportunities: financial, managerial, taxation, and accounting-related. [Exhibit 1.2](#) lists selected opportunities in each area.

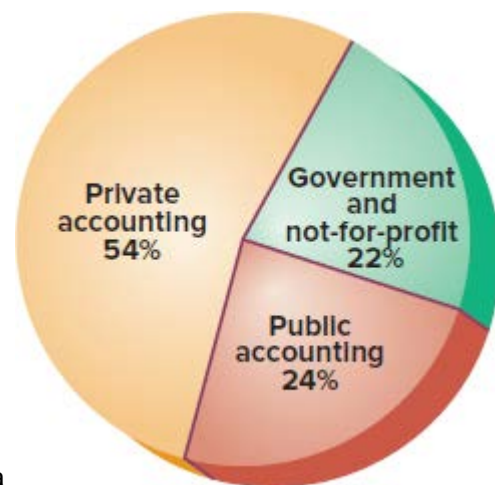


**EXHIBIT 1.2** Accounting Opportunities

**Point:** The largest accounting firms are **EY, KPMG, PwC, and Deloitte.**

**Point:** Higher education yields higher pay:

Master's degree	\$73,738
Bachelor's degree	56,665
Associate's degree	39,771
High school degree	30,627
No high school degree	20,241



**EXHIBIT 1.3** Accounting Jobs by Area

[Exhibit 1.3](#) shows that the majority of opportunities are in *private accounting*, which are employees working for businesses. *Public accounting* involves accounting services such as auditing and taxation. Opportunities also exist in government and not-for-profit agencies, including business regulation and law enforcement.

Accounting specialists are highly regarded, and their professional standing is often denoted by a certificate. Certified public accountants (CPAs) must meet education and experience requirements, pass an exam, and be ethical. Many accounting specialists hold certificates in addition to or instead of the CPA. Two of the most common are the certificate in management accounting (CMA) and the certified internal auditor (CIA). Employers also look for specialists with designations such as certified bookkeeper (CB), certified payroll professional (CPP), certified fraud examiner (CFE), and certified forensic accountant (CrFA).

Accounting specialists are in demand. [Exhibit 1.4](#) reports average annual salaries for several accounting positions. Salaries vary based on location, company size, and other factors.

**EXHIBIT 1.4** Accounting Salaries



Public Accounting	Salary
Partner.....	\$245,000
Manager (6–8 years) .....	112,000
Senior (3–5 years) .....	90,000
Junior (0–2 years) .....	62,500

Private Accounting	Salary
CFO .....	\$290,000
Controller/Treasurer .....	180,000
Manager (6–8 years) .....	98,500
Senior (3–5 years) .....	81,500
Junior (0–2 years).....	58,000

Recordkeeping	Salary
Full-charge bookkeeper.....	\$60,500
Accounts manager .....	58,000
Payroll manager .....	59,500
Accounting clerk (0–2 years)....	39,500

**NEED-TO-KNOWs** highlight key procedures and concepts in learning accounting

## NEED-TO-KNOW 1-1

Accounting Users **C1 C2**



Identify the following users of accounting information as either an (a) external or (b) internal user.

1. \_\_\_\_ Regulator
2. \_\_\_\_ CEO
3. \_\_\_\_ Shareholder
4. \_\_\_\_ Marketing manager
5. \_\_\_\_ Executive employee
6. \_\_\_\_ External auditor
7. \_\_\_\_ Production manager
8. \_\_\_\_ Nonexecutive employee
9. \_\_\_\_ Bank lender

### Solution

1. a   2. b   3. a   4. b   5. b   6. a   7. b   8. a   9. a.

Do More: QS 1-1, QS 1-2, E 1-1, E 1-2, E 1-3

# FUNDAMENTALS OF ACCOUNTING

## Ethics—A Key Concept

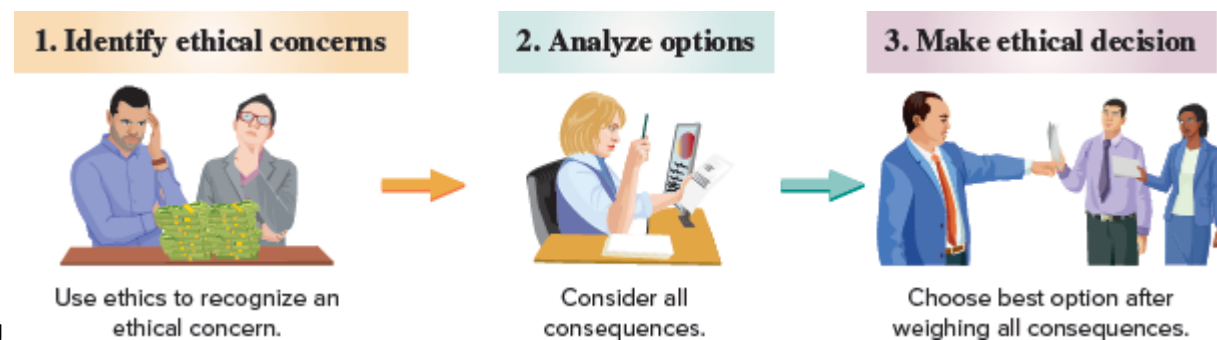
### C3 \_\_\_\_\_

Explain why ethics are crucial to accounting.

For information to be useful, it must be trusted. This demands ethics in accounting. **Ethics** are beliefs that separate right from wrong. They are accepted standards of good and bad behavior.

**Point:** A *Code of Conduct* is available at [AICPA.org](http://AICPA.org).

Accountants face ethical choices as they prepare financial reports. These choices can affect the salaries and bonuses paid to workers. They even can affect the success of products and services. Misleading information can lead to a bad decision that harms workers and the business. There is an old saying: *Good ethics are good business*. [Exhibit 1.5](#) gives a three-step process for making ethical decisions.



**EXHIBIT 1.5** Ethical Decision Making

**Fraud Triangle: Ethics under Attack** The fraud triangle shows that *three* factors push a person to commit fraud.





- **Opportunity**. A person must be able to commit fraud with a low risk of getting caught.
- **Pressure**, or incentive. A person must feel pressure or have incentive to commit fraud.
- **Rationalization**, or attitude. A person justifies fraud or does not see its criminal nature.

The key to stopping fraud is to focus on prevention. It is less expensive and more effective to prevent fraud from happening than it is to detect it.

To prevent fraud, companies set up internal controls. **Internal controls** are procedures to protect assets, ensure reliable accounting, promote efficiency, and uphold company policies. Examples are good records, physical controls (locks), and independent reviews.

**Enforcing Ethics** In response to major accounting scandals, like those at **Enron** and **WorldCom**, Congress passed the **Sarbanes-Oxley Act**, also called **SOX**, to help stop financial abuses. SOX requires documentation and verification of internal controls and emphasizes effective internal controls. Management must issue a report stating that internal controls are effective. **Auditors** verify the effectiveness of internal controls. Ignoring SOX can lead to penalties and criminal prosecution of executives. CEOs and CFOs who knowingly sign off on bogus accounting reports risk millions of dollars in fines and years in prison.

**Point:** An **audit** examines whether financial statements are prepared using GAAP.

**Point:** **SOX** requires a business that sells stock to disclose a code of ethics for its executives.

**Dodd-Frank Wall Street Reform and Consumer Protection Act**, or *Dodd-Frank*, has two important provisions.

- *Clawback* Mandates recovery (clawback) of excessive pay.
- *Whistleblower* SEC pays whistleblowers 10% to 30% of sanctions exceeding \$1 million.

**Ethical Risk** *boxes highlight ethical issues from practice*

**Ethics Pay** The \$100 million mark in total payments made by the SEC to whistleblowers was recently surpassed. Since the SEC began awarding whistleblowers a percentage of money from sanctions, over 14,000 tips have been reported. Many of the tips come from accountants. ■



## Generally Accepted Accounting Principles

### C4

Explain generally accepted accounting principles and define and apply several accounting principles.

Financial accounting is governed by concepts and rules known as **generally accepted accounting principles (GAAP)**. GAAP wants information to have *relevance* and *faithful representation*. Relevant information affects decisions of users. Faithful representation means information accurately reflects the business results.

**Point:** CPAs who audit financial statements must disclose if they do not comply with GAAP.

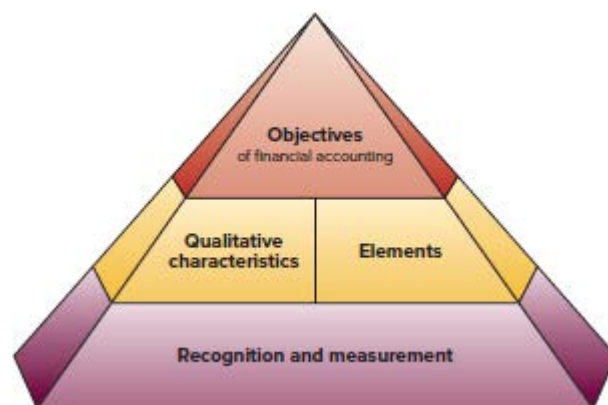
The **Financial Accounting Standards Board (FASB)** is given the task of setting GAAP from the **Securities and Exchange Commission (SEC)**. The SEC is a U.S. government agency that oversees proper use of GAAP by companies that sell stock and debt to the public.

**International Standards** Our global economy demands comparability in accounting reports. The **International Accounting Standards Board (IASB)** issues **International Financial Reporting Standards (IFRS)** that identify preferred accounting practices. These standards are similar to, but sometimes different from, U.S. GAAP. The FASB and IASB are working to reduce differences between U.S. GAAP and IFRS.

## Conceptual Framework

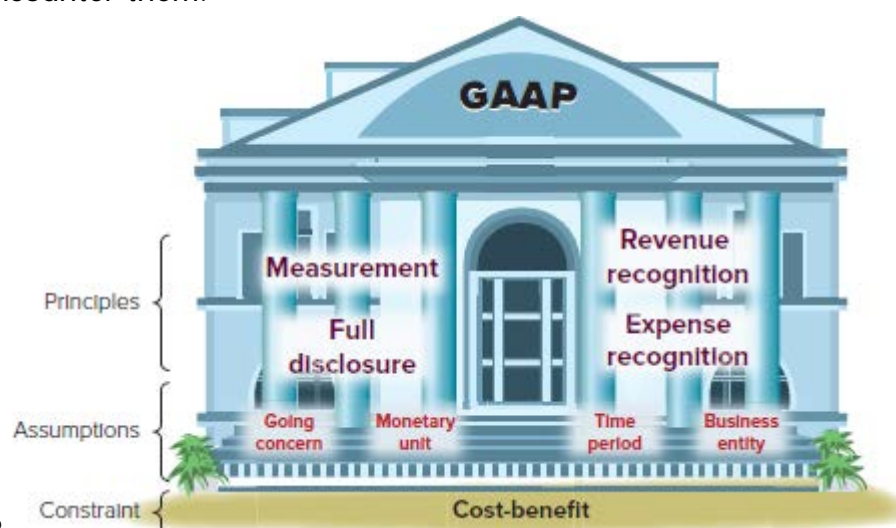
The FASB **conceptual framework** in [Exhibit 1.6](#) consists of the following.

- **Objectives**—to provide information useful to investors, creditors, and others.
- **Qualitative characteristics**—to require information that has *relevance* and *faithful representation*.
- **Elements**—to define items in financial statements.
- **Recognition and measurement**—to set criteria for an item to be recognized as an element; and how to measure it.



**EXHIBIT 1.6** Conceptual Framework

**Principles, Assumptions, and Constraint** There are two types of accounting principles (and assumptions). *General principles* are the assumptions, concepts, and guidelines for preparing financial statements; these are shown in purple font in [Exhibit 1.7](#), along with key assumptions in red font. *Specific principles* are detailed rules used in reporting business transactions and events; they are described as we encounter them.



**EXHIBIT 1.7** Building Blocks for GAAP

**Accounting Principles** There are four general principles.

- **Measurement principle (cost principle)** Accounting information is based on actual cost. Cost is measured on a cash or equal-to-cash basis. This means if cash is given for a service, its cost is measured by the cash paid. If something besides cash is exchanged (such as a car traded for a truck), cost is measured as the cash value of what is given up or received. Information based on cost is considered objective. *Objectivity* means that information is supported by independent, unbiased evidence. Later chapters cover adjustments to market and introduce *fair value*.

**Point:** A company pays \$500 for equipment. The cost principle requires it be recorded at \$500. It makes no difference if the owner thinks this equipment is worth \$700.

- **Revenue recognition principle** Revenue is recognized (1) when goods or services are provided to customers and (2) at the amount expected to be received from the customer. Revenue (sales) is the amount received from selling products and services. The amount received is usually in cash, but it also can be a customer's promise to pay at a future date, called credit sales. (To *recognize* means to record it.)

Page 8

**Example:** A lawn service bills a customer \$800 on June 1 for two months of mowing (June and July). The customer pays the bill on July 1. When is revenue recorded? **Answer:** It is recorded over time as it is earned; record \$400 revenue for June and \$400 for July.

- **Expense recognition principle (matching principle)** A company records the expenses it incurred to generate the revenue reported. An example is rent costs of office space.

**Example:** Credit cards are used to pay \$200 in gas for a lawn service during June and July. The cards are paid in August. When is expense recorded? **Answer:** If revenue is earned over time, record \$100 expense in June and \$100 in July.

- **Full disclosure principle** A company reports the details behind financial statements that would impact users' decisions. Those disclosures are often in footnotes to the statements.

