

PART 1

FINANCIAL REPORTING, PLANNING, PERFORMANCE, AND CONTROL





## Wiley CMAexcel Learning System Exam Review 2016

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# Wiley CMAexcel Learning System Exam Review 2016

## **Self-Study Guide**

Part 1: Financial Reporting, Planning, Performance, and Control



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## **Contents**

Acknowled	lgments of Subject Matter Experts	i
Candidate	Study Information	Х
How to Use	e the Wiley CMAexcel Learning System	Х
Create a St	udy Plan	xix
Introduction	on	1
Section Externa	A al Financial Reporting Decisions	3
Topic 1:	Financial Statements	25
Topic 2:	Recognition, Measurement, Valuation, and Disclosure	45
Practice Qu	uestions: External Financial Reporting Decisions	127
Section Plannin	B ng, Budgeting, and Forecasting	135
Topic 1:	Strategic Planning	157
Topic 2:	Budgeting Concepts	197
Topic 3:	Forecasting Techniques	215
Topic 4:	Budgeting Methodologies	231
Topic 5:	Annual Profit Plan and Supporting Schedules	243
Topic 6:	Top-Level Planning and Analysis	267
Practice Qu	uestions: Planning, Budgeting, and Forecasting	285

Section Perforn	C nance Management	295
Topic 1:	Cost and Variance Measures	311
Topic 2:	Responsibility Centers and Reporting Segments	331
Topic 3:	Performance Measures	343
Practice Qu	uestions: Performance Management	371
Section Cost Ma	D nagement	381
Topic 1:	Measurement Concepts	401
Topic 2:	Costing Systems	425
Topic 3:	Overhead Costs	453
Topic 4:	Supply Chain Management	471
Topic 5:	Business Process Improvement	491
Practice Qu	uestions: Cost Management	509
Section Interna	E Il Controls	521
Topic 1:	Governance, Risk, and Compliance	537
Topic 2:	Internal Auditing	565
Topic 3:	Systems Controls and Security Measures	585
Practice Qu	uestions: Internal Controls	605
Essay Ex	kam Support Materials	611
Essay Exan	n Study Tips	615
Examples	of Essay Question Answers	617
Practice Es	say Questions and Answers	627

Answers to Section Practice Questions	709
Appendix A: ICMA Learning Outcome Statements—Part 1	775
Bibliography and References	791
Index of Learning Outcome Statements	795
Index	815

Contents

vii

## Acknowledgments of Subject Matter Experts

he Wiley CMAexcel Learning System (WCMALS) content is written to help explain the concepts and calculations from the Certified Management Accountant (CMA) exam Learning Outcome Statements (LOS) published by the Institute of Certified Management Accountants (ICMA).

Wiley would like to acknowledge the team of subject matter experts who worked with us to produce this version of the WCMALS. IMA would like to acknowledge the team of subject matter experts who worked together in conjunction with IMA staff to produce this version of the WCMALS.

Dave Brunn, CMA, CPA, is fortunate to have enjoyed two careers. He was a partner in the consulting division of Arthur Andersen & Co. and was with Andersen for more than 30 years. In the early 1980s, he was responsible for the division's Cost Management practice worldwide. Since 1993, he has been a faculty member at Carthage College in Kenosha, WI. He was the College's Distinguished Professor of the Year in 1999. He has served two terms on the Faculty Executive Committee and served as its Chair for one year. He has been the Rogers Palmer Distinguished Professor of Business Administration. He has been an IMA member since 1997 and is a member of the Northwest Suburban Chicago chapter. Since his retirement from full-time teaching in 2013, he has started a CMA review course at Carthage, serving both undergraduate students and working professionals. He has seen two of his students become CMAs and expects to see several more become CMAs in the next few months. Finally, he has taught about 40 sections at the MBA level with the Lake Forest Graduate School of Management.

**Anthony Griffin, CMA,** is the controller for Dayton Aerospace, Inc., a senior management consulting firm specializing in defense acquisition and logistics support for government and industry customers. Griffin has been actively involved in supporting the IMA and the CMA certification by serving as a board member and president of his local IMA chapter, and by organizing and leading several CMA review courses in the Dayton, Ohio, area.

**Ann Medinets** received her MBA and Ph.D. from Rutgers University. Her research interests include shareholder rights, corporate social responsibility reporting, the auditor-client relationship, and resource allocation decisions.

**S. Rao Vallabhaneni** is an educator, author, publisher, consultant, and practitioner in the business field with more than 30 years of management experience in manufacturing, finance, accounting, auditing, consulting, and information technology fields. His diversified experience covers private companies, public sector organizations, and academia. He holds 24 professional certifications in the business field and is the author of more than 60 books in trade, study guides, and review materials to prepare for various professional certification exams in business. He is a John Wiley author for the CIA Exam Review products and for the Corporate Management, Governance, and Ethics Best Practices book.

John M. Wachowicz, Jr., CPA, is Professor and the Regions Bank Scholar in Banking and Finance at The University of Tennessee, Knoxville. He has received seventeen teaching, research, and service awards, including three MBA Outstanding Faculty Awards, the L.R. Hesler Award for Excellence in Teaching and Service, and two Alumni Outstanding Teacher Awards. John is co-author with Professor James Van Horne of Stanford University of *Fundamentals of Financial Management*, 13th ed., FT/Pearson Education Ltd. (2009). John received his Ph.D. in Finance from the University of Illinois.

Ray Whittington is the dean of the College of Commerce and Kellstadt Graduate School of Management at DePaul University. He also served as the Director of the School of Accountancy & MIS at DePaul University. Prior to joining the faculty at DePaul, he was the Director of the School of Accountancy at San Diego State University. From 1989 through 1991, Ray was the Director of Auditing Research for the American Institute of Certified Public Accountants (AICPA), and he previously was on the audit staff of KPMG. Ray was a member of Auditing Standards Board of the AICPA (1998–2002). He has also served as a member of the Accounting and Review Services Committee of the AICPA, the Board of Regents of the Institute of Internal Auditors, the board of directors of the Graduate Management Admissions Council, and chairman of the Auditing Standards Committee of the Auditing Section of the American Accounting