### Decision Insight



**Measurement and Recognition** Revenues for the **Seattle Seahawks**, **Atlanta Falcons**, **Green Bay Packers**, and other professional football teams include ticket sales, television broadcasts, concessions, and advertising. Revenues from ticket sales are earned when the NFL team plays each game. Advance ticket sales are not revenues; instead, they are a liability until the NFL team plays the game for which the ticket was sold. At that point, the liability is removed and revenues are reported. ■







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## Accounting Assumptions

There are four accounting assumptions.

- **Going-concern assumption** Accounting information presumes that the business will continue operating instead of being closed or sold. This means, for example, that property is reported at cost instead of liquidation value.
- **Monetary unit assumption** Transactions and events are expressed in monetary, or money, units. Examples of monetary units are the U.S. dollar and the Mexican peso.
- **Time period assumption** The life of a company can be divided into time periods, such as months and years, and useful reports can be prepared for those periods.
- **Business entity assumption** A business is accounted for separately from other business entities and its owner. [Exhibit 1.8](#) describes four common business entities.

**EXHIBIT 1.8** Attributes of Businesses

	Sole Proprietorship 	Partnership 	Corporation 	Limited Liability Company (LLC) 
<b>Number of owners</b>	1 owner; easy to set up.	2 or more, called <i>partners</i> ; easy to set up.	1 or more, called <i>stockholders</i> ; can get many investors by selling <b>stock</b> or <b>shares</b> of corporate ownership.*	1 or more, called <i>members</i> .
<b>Business taxation</b>	No additional business income tax.	No additional business income tax.	Additional corporate income tax.	No additional business income tax.
<b>Owner liability</b>	Unlimited liability. Owner is personally liable for proprietorship debts.	Unlimited liability. Partners are jointly liable for partnership debts.	Limited liability. Owners, called <b>stockholders</b> (or <b>shareholders</b> ), are not liable for corporate acts and debts.	Limited liability. Owners, called <b>members</b> , are not personally liable for LLC debts.
<b>Legal entity</b>	<i>Not</i> a separate legal entity.	<i>Not</i> a separate legal entity.	A separate entity with the same rights and responsibilities as a person.	A separate entity with the same rights and responsibilities as a person.
<b>Business life</b>	Business ends with owner death or choice.	Business ends with a partner death or choice.	Indefinite.	Indefinite.

\*When a corporation issues only one class of stock, it is called **common stock** (or *capital stock*).

**Accounting Constraint** The **cost-benefit constraint**, or **cost constraint**, says that information disclosed by an entity must have benefits to the user that are greater than the costs of providing it. *Materiality*, or the ability of information to influence decisions, is also sometimes mentioned as a constraint. *Conservatism* and *industry practices* are sometimes listed as well. Page 9

**Point: Proprietorships, partnerships, and LLCs are managed by their owners. In a corporation, the owners (shareholders) elect a board of directors who hire managers to run the business.**

**Decision Ethics boxes are role-playing exercises that stress ethics in accounting**



**Entrepreneur** You and a friend develop a new design for ice skates that improves speed. You plan to form a business to manufacture and sell the skates. You and your friend want to minimize taxes, but your big concern is potential lawsuits from customers who might be injured on these skates. What form of organization do you set up? ■ **Answer:** You should probably form an LLC. An LLC helps protect *personal* property from lawsuits directed at the business. Also, an LLC is not subject to an additional business income tax. You also must examine the ethical and social aspects of starting a business where injuries are expected.

**Point: Double taxation** means that (1) the corporation income is taxed and (2) any dividends to owners are taxed as part of the owners' personal income.

## NEED-TO-KNOW 1-2

Accounting Guidance **C3 C4**



**Part 1:** Identify each of the following terms/phrases as either an accounting (a) principle, (b) assumption, or (c) constraint.

1. \_\_\_\_\_ Cost-benefit
2. \_\_\_\_\_ Measurement
3. \_\_\_\_\_ Business entity
4. \_\_\_\_\_ Going-concern
5. \_\_\_\_\_ Full disclosure
6. \_\_\_\_\_ Time period
7. \_\_\_\_\_ Expense recognition
8. \_\_\_\_\_ Revenue recognition

**Solution**

1. c 2. a 3. b 4. b 5. a 6. b 7. a 8. a

**Part 2:** Complete the following table with either a *yes* or a *no* regarding the attributes of a partnership, corporation, and LLC.

Attribute Present	Partnership	Corporation	LLC
Business taxed.....	a. _____	e. _____	i. _____
Limited liability.....	b. _____	f. _____	j. _____
Legal entity.....	c. _____	g. _____	k. _____
Unlimited life.....	d. _____	h. _____	l. _____

**Solution**

a. no b. no c. no d. no e. yes f. yes g. yes h. yes i. no j. yes k. yes l. yes

Do More: QS 1-3, QS 1-4, QS 1-5, QS 1-6, E 1-4, E 1-5, E 1-6, E 1-7

## BUSINESS TRANSACTIONS AND ACCOUNTING

### A1 \_\_\_\_\_

Define and interpret the accounting equation and each of its components.

Accounting shows two basic aspects of a company: what it owns and what it owes. *Assets* are resources a company owns or controls. The claims on a company's assets—what it owes—are separated into owner (equity) and nonowner (liability) claims. Together, liabilities and equity are the source of funds to acquire assets.

**Assets** *Assets* are resources a company owns or controls. These resources are expected to yield future benefits. Examples are web servers for an online services company, musical instruments for a rock band, and land for a vegetable grower. Assets include cash, supplies, equipment, land, and accounts receivable. A *receivable* is an asset that promises a future inflow of resources. A company that provides a service or product on credit has an account receivable from that customer.

**Point:** "On credit" and "on account" mean cash is paid at a future date.

**Liabilities** *Liabilities* are creditors' claims on assets. These claims are obligations to provide assets, products, or services to others. A *payable* is a liability that promises a future outflow of resources. Examples are wages payable to workers, accounts payable to suppliers, notes (loans) payable to banks, and taxes payable.

**Equity** *Equity* is the owner's claim on assets and is equal to assets minus liabilities. Equity is also called *net assets* or *residual equity*.

## Accounting Equation

The relation of assets, liabilities, and equity is shown in the following **accounting equation**. **The accounting equation applies to all transactions and events, to all companies and organizations, and to all points in time.**

$$\text{Assets} = \text{Liabilities} + \text{Equity}$$

We can break down equity to get the **expanded accounting equation**.

Equity
Assets = Liabilities + <span style="color: green;">Owner, Capital</span> – <span style="color: red;">Owner, Withdrawals</span> + <span style="color: green;">Revenues</span> – <span style="color: red;">Expenses</span>

**Point:** This equation can be rearranged. Example: Assets – Liabilities = Equity

We see that equity increases from owner investments and from revenues. It decreases from withdrawals and from expenses.



Equity consists of four parts.

**+ Owner, Capital**

**Owner investments** are inflows of cash and other net assets from owner contributions, which increase equity.

**- Owner, Withdrawals**

**Owner withdrawals** are outflows of cash and other assets to owners for personal use, which reduce equity.

**+ Revenues**

**Revenues** increase equity (via net income) from sales of products and services to customers; examples are sales of products, consulting services provided, facilities rented to others, and commissions from services.

**- Expenses**

**Expenses** decrease equity (via net income) from costs of providing products and services to customers; examples are costs of employee time, use of supplies, advertising, utilities, and insurance fees.

**Decision Insight**



**Big Data** The SEC keeps an online database called **EDGAR** ([sec.gov/edgar](http://sec.gov/edgar)) that has accounting information for thousands of companies, such as **Columbia Sportswear**, that issue stock to the public. The annual report filing for most publicly traded U.S. companies is known as Form 10-K, and the quarterly filing is Form 10-Q. Information services such as [Finance.Yahoo.com](http://Finance.Yahoo.com) offers online data and analysis. ■



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**NEED-TO-KNOW 1-3**

**Accounting Equation A1**



**Part 1:** Use the *accounting equation* to compute the missing financial statement amounts.

Company	Assets	Liabilities	Equity
Bose	\$150	\$ 30	\$ (a)
Vogue	\$ (b)	\$100	\$300

**Solution**

a. \$120   b. \$400

**Part 2:** Use the *expanded accounting equation* to compute the missing financial statement amounts.

Company	Assets	Liabilities	Owner, Capital	Owner, Withdrawals	Revenues	Expenses
Tesla	\$200	\$ 80	\$100	\$5	\$ (a)	\$40
YouTube	\$400	\$160	\$220	\$ (b)	\$ 120	\$90

**Solution**

a. \$65   b. \$10

Do More: QS 1-7, QS 1-8, E 1-8, E 1-9

**Transaction Analysis**

**P1** \_\_\_\_\_

Analyze business transactions using the accounting equation.

Business activities are described in terms of transactions and events. **External transactions** are exchanges of value between two entities, which cause changes in the accounting equation. An example is the sale of the *AppleCare Protection Plan* by **Apple**. **Internal transactions** are exchanges within an entity, which may or may not affect the accounting equation. An example is **Target**'s use of its supplies, which are reported as expenses when used. **Events** are happenings that affect the accounting equation *and* are reliably measured. They include business events such as changes in the market value of certain assets and liabilities and natural events such as fires that destroy assets and create losses.

This section uses the accounting equation to analyze 11 transactions and events of FastForward, a start-up consulting (service)

business, in its first month of operations. Remember that after each transaction and event, assets *always* equal liabilities plus equity.

*Real company names are in bold magenta*

**Transaction 1: Investment by Owner** On December 1, Chas Taylor forms a consulting business named FastForward and set up as a proprietorship. FastForward evaluates the performance of footwear and accessories. Taylor owns and manages the business, which will publish online reviews and consult with clubs, athletes, and others who purchase **Nike** and **Adidas** products.

**FAST** Forward

Taylor invests \$30,000 cash in the new company and deposits the cash in a bank account opened under the name of FastForward. After this transaction, cash (an asset) and owner's equity each equals \$30,000. Equity is increased by the owner's investment, which is included in the column titled C. Taylor, Capital. The effect of this transaction on FastForward is shown in the accounting equation as follows (we label the equity entries).

	Assets		=	Liabilities	+	Equity
(1)	Cash		=			C. Taylor, Capital
	<b>+\$30,000</b>		=			<b>+\$30,000</b> Owner Investment



**Transaction 2: Purchase Supplies for Cash** FastForward uses \$2,500 of its cash to buy supplies of Nike and Adidas footwear for performance testing over the next few months. This transaction is an exchange of cash, an asset, for another kind of asset, supplies. It simply changes the form of assets from cash to supplies. The decrease in cash is exactly equal to the increase in supplies. The supplies of footwear are assets because of the expected future benefits from the test results of their performance.

	Assets			=	Liabilities	+	Equity
	Cash	+	Supplies	=			C. Taylor, Capital
Old Bal.	\$30,000			=			\$30,000
(2)	<b>-2,500</b>	+	<b>\$2,500</b>	=			
New Bal.	\$27,500	+	\$2,500	=			\$30,000
	\$30,000						\$30,000

**Transaction 3: Purchase Equipment for Cash** FastForward spends \$26,000 to acquire equipment for testing footwear. Like Transaction 2, Transaction 3 is an exchange of one asset, cash, for another asset, equipment. The equipment is an asset because of its expected future benefits from testing footwear. This purchase changes the makeup of assets but does not change the asset total. The accounting equation remains in balance.

	Assets				=	Liabilities	+	Equity
	Cash	+	Supplies	+	Equipment	=		C. Taylor, Capital
Old Bal.	\$27,500	+	\$2,500			=		\$30,000
(3)	<b>-26,000</b>			+	<b>\$26,000</b>	=		
New Bal.	\$1,500	+	\$2,500	+	\$26,000	=		\$30,000
	\$30,000							\$30,000

Page 12

**Transaction 4: Purchase Supplies on Credit** Taylor decides more supplies of footwear and accessories are needed. These additional supplies cost \$7,100, but FastForward has only \$1,500 in cash. Taylor arranges to purchase them on credit from CalTech Supply Company. Thus, FastForward acquires supplies in exchange for a promise to pay for them later. This purchase increases assets by \$7,100 in supplies, and liabilities (called *accounts payable* to CalTech Supply) increase by the same amount.

	Assets				=	Liabilities	+	Equity	
	Cash	+	Supplies	+	Equipment	=	Accounts Payable	+	C. Taylor, Capital
Old Bal.	\$1,500	+	\$2,500	+	\$26,000	=			\$30,000
(4)		+	<b>7,100</b>			=	<b>+\$7,100</b>		
New Bal.	\$1,500	+	\$9,600	+	\$26,000	=	\$7,100	+	\$30,000
	\$37,100								\$37,100

**Example:** If FastForward pays \$500 cash in Transaction 4, how does this partial payment affect the liability to CalTech? *Answer:* The liability to CalTech is reduced to \$6,600 and the cash balance is reduced to \$1,000.



**Transaction 5: Provide Services for Cash** FastForward plans to earn revenues by selling online ad space and consulting with clients about footwear and accessories. It earns net income only if its revenues are greater than its expenses. In its first job, FastForward provides consulting services and immediately collects \$4,200 cash. The accounting equation reflects this increase in cash of \$4,200 and in equity of \$4,200. This increase in equity is shown in the far right column under Revenues because the cash received is earned by providing consulting services.

	Assets			=	Liabilities	+	Equity				
	Cash	+	Supplies	+	Equipment	=	Accounts Payable	+	C. Taylor, Capital	+	Revenues
Old Bal.	\$1,500	+	\$9,600	+	\$26,000	=	\$7,100	+	\$30,000		
(5)	<b>+4,200</b>									<b>+ \$4,200</b>	Consulting
New Bal.	\$5,700	+	\$9,600	+	\$26,000	=	\$7,100	+	\$30,000	+	\$4,200
	\$41,300						\$41,300				

**Point:** Revenue recognition principle requires that revenue is recognized when work is performed.

**Transactions 6 and 7: Payment of Expenses in Cash** FastForward pays \$1,000 to rent its facilities. Paying this amount allows FastForward to occupy the space for the month of December. The rental payment is shown in the following accounting equation as Transaction 6. FastForward also pays the biweekly \$700 salary of the company's only employee. This is shown in the accounting equation as Transaction 7. Both Transactions 6 and 7 are December expenses for FastForward. The costs of both rent and salary are expenses, not assets, because their benefits are used in December (they have no future benefits after December). The accounting equation shows that both transactions reduce cash and equity. The far right column shows these decreases as Expenses.

*Increases in expenses yield decreases in equity.*

	Assets			=	Liabilities	+	Equity						
	Cash	+	Supplies	+	Equipment	=	Accounts Payable	+	C. Taylor, Capital	+	Revenues	-	Expenses
Old Bal.	\$5,700	+	\$9,600	+	\$26,000	=	\$7,100	+	\$30,000	+	\$4,200		
(6)	<b>-1,000</b>											<b>- \$1,000</b>	Rent
Bal.	4,700	+	9,600	+	26,000	=	7,100	+	30,000	+	4,200	-	1,000
(7)	<b>- 700</b>											<b>- 700</b>	Salaries
New Bal.	\$4,000	+	\$9,600	+	\$26,000	=	\$7,100	+	\$30,000	+	\$4,200	-	\$1,700
	\$39,600						\$39,600						

**Point:** Expense recognition principle requires that expenses are recognized when the revenue they help generate is recorded.

**Transaction 8: Provide Services and Facilities for Credit** FastForward provides consulting services of \$1,600 and rents its test facilities for an additional \$300 to Adidas on credit. Adidas is billed for the \$1,900 total. This transaction creates a new asset, called *accounts receivable*, from Adidas. Accounts receivable is increased instead of cash because the payment has not yet been received. Equity is increased from the two revenue components shown in the Revenues column of the accounting equation.

	Assets				=	Liabilities	+	Equity							
	Cash	+	Accounts Receivable	+	Supplies	+	Equipment	=	Accounts Payable	+	C. Taylor, Capital	+	Revenues	-	Expenses
Old Bal.	\$4,000			+	\$9,600	+	\$26,000	=	\$7,100	+	\$30,000	+	\$4,200	-	\$1,700
(8)		<b>+ \$1,900</b>										<b>+ 1,600</b>	Consulting		
												<b>+ 300</b>	Rental		
New Bal.	\$4,000	+	\$1,900	+	\$9,600	+	\$26,000	=	\$7,100	+	\$30,000	+	\$6,100	-	\$1,700
	\$41,500								\$41,500						

**Point:** Transaction 8, like 5, records revenue when work is performed, not necessarily when cash is received.

**Transaction 9: Receipt of Cash from Accounts Receivable** The client in Transaction 8 (Adidas) pays \$1,900 to FastForward 10 days after it is billed for consulting services. This Transaction 9 does not change the total amount of assets and does not affect liabilities or equity. It converts the receivable (an asset) to cash (another asset). It does not create new revenue. Revenue was recognized when FastForward performed the services in Transaction 8, not when the cash is collected.

	Assets				=	Liabilities	+	Equity		
	Cash	+ Accounts Receivable	+ Supplies	+ Equipment	=	Accounts Payable	+ C. Taylor, Capital	+ Revenues	- Expenses	
Old Bal.	\$4,000	+ \$1,900	+ \$9,600	+ \$26,000	=	\$7,100	+ \$30,000	+ \$6,100	- \$1,700	
(9)	+1,900	- 1,900			=					
New Bal.	\$5,900	+ \$ 0	+ \$9,600	+ \$26,000	=	\$7,100	+ \$30,000	+ \$6,100	- \$1,700	
	\$41,500					\$41,500				

**Point:** Transaction 9 involved no added client work, so no added revenue is recorded.

**Point:** Receipt of cash is not always a revenue.

**Transaction 10: Payment of Accounts Payable** FastForward pays CalTech Supply \$900 cash as partial payment for its earlier \$7,100 purchase of supplies (Transaction 4), leaving \$6,200 unpaid. This transaction decreases FastForward's cash by \$900 and decreases its liability to CalTech Supply by \$900. Equity does not change. This event does not create an expense even though cash flows out of FastForward (instead the expense is recorded when FastForward uses these supplies).

	Assets				=	Liabilities	+	Equity		
	Cash	+ Accounts Receivable	+ Supplies	+ Equipment	=	Accounts Payable	+ C. Taylor, Capital	+ Revenues	- Expenses	
Old Bal.	\$5,900	+ \$ 0	+ \$9,600	+ \$26,000	=	\$7,100	+ \$30,000	+ \$6,100	- \$1,700	
(10)	- 900				=	- 900				
New Bal.	\$5,000	+ \$ 0	+ \$9,600	+ \$26,000	=	\$6,200	+ \$30,000	+ \$6,100	- \$1,700	
	\$40,600					\$40,600				

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**Transaction 11: Withdrawal of Cash by Owner** The owner of FastForward withdraws \$200 cash for personal use. Withdrawals (decreases in equity) are not reported as expenses because they do not help earn revenue. Because withdrawals are not expenses, they are not used in computing net income.

*Increases in withdrawals yield decreases in equity.*

	Assets				=	Liabilities	+	Equity		
	Cash	+ Accounts Receivable	+ Supplies	+ Equipment	=	Accounts Payable	+ C. Taylor, Capital	- C. Taylor, Withdrawals	+ Revenues	- Expenses
Old Bal.	\$5,000	+ \$ 0	+ \$9,600	+ \$26,000	=	\$6,200	+ \$30,000		+ \$6,100	- \$1,700
(11)	- 200				=			- \$200 Owner Withdrawals		
New Bal.	\$4,800	+ \$ 0	+ \$9,600	+ \$26,000	=	\$6,200	+ \$30,000	- \$200	+ \$6,100	- \$1,700
	\$40,400					\$40,400				

## Summary of Transactions

Exhibit 1.9 shows the effects of these 11 transactions of FastForward using the accounting equation. Assets equal liabilities plus equity after each transaction.

**EXHIBIT 1.9** Summary of Transactions Using the Accounting Equation

Assets				=	Liabilities	+	Equity		
Cash	+ Accounts Receivable	+ Supplies	+ Equipment	=	Accounts Payable	+ C. Taylor, Capital	- C. Taylor, Withdrawals	+ Revenues	- Expenses
(1) \$30,000				=		\$30,000			
(2) - 2,500		+ \$2,500							
Bal. 27,500		+ 2,500		=		30,000			
(3) -26,000			+ \$26,000						
Bal. 1,500		+ 2,500	+ 26,000	=		30,000			
(4)		+ 7,100		=	+ \$7,100				
Bal. 1,500		+ 9,600	+ 26,000	=	7,100	+ 30,000			
(5) + 4,200								+ \$4,200	
Bal. 5,700		+ 9,600	+ 26,000	=	7,100	+ 30,000		+ 4,200	
(6) - 1,000									- \$1,000
Bal. 4,700		+ 9,600	+ 26,000	=	7,100	+ 30,000		+ 4,200	- 1,000
(7) - 700									- 700
Bal. 4,000		+ 9,600	+ 26,000	=	7,100	+ 30,000		+ 4,200	- 1,700
(8)	+ \$1,900							+ 1,600	
								+ 300	
Bal. 4,000	+ 1,900	+ 9,600	+ 26,000	=	7,100	+ 30,000		6,100	- 1,700
(9) + 1,900	- 1,900								
Bal. 5,900	+ 0	+ 9,600	+ 26,000	=	7,100	+ 30,000		+ 6,100	- 1,700
(10) - 900					- 900				
Bal. 5,000	+ 0	+ 9,600	+ 26,000	=	6,200	+ 30,000		+ 6,100	- 1,700
(11) - 200							- \$200		
Bal. \$ 4,800	+ \$ 0	+ \$9,600	+ \$ 26,000	=	\$ 6,200	+ \$ 30,000	- \$ 200	+ \$ 6,100	- \$ 1,700

## NEED-TO-KNOW 1-4

### Transaction Analysis P1



Assume Tata Company began operations on January 1 and completed the following transactions during its first month of operations. Arrange the following asset, liability, and equity titles in a table like [Exhibit 1.9](#): Cash; Accounts Receivable; Equipment; Accounts Payable; J. Tata, Capital; J. Tata, Withdrawals; Revenues; and Expenses.

- Jan. 1 Jamsetji Tata invested \$4,000 cash in Tata Company.  
 5 The company purchased \$2,000 of equipment on credit.  
 14 The company provided \$540 of services for a client on credit.  
 21 The company paid \$250 cash for an employee's salary.

### Solution

Assets				=	Liabilities	+	Equity		
Cash	+ Accounts Receivable	+ Equipment	=	Accounts Payable	+ J. Tata, Capital	- J. Tata, Withdrawals	+ Revenues	- Expenses	
Jan. 1 \$4,000			=		\$4,000				
Jan. 5		+ \$2,000		+ \$2,000					
Bal. 4,000		+ 2,000	=	2,000	+ 4,000				
Jan. 14	+ \$540						+ \$540		
Bal. 4,000	+ 540	+ 2,000	=	2,000	+ 4,000		+ 540		
Jan. 21	- 250							- \$250	
Bal. 3,750	+ 540	+ 2,000	=	2,000	+ 4,000		+ 540	- 250	
\$6,290				\$6,290					

Do More: QS 1-10, QS 1-11, E 1-10, E 1-11, E 1-13

## COMMUNICATING WITH USERS

### P2

Identify and prepare basic financial statements and explain how they interrelate.

Financial statements are prepared in the order below using the 11 transactions of FastForward. (These statements are *unadjusted*—we explain this in [Chapters 2](#) and [3](#).) The four financial statements and their purposes follow.

Financial Statement	Layout	Purpose
<b>Income statement</b>	$\begin{array}{r} \text{Revenue} \\ - \text{Expenses} \\ \hline \text{Net income} \end{array}$	Describes a company's revenues and expenses and computes net income or loss over a period of time.
<b>Statement of owner's equity</b>	$\begin{array}{r} \text{Beg. capital} \\ + \text{Owner investments} \\ + \text{Net income} \\ - \text{Withdrawals} \\ \hline \text{End. capital} \end{array}$	Explains changes in owner's equity from owner investments, net income (or loss), and any withdrawals over a period of time.
<b>Balance sheet</b>	$\begin{array}{r} \text{Assets} = \text{Liabilities} \\ + \text{Equity} \end{array}$	Describes a company's financial position (types and amounts of assets, liabilities, and equity) <i>at a point in time</i> .
<b>Statement of cash flows</b>	$\begin{array}{r} +/\text{- Operating C.F.} \\ +/\text{- Investing C.F.} \\ +/\text{- Financing C.F.} \\ \hline \text{Change in cash} \end{array}$	Identifies cash inflows (receipts) and cash outflows (payments) over a period of time.

## Income Statement

FastForward's income statement for December is shown at the top of [Exhibit 1.10](#). Information about revenues and expenses is taken from the Equity columns of [Exhibit 1.9](#). Revenues are reported first on the income statement. They include consulting revenues of \$5,800 from Transactions 5 and 8 and rental revenue of \$300 from Transaction 8. Expenses are reported after revenues. Rent and salary expenses are from Transactions 6 and 7. Expenses are the costs to generate the revenues reported. **Net income** occurs when revenues exceed expenses. A **net loss** occurs when expenses exceed revenues. Net income (or loss) is shown at the bottom of the statement and is the amount reported in December. Owner's investments and withdrawals are *not* part of income.

*Key Terms are in bold and defined again in the glossary*

**Point:** Net income is sometimes called *earnings* or *profit*.

**EXHIBIT 1.10** Financial Statements and Their Links

FASTFORWARD Income Statement For Month Ended December 31, 2019		
Revenues		
Consulting revenue (\$4,200 + \$1,600) .....	\$ 5,800	
Rental revenue .....	<u>300</u>	
Total revenues .....		\$ 6,100
Expenses		
Rent expense .....	1,000	
Salaries expense .....	<u>700</u>	
Total expenses .....		<u>1,700</u>
Net income .....		<u>\$ 4,400</u>

FASTFORWARD Statement of Owner's Equity For Month Ended December 31, 2019		
C. Taylor, Capital, December 1, 2019 .....		\$ 0
Plus: Investments by owner .....	\$30,000	
Net income .....	<u>4,400</u>	<u>34,400</u>
		34,400
Less: Withdrawals by owner .....		<u>200</u>
C. Taylor, Capital, December 31, 2019 .....		<u>\$34,200</u>

FASTFORWARD Balance Sheet December 31, 2019			
<b>Assets</b>		<b>Liabilities</b>	
Cash .....	\$ 4,800	Accounts payable .....	\$ 6,200
Supplies .....	9,600	Total liabilities .....	6,200
Equipment .....	26,000		
		<b>Equity</b>	
Total assets .....	<u>\$40,400</u>	C. Taylor, Capital .....	<u>34,200</u>
		Total liabilities and equity .....	<u>\$ 40,400</u>

FASTFORWARD Statement of Cash Flows For Month Ended December 31, 2019		
Cash flows from operating activities		
Cash received from clients (\$4,200 + \$1,900) .....	\$ 6,100	
Cash paid for expenses (\$2,500 + \$900 + \$1,000 + \$700) .....	<u>(5,100)</u>	
Net cash provided by operating activities .....		\$ 1,000
Cash flows from investing activities		
Cash paid for equipment .....	<u>(26,000)</u>	
Net cash used by investing activities .....		(26,000)
Cash flows from financing activities		
Cash investments by owner .....	30,000	
Cash withdrawals by owner .....	<u>(200)</u>	
Net cash provided by financing activities .....		<u>29,800</u>
Net increase in cash .....		\$ 4,800
Cash balance, December 1, 2019 .....		<u>0</u>
Cash balance, December 31, 2019 .....		<u>\$ 4,800</u>

Point: A statement's heading identifies the company, the statement title, and the date or time period.



**Point:** Arrow lines show how the statements are linked.

Net income is used to compute equity.

Owner capital is used to prepare the balance sheet.

Cash from the balance sheet is used to reconcile the statement of cash flows.

**Point:** The income statement, the statement of owner's equity, and the statement of cash flows are prepared for a *period* of time. The balance sheet is prepared as of a *point* in time.

**Point:** A single ruled line means an addition or subtraction. Final totals are double underlined. Negative amounts may or may not be in parentheses.

## Statement of Owner's Equity



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The statement of owner's equity reports how equity changes over the reporting period. This statement shows beginning capital, events that increase it (owner investments and net income), and events that decrease it (withdrawals and net loss). Ending capital is computed in this statement and is carried over and reported on the balance sheet. FastForward's statement of owner's equity is the second report in [Exhibit 1.10](#). The beginning balance is measured as of the start of business on December 1. It is zero because FastForward did not exist before then. An existing business reports a beginning balance equal to the prior period's ending balance (such as from November 30). FastForward's statement shows the \$4,400 of net income for the period, which links the income statement to the statement of owner's equity (see line ). The statement also reports the \$200 cash withdrawal and FastForward's end-of-period capital balance.

## Balance Sheet

FastForward's balance sheet is the third report in [Exhibit 1.10](#). This statement shows FastForward's financial position at the end of business day on December 31. The left side of the balance sheet lists FastForward's assets: cash, supplies, and equipment. The upper right side of the balance sheet shows that FastForward owes \$6,200 to creditors. Any other liabilities (such as a bank loan) would be listed here. The equity balance is \$34,200. Line shows the link between the ending balance of the statement of owner's equity and the equity balance on the balance sheet. (This presentation of the balance sheet is called the *account form*: assets on the left and liabilities and equity on the right. Another presentation is the *report form*: assets on top, followed by liabilities and then equity at the bottom. Both are acceptable.) As always, the accounting equation balances: Assets of \$40,400 = Liabilities of \$6,200 + Equity of \$34,200.

## Statement of Cash Flows

FastForward's statement of cash flows is the final report in [Exhibit 1.10](#). The first section reports cash flows from *operating activities*. It shows the \$6,100 cash received from clients and the \$5,100 cash paid for supplies, rent, and employee salaries. Outflows are in parentheses to denote subtraction. Net cash provided by operating activities for December is \$1,000. The second section reports *investing activities*, which involve buying and selling assets such as land and equipment that are held for *long-term use* (typically more than one year). The only investing activity is the \$26,000 purchase of equipment. The third section shows cash flows from *financing activities*, which include *long-term* borrowing and repaying of cash from lenders and the cash investments from, and withdrawals by, the owner. FastForward reports \$30,000 from the owner's initial investment and a \$200 cash withdrawal. The net cash effect of all financing transactions is a \$29,800 cash inflow. The final part of the statement shows an increased cash balance of \$4,800. The ending balance is also \$4,800 as it started with no cash—see line .

**Point:** Payment for supplies is an operating activity because supplies are expected to be used up in short-term operations (typically less than one year).

**Point:** Investing activities refer to long-term asset investments by the company, *not* to owner investments.

### NEED-TO-KNOW 1-5

Financial Statements P2



## APPLE

Prepare the (a) income statement, (b) statement of owner's equity, and (c) balance sheet for **Apple** using the following *condensed* data from its fiscal year ended September 30, 2017 (\$ in millions).



Accounts payable .....	\$ 49,049	Investments and other assets .....	\$303,373
Other liabilities .....	192,223	Land and equipment (net) .....	33,783
Cost of sales .....	141,048	Selling, general, and other expenses .....	39,835
Cash .....	20,289	Accounts receivable .....	17,874
Owner, Capital, Sep. 24, 2016 .....	128,249	Net income .....	48,351
Withdrawals .....	42,553	Owner, Capital, Sep. 30, 2017 .....	134,047
Revenues .....	229,234		

**Solution** (\$ in millions)

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APPLE Income Statement For Fiscal Year Ended September 30, 2017	
Revenues .....	\$ 229,234
Expenses	
Cost of sales .....	\$ 141,048
Selling, general, and other expenses .....	39,835
Total expenses .....	180,883
Net income .....	<u>\$ 48,351</u>

APPLE Statement of Owner's Equity For Fiscal Year Ended September 30, 2017	
Owner, Capital, Sep. 24, 2016 .....	\$ 128,249
Plus: Net income .....	<u>48,351</u>
	176,600
Less: Withdrawals by owner .....	<u>42,553</u>
Owner, Capital, Sep. 30, 2017 .....	<u>\$134,047</u>

APPLE Balance Sheet September 30, 2017			
Assets		Liabilities	
Cash .....	\$ 20,289	Accounts payable .....	\$ 49,049
Accounts receivable .....	17,874	Other liabilities .....	192,223
Land and equipment (net) .....	33,783	Total liabilities .....	241,272
Investments and other assets .....	303,373		
		Equity	
		Owner, Capital, Sep. 30, 2017 .....	<u>134,047</u>
Total assets .....	<u>\$375,319</u>	Total liabilities and equity .....	<u>\$ 375,319</u>

Do More: QS 1-12, QS 1-13, QS 1-14, E 1-15, E 1-16, E 1-17

**Decision Analysis** (a section at the end of each chapter) covers ratios for decision making using real company data. Instructors can skip this section and cover all ratios in [Chapter 17](#)



Decision Analysis



Return on Assets

## A2 \_\_\_\_\_

Compute and interpret return on assets.

We organize financial statement analysis into four areas: (1) liquidity and efficiency, (2) solvency, (3) profitability, and (4) market prospects—[Chapter 17](#) has a ratio listing with definitions and groupings by area. When analyzing ratios, we use a company's prior-year ratios and competitor ratios to identify good, bad, or average performance.

This chapter presents a profitability measure: return on assets. Return on assets is useful in evaluating management, analyzing and forecasting profits, and planning activities. **Return on assets (ROA)**, also called *return on investment (ROI)*, is defined in [Exhibit 1.11](#).

**EXHIBIT 1.11** Return on Assets

$$\text{Return on assets} = \frac{\text{Net income}}{\text{Average total assets}}$$

Net income is from the annual income statement, and average total assets is computed by adding the beginning and ending amounts for that same period and dividing by 2. **Nike** reports total net income of \$4,240 million for the current year. At the beginning of the current year its total assets are \$21,396 million, and at the end of the current year they total \$23,259 million. Nike's return on assets for the current year is:

$$\text{Return on assets} = \frac{\$4,240 \text{ million}}{(\$21,396 \text{ million} + \$23,259 \text{ million})/2} = 19.0\%$$

Is a 19.0% return on assets good or bad for Nike? To help answer this question, we compare (benchmark) Nike's return with its prior performance and the return of its competitor, **Under Armour**. Nike shows a stable pattern of good returns that reflects effective use of assets. Nike has outperformed Under Armour in each of the last three years. Its management performed well based on Nike's return on assets.

**EXHIBIT 1.12** Nike and Under Armour Returns

Return on Assets	Current Year	1 Year Ago	2 Years Ago
Nike.....	19.0%	17.5%	16.3%
Under Armour.....	7.9	9.4	11.4

*Decision Analysis ends with a role-playing scenario to show the usefulness of ratios*

**Decision Maker**



**Business Owner** You own a winter ski resort that earns a 21% return on its assets. An opportunity to purchase a winter ski equipment manufacturer is offered to you. This manufacturer earns a 14% return on its assets. The industry return for competitors of this manufacturer is 9%. Do you purchase this manufacturer? ■ *Answer:* The 14% return on assets for the manufacturer exceeds the 9% industry return. This is positive for a potential purchase. Also, this purchase is an opportunity to spread your risk over two businesses. Still, you should hesitate to purchase a business whose 14% return is lower than your current 21% return. You might better direct efforts to increase investment in your resort if it can earn more than the 14% alternative.

*Comprehensive Need-to-Know is a review of key chapter content; the Planning the Solution section offers strategies in solving it*

**NEED-TO-KNOW 1-6 COMPREHENSIVE**

Transaction Analysis, Statement Preparation, and Return on Assets

After several months of planning, Jasmine Worthy started a haircutting business called Expressions. The following events occurred during its first month of business.

- a. Aug. 1 Worthy invested \$3,000 cash and \$15,000 of equipment in Expressions.
- b. 2 Expressions paid \$600 cash for furniture for the shop.
- c. 3 Expressions paid \$500 cash to rent space in a strip mall for August.
- d. 4 Purchased \$1,200 of equipment on credit for the shop (recorded as accounts payable).
- e. 15 Expressions opened for business on August 5. Cash received from haircutting services in the first week and a half of business (ended August 15) was \$825.
- f. 16 Expressions provided \$100 of haircutting services on credit.
- g. 17 Expressions received a \$100 check for services previously rendered on credit.
- h. 18 Expressions paid \$125 cash to an assistant for hours worked for the grand opening.
- i. 31 Cash received from services provided during the second half of August was \$930.
- j. 31 Expressions paid \$400 cash toward the accounts payable entered into on August 4.
- k. 31 Worthy made a \$900 cash withdrawal from Expressions for personal use.

**Required**

1. Arrange the following asset, liability, and equity titles in a table similar to the one in [Exhibit 1.9](#): Cash; Accounts Receivable; Furniture; Store Equipment; Accounts Payable; J. Worthy, Capital; J. Worthy, Withdrawals; Revenues; and Expenses. Show the effects of each transaction using the accounting equation.
2. Prepare an income statement for August.
3. Prepare a statement of owner's equity for August.
4. Prepare a balance sheet as of August 31.
5. Prepare a statement of cash flows for August.
6. Determine the return on assets ratio for August.

**PLANNING THE SOLUTION**

- Set up a table like [Exhibit 1.9](#) with the appropriate columns for accounts.
- Analyze each transaction and show its effects as increases or decreases in the appropriate columns. Be sure the accounting equation remains in balance after each transaction.

Prepare the income statement, and identify revenues and expenses. List those items on the statement, compute the difference, and label the result as *net income* or *net loss*.

- Use information in the Equity columns to prepare the statement of owner's equity.
- Use information in the last row of the transactions table to prepare the balance sheet.
- Prepare the statement of cash flows; include all events listed in the Cash column of the transactions table. Classify each cash flow as operating, investing, or financing.
- Calculate return on assets by dividing net income by average assets.

## SOLUTION

1.

	Assets				=	Liabilities		+	Equity		
	Cash	Accounts Receivable	Furniture	Store Equipment		Accounts Payable	J. Worthy, Capital		J. Worthy, Withdrawals	Revenues	Expenses
a.	\$3,000			\$15,000		\$18,000					
b.	- 600		+ \$600								
Bal.	2,400		+ 600	+ 15,000	=					18,000	
c.	- 500									- \$500	
Bal.	1,900		+ 600	+ 15,000	=					- 500	
d.				+ 1,200	+ \$1,200						
Bal.	1,900		+ 600	+ 16,200	=	1,200				+ 18,000	
e.	+ 825								+ \$ 825		
Bal.	2,725		+ 600	+ 16,200	=	1,200			+ 825	- 500	
f.		+ \$100							+ 100		
Bal.	2,725	+ 100	+ 600	+ 16,200	=	1,200			+ 925	- 500	
g.	+ 100	- 100									
Bal.	2,825	+ 0	+ 600	+ 16,200	=	1,200			+ 925	- 500	
h.	- 125									- 125	
Bal.	2,700	+ 0	+ 600	+ 16,200	=	1,200			+ 925	- 625	
i.	+ 930								+ 930		
Bal.	3,630	+ 0	+ 600	+ 16,200	=	1,200			+ 1,855	- 625	
j.	- 400					- 400					
Bal.	3,230	+ 0	+ 600	+ 16,200	=	800			+ 1,855	- 625	
k.	- 900							- \$900			
Bal.	\$ 2,330	+ 0	+ \$600	+ \$16,200	=	\$ 800		+ \$18,000	- \$ 900	+ \$1,855 - \$625	

2.

EXPRESSIONS Income Statement For Month Ended August 31		
Revenues		
Haircutting services revenue .....		\$ 1,855
Expenses		
Rent expense .....	\$ 500	
Wages expense .....	<u>125</u>	
Total expenses .....		<u>625</u>
Net income .....		<u>\$ 1,230</u>

3.

EXPRESSIONS Statement of Owner's Equity For Month Ended August 31		
J. Worthy, Capital, August 1* .....		\$ 0
Plus: Investments by owner .....	\$18,000	
Net income .....	<u>1,230</u>	<u>19,230</u>
		19,230
Less: Withdrawals by owner .....		<u>900</u>
J. Worthy, Capital, August 31 .....		<u>\$18,330</u>

\*If Expressions had existed before August 1, the beginning capital balance would equal the prior period's ending balance.

4.

EXPRESSIONS Balance Sheet August 31			
<b>Assets</b>		<b>Liabilities</b>	
Cash .....	\$ 2,330	Accounts payable .....	\$ 800
Furniture .....	600	<b>Equity</b>	
Store equipment .....	<u>16,200</u>	J. Worthy, Capital .....	<u>18,330</u>
Total assets .....	<u>\$19,130</u>	Total liabilities and equity .....	<u>\$19,130</u>

5.

EXPRESSIONS Statement of Cash Flows For Month Ended August 31		
Cash flows from operating activities		
Cash received from customers .....	\$1,855	
Cash paid for expenditures (\$500 + \$125 + \$400) .....	<u>(1,025)</u>	
Net cash provided by operating activities .....		\$ 830
Cash flows from investing activities		
Cash paid for furniture .....		(600)
Cash flows from financing activities		
Cash investments by owner .....	3,000	
Cash withdrawals by owner .....	<u>(900)</u>	
Net cash provided by financing activities .....		<u>2,100</u>
Net increase in cash .....		\$ 2,330
Cash balance, August 1 .....		0
Cash balance, August 31 .....		<u>\$2,330</u>

6.

$$\text{Return on assets} = \frac{\text{Net income}}{\text{Average assets}} = \frac{\$1,230}{(\$18,000^* + \$19,130)/2} = \frac{\$1,230}{\$18,565} = \underline{\underline{6.63\%}}$$

\*Uses the initial \$18,000 investment as the beginning balance for the *start-up period only*.

## APPENDIX

# Return and Risk

# 1A

## A3

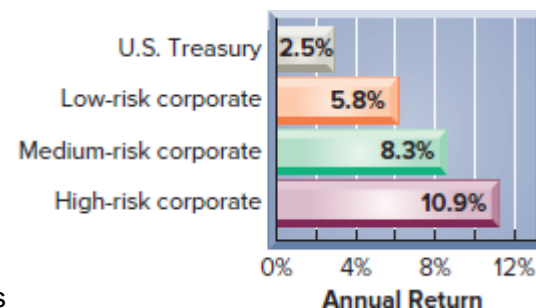
Explain the relation between return and risk.

This appendix covers return and risk analysis.

Net income is often linked to **return**. Return on assets (ROA) is stated in ratio form as income divided by assets invested. For example, banks report return from a savings account in the form of an interest return such as 2%. We also could invest in a company's stock, or even start our own business. How do we decide among these options? The answer depends on our trade-off between return and risk.

**Risk** is the uncertainty about the return we will earn. All business investments involve risk, but some investments involve more risk than others. The lower the risk of an investment, the lower is our expected return. The reason that savings accounts pay such a low return is the low risk of not being repaid with interest (the government guarantees most savings accounts). If we buy a share of **eBay** or any other company, we might get a large return. However, we have no guarantee of any return; there is even the risk of loss.

[Exhibit 1A.1](#) shows recent returns for 10-year bonds with different risks. *Bonds* are written promises by organizations to repay amounts loaned with interest. U.S. Treasury bonds have a low expected return, but they also have low risk because they are backed by the U.S. government. High-risk corporate bonds have a much larger potential return but have much higher risk.



**EXHIBIT 1A.1** Average Returns for Bonds with Different Risks

The trade-off between return and risk is a normal part of business. Higher risk implies higher, but riskier, expected returns. To help us make better decisions, we use accounting information to assess both return and risk.

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## APPENDIX

# Business Activities

# 1B

## C5

Identify and describe the three major activities of organizations.

This appendix explains how the accounting equation is linked to business activities. There are three major types of business activities: financing, investing, and operating. Each of these requires planning. *Planning* is defining an organization's ideas, goals, and actions.

**Point:** Investing (assets) and financing (liabilities plus equity) totals are *always* equal.

**Financing** *Financing activities* provide the resources organizations use to pay for assets such as land, buildings, and equipment. The two sources of financing are owner and nonowner. *Owner financing* refers to resources contributed by the owner along with any income the owner leaves in the organization. *Nonowner (or creditor) financing* refers to resources loaned by creditors (lenders).

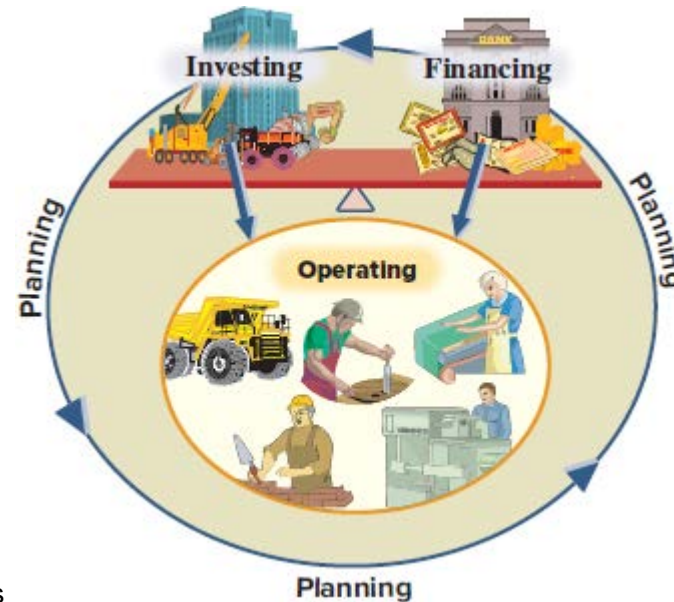
**Investing** *Investing activities* are the acquiring and disposing of assets that an organization uses to buy and sell its products or services. Some organizations require land and factories to operate. Others need only an office. Invested amounts are referred to as *assets*. Creditor and owner financing hold claims on assets. Creditors' claims are called *liabilities*, and the owner's claim is called *equity*. This yields the *accounting equation*: Assets = Liabilities + Equity.

**Operating** *Operating activities* involve using resources to research, develop, purchase, produce, distribute, and market products and services. Sales and revenues are the inflow of assets from selling products and services. Costs and expenses



are the outflow of assets to support operating activities.

[Exhibit 1B.1](#) summarizes business activities. Planning is part of each activity and gives them meaning and focus. Investing (assets) and financing (liabilities and equity) are opposite each other because they always are equal. Operating activities are below to show that they are the result of investing and financing.



**EXHIBIT 1B.1** Activities of Organizations

## Summary: Cheat Sheet

### ACCOUNTING USES

**External users:** Do not directly run the organization and have limited access to its accounting information. Examples are lenders, shareholders, boards of directors, external auditors, nonexecutive employees, labor unions, regulators, voters, donors, suppliers, and customers.

**Internal users:** Directly manage organization operations. Examples are the CEO and other executives, research and development managers, purchasing managers, production managers, and other managerial-level employees.

**Private accounting:** Accounting employees working for businesses.

**Public accounting:** Offering audit, tax, and accounting services to others.

### ETHICS AND ACCOUNTING

- **Fraud triangle:** Factors that push a person to commit fraud.
- **Opportunity:** Must be able to commit fraud with a low risk of getting caught.
- **Pressure,** or incentive: Must feel pressure or have incentive to commit fraud.
- **Rationalization,** or attitude: Justifies fraud or does not see its criminal nature.

#### Common business entities:

	Sole Proprietorship	Partnership
<b>Number of owners</b>	1 owner; easy to set up.	2 or more, called <i>partners</i> ; easy to set up.
<b>Business taxation</b>	No additional business income tax.	No additional business income tax.
<b>Owner liability</b>	Unlimited liability. Owner is personally liable for proprietorship debts.	Unlimited liability. Partners are jointly liable for partnership debts.
<b>Legal entity</b>	<i>Not</i> a separate legal entity.	<i>Not</i> a separate legal entity.
<b>Business life</b>	Business ends with owner death or choice.	Business ends with a partner death or choice.

	Corporation	Limited Liability Company (LLC)
<b>Number of owners</b>	1 or more, called <i>stockholders</i> ; can get many investors by selling <b>stock</b> or <b>shares</b> of corporate ownership.	1 or more, called <i>members</i> .
<b>Business taxation</b>	Additional corporate income tax.	No additional business income tax.
<b>Owner liability</b>	Limited liability. Owners, called <b>stockholders</b> (or <b>shareholders</b> ), are not liable for corporate acts and debts.	Limited liability. Owners, called <b>members</b> , are not personally liable for LLC debts.
<b>Legal entity</b>	A separate entity with the same rights and responsibilities as a person.	A separate entity with the same rights and responsibilities as a person.
<b>Business life</b>	Indefinite.	Indefinite.



## SYSTEM OF ACCOUNTS

**Assets:** Resources a company owns or controls that are expected to yield future benefits.

**Liabilities:** Creditors' claims on assets. These are obligations to provide assets, products, or services to others.

**Equity:** Owner's claim on assets. It consists of:

+ **Owner, Capital**

**Owner investments** are inflows of cash and other net assets from owner contributions, which increase equity.

— **Owner, Withdrawals**

**Owner withdrawals** are outflows of cash and other assets to owners for personal use, which reduce equity.

+ **Revenues**

**Revenues** increase equity (via net income) from sales of products and services to customers; examples are sales of products, consulting services provided, facilities rented to others, and commissions from services.

— **Expenses**

**Expenses** decrease equity (via net income) from costs of providing products and services to customers; examples are costs of employee time, use of supplies, advertising, utilities, and insurance fees.

## TRANSACTION ANALYSIS

**Accounting equation:** Applies to all transactions and events, to all companies and organizations, and to all points in time.

$$\text{Assets} = \text{Liabilities} + \text{Equity}$$

Summary of transactions:

	Assets				=	Liabilities		+	Equity		
	Cash	+ Accounts Receivable	+ Supplies	+ Equipment		Accounts Payable	C. Taylor, Capital		— C. Taylor, Withdrawals	+ Revenues	— Expenses
(1)	\$30,000				=		\$30,000				
(2)	— 2,500		+ 2,500		=						
Bal.	27,500		+ 2,500		=		30,000				
(3)	—26,000			+ 26,000	=						
Bal.	1,500		+ 2,500	+ 26,000	=		30,000				
(4)			+ 7,100		=	+7,100					
Bal.	1,500		+ 9,600	+ 26,000	=	7,100	+ 30,000				
(5)	+ 4,200				=					+ 4,200	
Bal.	5,700		+ 9,600	+ 26,000	=	7,100	+ 30,000			+ 4,200	
(6)	— 1,000				=					— 1,000	
Bal.	4,700		+ 9,600	+ 26,000	=	7,100	+ 30,000			+ 4,200	
(7)	— 700				=					— 700	
Bal.	4,000		+ 9,600	+ 26,000	=	7,100	+ 30,000			+ 4,200	
(8)		+ 1,900			=					+ 1,600	
Bal.	4,000	+ 1,900	+ 9,600	+ 26,000	=	7,100	+ 30,000			+ 6,100	
(9)	+ 1,900	— 1,900			=					— 1,700	
Bal.	5,900	+ 0	+ 9,600	+ 26,000	=	7,100	+ 30,000			+ 6,100	
(10)	— 900				=	— 900				— 1,700	
Bal.	5,000	+ 0	+ 9,600	+ 26,000	=	6,200	+ 30,000			+ 6,100	
(11)	— 200				=					— 200	
Bal.	\$ 4,800	+ \$ 0	+ \$ 9,600	+ \$ 26,000	=	\$ 6,200	+ \$ 30,000	— \$ 200	+ \$ 6,100	— \$ 1,700	

Transaction 1: Investment by owner

Transaction 2: Purchase supplies for cash

Transaction 3: Purchase equipment for cash

Transaction 4: Purchase supplies on credit

Transaction 5: Provide services for cash

Transactions 6 and 7: Payment of expenses in cash

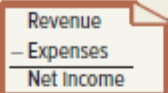
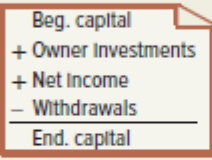
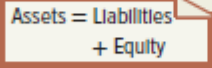
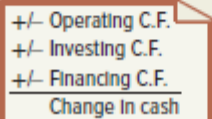
Transaction 8: Provide services and facilities for credit

Transaction 9: Receipt of cash from accounts receivable

Transaction 10: Payment of accounts payable

Transaction 11: Withdrawal of cash by owner

## FINANCIAL STATEMENTS

Financial Statement	Layout	Purpose
Income statement	 Revenue – Expenses — Net Income	Describes a company's revenues and expenses and computes net income or loss over a period of time.
Statement of owner's equity	 Beg. capital + Owner Investments + Net Income – Withdrawals — End. capital	Explains changes in owner's equity from owner investments, net income (or loss), and any withdrawals over a period of time.
Balance sheet	 Assets = Liabilities + Equity	Describes a company's financial position (types and amounts of assets, liabilities, and equity) <i>at a point in time</i> .
Statement of cash flows	 +/- Operating C.F. +/- Investing C.F. +/- Financing C.F. — Change in cash	Identifies cash inflows (receipts) and cash outflows (payments) over a period of time.

*A list of key terms concludes each chapter (a complete glossary is also available)*

### Key Terms

[Accounting](#) 3  
[Accounting equation](#) 10  
[Assets](#) 9  
[Audit](#) 6  
[Auditors](#) 6  
[Balance sheet](#) 15  
[Bookkeeping](#) 3  
[Business entity assumption](#) 8  
[Common stock](#) 8  
[Conceptual framework](#) 7  
[Corporation](#) 8  
[Cost-benefit constraint](#) 8  
[Cost constraint](#) 8  
[Cost principle](#) 7  
[Dodd-Frank Wall Street Reform and Consumer Protection Act](#) 6  
[Double taxation](#) 9  
[Equity](#) 9  
[Ethics](#) 6  
[Events](#) 11  
[Expanded accounting equation](#) 10  
[Expense recognition principle](#) 8  
[Expenses](#) 10  
[External transactions](#) 11  
[External users](#) 4  
[Financial accounting](#) 4  
[Financial Accounting Standards Board \(FASB\)](#) 7  
[Full disclosure principle](#) 8  
[Generally accepted accounting principles \(GAAP\)](#) 7  
[Going-concern assumption](#) 8  
Income statement 15  
[Internal controls](#) 6  
[Internal transactions](#) 11  
[Internal users](#) 4  
[International Accounting Standards Board \(IASB\)](#) 7  
[International Financial Reporting Standards \(IFRS\)](#) 7  
[Liabilities](#) 9

Limited liability company (LLC) 8  
[Managerial accounting 4](#)  
[Matching principle 8](#)  
[Measurement principle 7](#)  
Members 8  
[Monetary unit assumption 8](#)  
[Net income 15](#)  
[Net loss 15](#)  
[Owner, Capital 10](#)  
[Owner investments 10](#)  
[Owner, Withdrawals 10](#)  
Partnership 8  
Proprietorship 8  
[Recordkeeping 3](#)  
[Return 21](#)  
[Return on assets \(ROA\) 18](#)  
[Revenue recognition principle 7](#)  
[Revenues 10](#)  
[Risk 21](#)  
[Sarbanes-Oxley Act 6](#)  
[Securities and Exchange Commission \(SEC\) 7](#)  
[Shareholders 8](#)  
[Shares 8](#)  
[Sole proprietorship 8](#)  
[Statement of cash flows 15](#)  
[Statement of owner's equity 15](#)  
[Stock 8](#)  
[Stockholders 8](#)  
[Time period assumption 8](#)

### Multiple Choice Quiz

1. A building is offered for sale at \$500,000 but is currently assessed at \$400,000. The purchaser of the building believes the building is worth \$475,000, but ultimately purchases the building for \$450,000. The purchaser records the building at:
  - a. \$50,000.
  - b. \$400,000.
  - c. \$450,000.
  - d. \$475,000.
  - e. \$500,000.
2. On December 30 of the current year, **KPMG** signs a \$150,000 contract to provide accounting services to one of its clients in *the next year*. KPMG has a December 31 year-end. Which accounting principle or assumption requires KPMG to record the accounting services revenue from this client in *the next year* and not in the current year?
  - a. Business entity assumption
  - b. Revenue recognition principle
  - c. Monetary unit assumption
  - d. Cost principle
  - e. Going-concern assumption
3. If the assets of a company increase by \$100,000 during the year and its liabilities increase by \$35,000 during the same year, then the change in equity of the company during the year must have been:
  - a. An increase of \$135,000.
  - b. A decrease of \$135,000.
  - c. A decrease of \$65,000.
  - d. An increase of \$65,000.

- e. An increase of \$100,000.
4. **Brunswick** borrows \$50,000 cash from Third National Bank. How does this transaction affect the accounting equation for Brunswick?
- Assets increase by \$50,000; liabilities increase by \$50,000; no effect on equity.
  - Assets increase by \$50,000; no effect on liabilities; equity increases by \$50,000.
  - Assets increase by \$50,000; liabilities decrease by \$50,000; no effect on equity.
  - No effect on assets; liabilities increase by \$50,000; equity increases by \$50,000.
  - No effect on assets; liabilities increase by \$50,000; equity decreases by \$50,000.
5. **Geek Squad** performs services for a customer and bills the customer for \$500. How would Geek Squad record this transaction?
- Accounts receivable increase by \$500; revenues increase by \$500.
  - Cash increases by \$500; revenues increase by \$500.
  - Accounts receivable increase by \$500; revenues decrease by \$500.
  - Accounts receivable increase by \$500; accounts payable increase by \$500.
  - Accounts payable increase by \$500; revenues increase by \$500.

### ANSWERS TO MULTIPLE CHOICE QUIZ

- c; \$450,000 is the actual cost incurred.
- b; revenue is recorded when services are provided.
- d;

Assets	=	Liabilities	+	Equity
+\$100,000	=	+\$35,000	+	?





$$\text{Change in equity} = \$100,000 - \$35,000 = \underline{\underline{\$65,000}}$$






- a
- a

A(B) *Superscript letter A (B) denotes assignments based on Appendix 1A (1B).*

 Icon denotes assignments that involve decision making.

### Discussion Questions

- What is the purpose of accounting in society?
- Technology is increasingly used to process accounting data. Why then must we study and understand accounting?
-  Identify four kinds of external users and describe how they use accounting information.
-  What are at least three questions business owners and managers might be able to answer by looking at accounting information?
- Identify three actual businesses that offer services and three actual businesses that offer products.
-  Describe the internal role of accounting for organizations.
- Identify three types of services typically offered by accounting professionals.
-  What type of accounting information might be useful to the marketing managers of a business?
- Why is accounting described as a service activity?
- What are some accounting-related professions?
- How do ethics rules affect auditors' choice of clients?
- What work do tax accounting professionals perform in addition to preparing tax returns?
- What does the concept of *objectivity* imply for information reported in financial statements?
- A business reports its own office stationery on the balance sheet at its \$400 cost, although it cannot be sold for more than \$10 as scrap paper. Which accounting principle and/or assumption justifies this treatment?
- Why is the revenue recognition principle needed? What does it demand?
- Describe the four basic forms of business organization and their key attributes.
- Define (a) *assets*, (b) *liabilities*, (c) *equity*, and (d) *net assets*.
- What events or transactions change equity?
- Identify the two main categories of accounting principles.

20. What do accountants mean by the term *revenue*?
21. Define *net income* and explain its computation.
22. Identify the four basic financial statements of a business.
23.  What information is reported in an income statement?
24. Give two examples of expenses a business might incur.
25. What is the purpose of the statement of owner's equity?
26.  What information is reported in a balance sheet?
27. The statement of cash flows reports on what major activities?
28.  Define and explain return on assets.
29. <sup>A</sup>  Define return and risk. Discuss the trade-off between them.
30. <sup>B</sup> Describe the three major business activities in organizations.
31. <sup>B</sup> Explain why investing (assets) and financing (liabilities and equity) totals are always equal.
32. Refer to the financial statements of **Google** in [Appendix A](#) near the end of the text. To what level of significance are dollar amounts rounded? What time period does its income statement cover? **GOOGLE**
33.  Access the SEC EDGAR database ([SEC.gov](http://SEC.gov)) and retrieve **Apple's** 2017 10-K (filed November 3, 2017). Identify **APPLE** its auditor. What responsibility does its independent auditor claim regarding Apple's financial statements? **APPLE**

*Quick Study exercises offer a brief check of key points*

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## QUICK STUDY



### QS 1-1 Understanding accounting C1

Choose the term or phrase below that best completes each statement.

- a. Accounting
- b. Identifying
- c. Recording
- d. Communicating
- e. Governmental
- f. Technology
- g. Language of business
- h. Recordkeeping (bookkeeping)

1. \_\_\_\_\_ reduces the time, effort, and cost of recordkeeping while improving clerical accuracy.
2. \_\_\_\_\_ requires that we input, measure, and log transactions and events.
3. \_\_\_\_\_ is the recording of transactions and events, either manually or electronically.

### QS 1-2 Identifying accounting users C2

Identify the following users as either external users (E) or internal users (I).

- \_\_\_\_\_ a. Customers
- \_\_\_\_\_ b. Suppliers
- \_\_\_\_\_ c. External auditors
- \_\_\_\_\_ d. Business press
- \_\_\_\_\_ e. Managers
- \_\_\_\_\_ f. District attorney
- \_\_\_\_\_ g. Shareholders
- \_\_\_\_\_ h. Lenders
- \_\_\_\_\_ i. Controllers
- \_\_\_\_\_ j. FBI and IRS
- \_\_\_\_\_ k. Consumer group
- \_\_\_\_\_ l. Directors



**QS 1-3** Identifying ethical risks **C3** ▲

The fraud triangle asserts that the following *three* factors must exist for a person to commit fraud.

- A. Opportunity
- B. Pressure
- C. Rationalization

Identify the fraud risk factor (A, B, or C) in each of the following situations.

- \_\_\_\_\_ 1. The business has no cameras or security devices at its warehouse.
- \_\_\_\_\_ 2. Managers are expected to grow business or be fired.
- \_\_\_\_\_ 3. A worker sees other employees regularly take inventory for personal use.
- \_\_\_\_\_ 4. No one matches the cash in the register to receipts when shifts end.
- \_\_\_\_\_ 5. Officers are told to show rising income or risk layoffs.
- \_\_\_\_\_ 6. A worker feels that fellow employees are not honest.

▲ *This icon highlights ethics-related assignments*

**QS 1-4** Identifying principles, assumptions, and constraints **C4**

Identify each of the following terms or phrases as an accounting (a) principle, (b) assumption, or (c) constraint.

- \_\_\_\_\_ 1. Full disclosure
- \_\_\_\_\_ 2. Time period
- \_\_\_\_\_ 3. Going-concern
- \_\_\_\_\_ 4. Revenue recognition

**QS 1-5** Identifying attributes of businesses **C4**

Complete the following table with either a *yes* or *no* regarding the attributes of a proprietorship, partnership, corporation, and limited liability company (LLC).

Attribute Present	Proprietorship	Partnership	Corporation	LLC
1. Business taxed .....	___	___	___	___
2. Limited liability .....	___	___	___	___
3. Legal entity .....	___	___	___	___

**QS 1-6** Identifying accounting principles and assumptions **C4** ⓘ

Identify the letter for the principle or assumption from A through F in the blank space next to each numbered situation that it best explains or justifies.

- A. General accounting principle
- B. Measurement (cost) principle
- C. Business entity assumption
- D. Revenue recognition principle
- E. Expense recognition (matching) principle
- F. Going-concern assumption

- \_\_\_\_\_ 1. In December of this year, Chavez Landscaping received a customer's order and cash prepayment to install sod at a house that would not be ready for installation until March of *next year*. Chavez should record the revenue from the customer order in March of *next year*, not in December of this year.
- \_\_\_\_\_ 2. If \$51,000 cash is paid to buy land, the land is reported on the buyer's balance sheet at \$51,000.
- \_\_\_\_\_ 3. Mike Derr owns both Sailing Passions and Dockside Digs. In preparing financial statements for Dockside Digs, Mike makes sure that the expense transactions of Sailing Passions are kept separate from Dockside Digs's transactions and financial statements.

**QS 1-7** Applying the accounting equation **A1** ⓘ

- a. Total assets of Charter Company equal \$700,000 and its equity is \$420,000. What is the amount of its liabilities?
- b. Total assets of Martin Marine equal \$500,000 and its liabilities and equity amounts are equal to each other. What is the amount of its liabilities? What is the amount of its equity?


**QS 1-8** Applying the accounting equation **A1**

1. Use the accounting equation to compute the missing financial statement amounts (a), (b), and (c).

	A	B	C	D
1	Company	Assets	= Liabilities	+ Equity
2	1	\$ 75,000	\$ (a)	\$ 40,000
3	2	(b)	25,000	70,000
4	3	85,000	20,000	(c)

2. Use the expanded accounting equation to compute the missing financial statement amounts (a) and (b).

	A	B	C	D	E	F	G
1	Company	Assets	Liabilities	Owner, Capital	Owner, Withdrawals	Revenues	Expenses
2	1	\$ 40,000	\$ 16,000	\$ 20,000	\$ 0	(a)	\$ 8,000
3	2	\$ 80,000	\$ 32,000	\$ 44,000	(b)	\$ 24,000	\$ 18,000

**QS 1-9** Identifying and computing assets, liabilities, and equity **A1** 

**GOOGLE**

Use **Google's** December 31, 2017, financial statements, in [Appendix A](#) near the end of the text, to answer the following.

- Identify the amounts (in \$ millions) of its 2017 (1) assets, (2) liabilities, and (3) equity.
- Using amounts from part a, verify that Assets = Liabilities + Equity.

**QS 1-10** Identifying effects of transactions using accounting equation—Revenues and Expenses **P1**

Create the following table similar to the one in [Exhibit 1.9](#).

Assets		=	Liabilities		+	Equity		
Cash	+ Accounts Receivable	=	Accounts Payable	+ Owner, Capital	-	Owner, Withdrawals	+ Revenues	- Expenses

Then use additions and subtractions to show the dollar effects of each transaction on individual items of the accounting equation (identify each revenue and expense type, such as commissions revenue or rent expense).

- The company completed consulting work for a client and immediately collected \$5,500 cash earned.
- The company completed commission work for a client and sent a bill for \$4,000 to be received within 30 days.
- The company paid an assistant \$1,400 cash as wages for the period.
- The company collected \$1,000 cash as a partial payment for the amount owed by the client in transaction b.
- The company paid \$700 cash for this period's cleaning services.

**QS 1-11** Identifying effects of transactions using accounting equation—Assets and Liabilities **P1**

Create the following table similar to the one in [Exhibit 1.9](#).

Assets				=	Liabilities		+	Equity		
Cash	+ Supplies	+ Equipment	+ Land	=	Accounts Payable	+ A. Carr, Capital	-	A. Carr, Withdrawals	+ Revenues	- Expenses

Then use additions and subtractions to show the dollar effects of each transaction on individual items of the accounting equation.

- The owner (Alex Carr) invested \$15,000 cash in the company.
- The company purchased supplies for \$500 cash.
- The owner (Alex Carr) invested \$10,000 of equipment in the company.
- The company purchased \$200 of additional supplies on credit.
- The company purchased land for \$9,000 cash.

**QS 1-12** Identifying items with financial statements **P2**

Indicate in which financial statement each item would most likely appear: income statement (I), balance sheet (B), or statement of cash flows (CF).

- \_\_\_\_\_ a. Assets

- \_\_\_\_\_ b. Cash from operating activities
- \_\_\_\_\_ c. Equipment
- \_\_\_\_\_ d. Expenses
- \_\_\_\_\_ e. Liabilities
- \_\_\_\_\_ f. Net decrease (or increase) in cash
- \_\_\_\_\_ g. Revenues
- \_\_\_\_\_ h. Total liabilities and equity

**QS 1-13** Identifying income and equity accounts **P2**

Classify each of the following items as revenues (R), expenses (EX), or withdrawals (W).

- \_\_\_\_\_ 1. Cost of sales
- \_\_\_\_\_ 2. Service revenue
- \_\_\_\_\_ 3. Wages expense
- \_\_\_\_\_ 4. Owner withdrawal
- \_\_\_\_\_ 5. Rent expense
- \_\_\_\_\_ 6. Rental revenue
- \_\_\_\_\_ 7. Insurance expense
- \_\_\_\_\_ 8. Consulting revenue

**QS 1-14** Identifying assets, liabilities, and equity **P2**

Classify each of the following items as assets (A), liabilities (L), or equity (EQ).

- \_\_\_\_\_ 1. Land
- \_\_\_\_\_ 2. Owner, Capital
- \_\_\_\_\_ 3. Equipment
- \_\_\_\_\_ 4. Accounts payable
- \_\_\_\_\_ 5. Accounts receivable
- \_\_\_\_\_ 6. Supplies

**QS 1-15** Preparing an income statement **P2**



On December 31, Hawkin's records show the following accounts. Use this information to prepare a December income statement for Hawkin.

Equipment .....	\$3,000	Accounts receivable .....	\$ 600	Wages expense .....	\$8,000
Cash .....	2,400	Services revenue .....	16,000	Utilities expense .....	700
Rent expense .....	1,500	Accounts payable .....	6,000		

**QS 1-16** Computing and interpreting return on assets **A2** 

In a recent year's financial statements, **Home Depot** reported the following results. Compute and interpret Home Depot's return on assets (assume competitors average an 11.0% return on assets).

Sales .....	\$95 billion	Net income .....	\$8 billion	Average total assets .....	\$42 billion
-------------	--------------	------------------	-------------	----------------------------	--------------

**QS 1-17** Identifying and computing assets, liabilities, and equity **A1**  

**Samsung**

Use **Samsung's** December 31, 2017, financial statements in [Appendix A](#) near the end of the text to answer the following.

- a. Identify the amounts (in millions of Korean won) of Samsung's 2017 (1) assets, (2) liabilities, and (3) equity.
- b. Using amounts from part a, verify that Assets = Liabilities + Equity.

**EXERCISES**

**Exercise 1-1** Classifying activities reflected in the accounting system **C1**

Classify the following activities as part of the identifying (I), recording (R), or communicating (C) aspects of accounting.

- \_\_\_\_\_ 1. Analyzing and interpreting reports.
- \_\_\_\_\_ 2. Presenting financial information.
- \_\_\_\_\_ 3. Keeping a log of service costs.

- \_\_\_\_\_ 4. Measuring the costs of a product.
  - \_\_\_\_\_ 5. Preparing financial statements.
  - \_\_\_\_\_ 6. Acquiring knowledge of revenue transactions.
  - \_\_\_\_\_ 7. Observing transactions and events.
  - \_\_\_\_\_ 8. Registering cash sales of products sold.
- 

**Exercise 1-2** Identifying accounting users and uses **C2** 

Part A. Identify the following questions as most likely to be asked by an internal (I) or an external (E) user of accounting information.

- \_\_\_\_\_ 1. Which inventory items are out of stock?
- \_\_\_\_\_ 2. Should we make a five-year loan to that business?
- \_\_\_\_\_ 3. What are the costs of our product's ingredients?
- \_\_\_\_\_ 4. Should we buy, hold, or sell a company's stock?
- \_\_\_\_\_ 5. Should we spend additional money for redesign of our product?
- \_\_\_\_\_ 6. Which firm reports the highest sales and income?
- \_\_\_\_\_ 7. What are the costs of our service to customers?

Part B. Identify the following users as either an internal (I) or an external (E) user.

- \_\_\_\_\_ 1. Research and development executive
  - \_\_\_\_\_ 2. Human resources executive
  - \_\_\_\_\_ 3. Politician
  - \_\_\_\_\_ 4. Shareholder
  - \_\_\_\_\_ 5. Distribution manager
  - \_\_\_\_\_ 6. Creditor
  - \_\_\_\_\_ 7. Production supervisor
  - \_\_\_\_\_ 8. Purchasing manager
- 

**Exercise 1-3** Describing accounting responsibilities **C2**

Many accounting professionals work in one of the following three areas.

- A.** Financial accounting
- B.** Managerial accounting
- C.** Tax accounting

Identify the area of accounting that is most involved in each of the following responsibilities.

- \_\_\_\_\_ 1. Internal auditing
  - \_\_\_\_\_ 2. External auditing
  - \_\_\_\_\_ 3. Cost accounting
  - \_\_\_\_\_ 4. Budgeting
  - \_\_\_\_\_ 5. Enforcing tax laws
  - \_\_\_\_\_ 6. Planning transactions to minimize taxes
  - \_\_\_\_\_ 7. Preparing external financial statements
  - \_\_\_\_\_ 8. Analyzing external financial reports
- 

**Exercise 1-4** Learning the language of business **C1 C2 C3**

Match each of the numbered descriptions 1 through 5 with the term or phrase it best reflects. Indicate your answer by writing the letter A through H for the term or phrase in the blank provided.

- A.** Audit
- B.** GAAP
- C.** Ethics
- D.** FASB
- E.** SEC
- F.** Public accountants
- G.** Net income

## H. IASB

- \_\_\_\_\_ 1. An assessment of whether financial statements follow GAAP.
- \_\_\_\_\_ 2. Amount a business earns in excess of all expenses and costs associated with its sales and revenues.
- \_\_\_\_\_ 3. A group that sets accounting principles in the United States.
- \_\_\_\_\_ 4. Accounting professionals who provide services to many clients.
- \_\_\_\_\_ 5. Principles that determine whether an action is right or wrong.

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### Exercise 1-5 Identifying ethical terminology C3

Match each of the numbered descriptions 1 through 7 with the term or phrase it best reflects. Indicate your answer by writing the letter A through G for the term or phrase in the blank provided.

- A. Ethics
- B. Fraud triangle
- C. Prevention
- D. Internal controls
- E. Sarbanes-Oxley Act
- F. Audit
- G. Dodd-Frank Act

- \_\_\_\_\_ 1. Requires the SEC to pay whistleblowers.
- \_\_\_\_\_ 2. Examines whether financial statements are prepared using GAAP; it does not ensure absolute accuracy of the statements.
- \_\_\_\_\_ 3. Requires documentation and verification of internal controls and increases emphasis on internal control effectiveness.
- \_\_\_\_\_ 4. Procedures set up to protect company property and equipment, ensure reliable accounting, promote efficiency, and encourage adherence to policies.
- \_\_\_\_\_ 5. A less expensive and more effective means to stop fraud.
- \_\_\_\_\_ 6. Three factors push a person to commit fraud: opportunity, pressure, and rationalization.
- \_\_\_\_\_ 7. Beliefs that distinguish right from wrong.

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### Exercise 1-6 Distinguishing business organizations C4

The following describe several different business organizations. Determine whether each description best refers to a sole proprietorship (SP), partnership (P), corporation (C), or limited liability company (LLC).

- \_\_\_\_\_ a. Micah and Nancy own Financial Services, which pays a business income tax. Micah and Nancy do not have personal responsibility for the debts of Financial Services.
- \_\_\_\_\_ b. Riley and Kay own Speedy Packages, a courier service. Both are personally liable for the debts of the business.
- \_\_\_\_\_ c. IBC Services does not have separate legal existence apart from the one person who owns it.
- \_\_\_\_\_ d. Trent Company is owned by Trent Malone, who is personally liable for the company's debts.
- \_\_\_\_\_ e. Ownership of Zander Company is divided into 1,000 shares of stock. The company pays a business income tax.
- \_\_\_\_\_ f. Physio Products does not pay income taxes and has one owner. The owner has unlimited liability for business debt.
- \_\_\_\_\_ g. AJ Company pays a business income tax and has two owners.
- \_\_\_\_\_ h. Jeffy Auto is a separate legal entity from its owner, but it does not pay a business income tax.

---

### Exercise 1-7 Identifying accounting principles and assumptions C4

Enter the letter A through H for the principle or assumption in the blank space next to each numbered description that it best reflects.

- A. General accounting principle
- B. Measurement (cost) principle
- C. Business entity assumption
- D. Revenue recognition principle
- E. Specific accounting principle
- F. Expense recognition (matching) principle



G. Going-concern assumption


H. Full disclosure principle

- \_\_\_\_\_ 1. A company reports details behind financial statements that would impact users' decisions.
- \_\_\_\_\_ 2. Financial statements reflect the assumption that the business continues operating.
- \_\_\_\_\_ 3. A company records the expenses incurred to generate the revenues reported.
- \_\_\_\_\_ 4. Concepts, assumptions, and guidelines for preparing financial statements.
- \_\_\_\_\_ 5. Each business is accounted for separately from its owner or owners.
- \_\_\_\_\_ 6. Revenue is recorded when products and services are delivered.
- \_\_\_\_\_ 7. Detailed rules used in reporting events and transactions.
- \_\_\_\_\_ 8. Information is based on actual costs incurred in transactions.

**Exercise 1-8** Using the accounting equation **A1**

Determine the missing amount from each of the separate situations *a*, *b*, and *c* below.

	A		B		C
1	<b>Assets</b>	=	<b>Liabilities</b>	+	<b>Equity</b>
2	\$ (a)		\$ 20,000		\$ 45,000
3	100,000		34,000		(b)
4	154,000		(c)		40,000


**Exercise 1-9** Using the accounting equation **A1** 

Answer the following questions. *Hint*: Use the accounting equation.

- a. At the beginning of the year, Addison Company's assets are \$300,000 and its equity is \$100,000. During the year, assets increase \$80,000 and liabilities increase \$50,000. What is the equity at year-end?
- b. Office Store has assets equal to \$123,000 and liabilities equal to \$47,000 at year-end. What is the equity for Office Store at year-end?
- c. At the beginning of the year, Quaker Company's liabilities equal \$70,000. During the year, assets increase by \$60,000, and at year-end assets equal \$190,000. Liabilities decrease \$5,000 during the year. What are the beginning and ending amounts of equity?

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**Check (c)** Beg. equity, \$60,000


**Exercise 1-10** Analysis using the accounting equation **P1** 

Zen began a new consulting firm on January 5. Following is a financial summary, including balances, for each of the company's first five transactions (using the accounting equation form).

Transaction	Assets				=	Liabilities		+	Equity				
	Cash	+	Accounts Receivable	+		Office Supplies	+		Office Furniture	=	Accounts Payable	+	Zen, Capital
___ 1.	\$40,000	+	\$ 0	+	\$ 0	+	\$ 0	=	\$ 0	+	\$40,000	+	\$ 0
___ 2.	38,000	+	0	+	3,000	+	0	=	1,000	+	40,000	+	0
___ 3.	30,000	+	0	+	3,000	+	8,000	=	1,000	+	40,000	+	0
___ 4.	30,000	+	6,000	+	3,000	+	8,000	=	1,000	+	40,000	+	6,000
___ 5.	31,000	+	6,000	+	3,000	+	8,000	=	1,000	+	40,000	+	7,000

Identify the explanation from *a* through *j* below that best describes each transaction 1 through 5 above and enter it in the blank space in front of each numbered transaction.

- a. The company purchased office furniture for \$8,000 cash.
- b. The company received \$40,000 cash from a bank loan.
- c. The owner invested \$1,000 cash in the business.
- d. The owner invested \$40,000 cash in the business.
- e. The company purchased office supplies for \$3,000 by paying \$2,000 cash and putting \$1,000 on credit.
- f. The company billed a customer \$6,000 for services provided.
- g. The company purchased office furniture worth \$8,000 on credit.
- h. The company provided services for \$1,000 cash.
- i. The company sold office supplies for \$3,000 and received \$2,000 cash and \$1,000 on credit.
- j. The company provided services for \$6,000 cash.


**Exercise 1-11** Identifying effects of transactions on the accounting equation P1 

The following table shows the effects of transactions 1 through 5 on the assets, liabilities, and equity of Mulan's Boutique.

Assets					=	Liabilities	+	Equity				
Cash	+	Accounts Receivable	+	Office Supplies	+	Land	=	Accounts Payable	+	Mulan, Capital	+	Revenues
\$ 21,000	+	\$ 0	+	\$3,000	+	\$19,000	=	\$ 0	+	\$43,000	+	\$ 0
___ 1. - 4,000					+	4,000						
___ 2.			+	1,000				+1,000				
___ 3.	+	1,900									+	1,900
___ 4. - 1,000								- 1,000				
___ 5. + 1,900	-	1,900										
<u>\$ 17,900</u>	+	<u>\$ 0</u>	+	<u>\$4,000</u>	+	<u>\$23,000</u>	=	<u>\$ 0</u>	+	<u>\$43,000</u>	+	<u>\$1,900</u>

Identify the explanation from *a* through *j* below that best describes each transaction 1 through 5 and enter it in the blank space in front of each numbered transaction.

- The company purchased \$1,000 of office supplies on credit.
- The company collected \$1,900 cash from an account receivable.
- The company sold land for \$4,000 cash.
- The owner withdrew \$1,000 cash from the business.
- The company purchased office supplies for \$1,000 cash.
- The company purchased land for \$4,000 cash.
- The company billed a client \$1,900 for services provided.
- The company paid \$1,000 cash toward an account payable.
- The owner invested \$1,900 cash in the business.
- The company sold office supplies for \$1,900 on credit.

**Exercise 1-12** Identifying effects of transactions on the accounting equation P1 

For each transaction *a* through *f*, identify its impact on the accounting equation (select from 1 through 5 below).

- \_\_\_ **a.** The company pays cash toward an account payable.  
 \_\_\_ **b.** The company purchases equipment on credit.  
 \_\_\_ **c.** The owner invests cash in the business.  
 \_\_\_ **d.** The owner withdraws cash from the business.  
 \_\_\_ **e.** The company purchases supplies for cash.  
 \_\_\_ **f.** The company provides services for cash.

- Decreases an asset and decreases equity.
- Increases an asset and increases a liability.
- Decreases an asset and decreases a liability.
- Increases an asset and decreases an asset.
- Increases an asset and increases equity.

**Exercise 1-13** Identifying effects of transactions using the accounting equation P1 

Ming Chen began a professional practice on June 1 and plans to prepare financial statements at the end of each month. During June, Ming Chen (the owner) completed these transactions.

- Owner invested \$60,000 cash in the company along with equipment that had a \$15,000 market value.
- The company paid \$1,500 cash for rent of office space for the month.
- The company purchased \$10,000 of additional equipment on credit (payment due within 30 days).
- The company completed work for a client and immediately collected the \$2,500 cash earned.
- The company completed work for a client and sent a bill for \$8,000 to be received within 30 days.
- The company purchased additional equipment for \$6,000 cash.
- The company paid an assistant \$3,000 cash as wages for the month.
- The company collected \$5,000 cash as a partial payment for the amount owed by the client in transaction *e*.
- The company paid \$10,000 cash to settle the liability created in transaction *c*.

j. Owner withdrew \$1,000 cash from the company for personal use.


**Required**

Create the following table similar to the one in [Exhibit 1.9](#).

Assets			=	Liabilities	+	Equity								
Cash	+	Accounts Receivable	+	Equipment	=	Accounts Payable	+	M. Chen, Capital	-	M. Chen, Withdrawals	+	Revenues	-	Expenses

Then use additions and subtractions to show the dollar effects of the transactions on individual items of the accounting equation. Show new balances after each transaction.

**Check** Ending balances: Cash, \$46,000; Expenses, \$4,500

**Exercise 1-14** Analyzing return on assets **A2** 

Swiss Group reports net income of \$40,000 for 2019. At the beginning of 2019, Swiss Group had \$200,000 in assets. By the end of 2019, assets had grown to \$300,000. What is Swiss Group's 2019 return on assets? How would you assess its performance if competitors average an 11% return on assets?

**Exercise 1-15** Preparing an income statement **P2**

On October 1, Ebony Ernst organized Ernst Consulting; on October 3, the owner contributed \$84,000 in assets to launch the business. On October 31, the company's records show the following items and amounts. Use this information to prepare an October income statement for the business.

Cash .....	\$11,360	Cash withdrawals by owner .....	\$ 2,000
Accounts receivable .....	14,000	Consulting revenue .....	14,000
Office supplies .....	3,250	Rent expense .....	3,550
Land .....	46,000	Salaries expense .....	7,000
Office equipment .....	18,000	Telephone expense .....	760
Accounts payable .....	8,500	Miscellaneous expenses .....	580
Owner investments .....	84,000		


**Check** Net income, \$2,110

**Exercise 1-16** Preparing a statement of owner's equity **P2**

Use the information in Exercise 1-15 to prepare an October statement of owner's equity for Ernst Consulting.

**Exercise 1-17** Preparing a balance sheet **P2**

Use the information in Exercise 1-15 to prepare an October 31 balance sheet for Ernst Consulting. *Hint:* The solution to Exercise 1-16 can help.

**Exercise 1-18** Preparing a statement of cash flows **P2** 

Use the information in Exercise 1-15 to prepare an October 31 statement of cash flows for Ernst Consulting. Assume the following additional information.

- The owner's initial investment consists of \$38,000 cash and \$46,000 in land.
- The company's \$18,000 equipment purchase is paid in cash.
- The accounts payable balance of \$8,500 consists of the \$3,250 office supplies purchase and \$5,250 in employee salaries yet to be paid.
- The company's rent, telephone, and miscellaneous expenses are paid in cash.
- No cash has been collected on the \$14,000 consulting fees earned.

**Check** Net increase in cash, \$11,360

**Exercise 1-19** Identifying sections of the statement of cash flows **P2**

Indicate the section (O, I, or F) where transactions 1 through 8 would appear on the statement of cash flows.

**O.** Cash flows from operating activity

**F.** Cash flows from financing activity

**I.** Cash flows from investing activity

- \_\_\_\_\_ 1. Cash purchase of equipment
- \_\_\_\_\_ 2. Cash withdrawal by owner
- \_\_\_\_\_ 3. Cash paid for advertising
- \_\_\_\_\_ 4. Cash paid for wages

- \_\_\_\_\_ 5. Cash paid on account payable to supplier
- \_\_\_\_\_ 6. Cash received from clients
- \_\_\_\_\_ 7. Cash paid for rent
- \_\_\_\_\_ 8. Cash investment by owner

**Exercise 1-20** Preparing an income statement for a company **P2**

**Ford Motor Company**, one of the world's largest automakers, reports the following income statement accounts for the year ended December 31 (\$ in millions). Use this information to prepare Ford's income statement for the year ended December 31.

Selling and administrative costs .....	\$ 12,196	Revenues .....	\$151,800
Cost of sales .....	126,584	Other expenses .....	8,413

**Exercise 1-21<sup>B</sup>** Identifying business activities **C5**

Match each transaction *a* through *e* to one of the following activities of an organization: financing activity (F), investing activity (I), or operating activity (O).

- \_\_\_\_\_ a. An owner contributes cash to the business.
- \_\_\_\_\_ b. An organization borrows money from a bank.
- \_\_\_\_\_ c. An organization advertises a new product.
- \_\_\_\_\_ d. An organization sells some of its land.
- \_\_\_\_\_ e. An organization purchases equipment.

**Exercise 1-22** Preparing an income statement for a company **P2**

**BMW Group**, one of Europe's largest manufacturers, reports the following income statement accounts for the year ended December 31 (euros in millions). Use this information to prepare BMW's income statement for the year ended December 31.

Revenues .....	€75,350	Selling and administrative costs .....	€6,139
Cost of sales .....	60,946	Other expenses .....	4,988

**Exercise 1-23** Using the accounting equation **A1** 

Answer the following questions. *Hint:* Use the accounting equation.

- a. On January 1, Lumia Company's liabilities are \$60,000 and its equity is \$40,000. On January 3, Lumia purchases and installs solar panel assets costing \$10,000. For the panels, Lumia pays \$4,000 cash and promises to pay the remaining \$6,000 in six months. What is the total of Lumia's assets after the solar panel purchase?
- b. On March 1, ABX Company's assets are \$100,000 and its liabilities are \$30,000. On March 5, ABX is fined \$15,000 for failing emission standards. ABX immediately pays the fine in cash. After the fine is paid, what is the amount of equity for ABX?
- c. On August 1, Lola Company's assets are \$30,000 and its liabilities are \$10,000. On August 4, Lola issues a sustainability report following SASB guidelines. Investors react positively to this report. On August 5, a new investor contributes \$3,000 cash and \$7,000 in equipment in exchange for Lola stock. After the investment, what is the amount of equity for Lola?




*This icon highlights sustainability-related assignments*

**PROBLEM SET A**



*Problem Set B, located at the end of Problem Set A, is provided for each problem to reinforce the learning process*

**Problem 1-1A** Identifying effects of transactions on financial statements **A1 P1** 

Identify how each of the following separate transactions 1 through 10 affects financial statements. For increases, place a "+" and the dollar amount in the column or columns. For decreases, place a "-" and the dollar amount in the column or columns. Some cells may contain both an increase (+) and a decrease (-) along with dollar amounts. The first transaction is completed as an example.

**Required**

- a. For the balance sheet, identify how each transaction affects total assets, total liabilities, and total equity. For the income statement, identify how each transaction affects net income.
- b. For the statement of cash flows, identify how each transaction affects cash flows from operating activities, cash flows from

investing activities, and cash flows from financing activities.

	Transaction	a.			b.			
		Balance Sheet		Income Statement	Statement of Cash Flows			
		Total Assets	Total Liab.	Total Equity	Net Income	Operating Activities	Investing Activities	Financing Activities
1	Owner invests \$900 cash in business	+900		+900				+900
2	Receives \$700 cash for services provided							
3	Pays \$500 cash for employee wages							
4	Buys \$100 of equipment on credit							
5	Purchases \$200 of supplies on credit							
6	Buys equipment for \$300 cash							
7	Pays \$200 on accounts payable							
8	Provides \$400 services on credit							
9	Owner withdraws \$50 cash							
10	Collects \$400 cash on accounts receivable							

**Problem 1-2A** Computing missing information using accounting knowledge **A1 P1** 

The following financial statement information is from five separate companies.

	Company A	Company B	Company C	Company D	Company E
December 31, 2018					
Assets .....	\$55,000	\$34,000	\$24,000	\$60,000	\$119,000
Liabilities .....	24,500	21,500	9,000	40,000	?
December 31, 2019					
Assets .....	58,000	40,000	?	85,000	113,000
Liabilities .....	?	26,500	29,000	24,000	70,000
During year 2019					
Owner investments .....	6,000	1,400	9,750	?	6,500
Net income (loss) .....	8,500	?	8,000	14,000	20,000
Owner cash withdrawals .....	3,500	2,000	5,875	0	11,000

**Required**

- Answer the following questions about Company A.
  - What is the amount of equity on December 31, 2018?
  - What is the amount of equity on December 31, 2019?
  - What is the amount of liabilities on December 31, 2019?

**Check (1b)** \$41,500

- Answer the following questions about Company B.
  - What is the amount of equity on December 31, 2018?
  - What is the amount of equity on December 31, 2019?
  - What is net income for year 2019?

**(2c)** \$1,600

- Compute the amount of assets for Company C on December 31, 2019.
- Compute the amount of owner investments for Company D during year 2019.
- Compute the amount of liabilities for Company E on December 31, 2018.

**(3)** \$55,875

**Problem 1-3A** Preparing an income statement **P2**

As of December 31, 2019, Armani Company's financial records show the following items and amounts.



Cash.....	\$10,000	A. Armani, Withdrawals .....	\$13,000
Accounts receivable.....	9,000	Consulting revenue .....	33,000
Supplies.....	6,000	Rental revenue .....	22,000
Equipment.....	5,000	Salaries expense.....	20,000
Accounts payable .....	11,000	Rent expense .....	12,000
A. Armani, Capital, Dec. 31, 2018.....	16,000	Selling and administrative expenses.....	8,000
A. Armani, Capital, Dec. 31, 2019.....	19,000		

### Required

Prepare the 2019 year-end income statement for Armani Company.

**Check** Net income, \$15,000

### Problem 1-4A Preparing a statement of owner's equity P2

Use the information in Problem 1-3A to prepare a year-end statement of owner's equity for Armani Company. *Note:* The owner invested a total of \$1,000 cash during the year.

### Problem 1-5A Preparing a balance sheet P2

Use the information in Problem 1-3A to prepare a year-end balance sheet for Armani Company.

### Problem 1-6A Preparing a statement of cash flows P2

Following is selected financial information of Kia Company for the year ended December 31, 2019.

Cash used by investing activities.....	\$(2,000)	Cash from operating activities.....	\$6,000
Net increase in cash.....	1,200	Cash, December 31, 2018.....	2,300
Cash used by financing activities.....	(2,800)		

### Required

Prepare the 2019 year-end statement of cash flows for Kia Company.

**Check** Cash balance, Dec. 31, 2019, \$3,500

### Problem 1-7A Analyzing transactions and preparing financial statements P1 P2

Gabi Gram started The Gram Co., a new business that began operations on May 1. The Gram Co. completed the following transactions during its first month of operations.

- May 1 G. Gram invested \$40,000 cash in the company.
- 1 The company rented a furnished office and paid \$2,200 cash for May's rent.
- 3 The company purchased \$1,890 of office equipment on credit.
- 5 The company paid \$750 cash for this month's cleaning services.
- 8 The company provided consulting services for a client and immediately collected \$5,400 cash.
- 12 The company provided \$2,500 of consulting services for a client on credit.
- 15 The company paid \$750 cash for an assistant's salary for the first half of this month.
- 20 The company received \$2,500 cash payment for the services provided on May 12.
- 22 The company provided \$3,200 of consulting services on credit.
- 25 The company received \$3,200 cash payment for the services provided on May 22.
- 26 The company paid \$1,890 cash for the office equipment purchased on May 3.
- 27 The company purchased \$80 of office equipment on credit.
- 28 The company paid \$750 cash for an assistant's salary for the second half of this month.
- 30 The company paid \$300 cash for this month's telephone bill.
- 30 The company paid \$280 cash for this month's utilities.
- 31 G. Gram withdrew \$1,400 cash from the company for personal use.

### Required

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1. Create the following table similar to the one in [Exhibit 1.9](#).

Date	Assets				=	Liabilities		+	Equity							
	Cash	+	Accounts Receivable	+		Office Equipment	=		Accounts Payable	+	G. Gram, Capital	-	G. Gram, Withdrawals	+	Revenues	-

Enter the effects of each transaction on the accounts of the accounting equation by recording dollar increases and decreases in the appropriate columns. Do not determine new account balances after each transaction. Determine the final total for each account and verify that the equation is in balance.

**Check** (1) Ending balances: Cash, \$42,780; Expenses, \$5,030

2. Prepare the income statement and the statement of owner's equity for the month of May, and the balance sheet as of May 31.

(2) Net income, \$6,070; Total assets, \$44,750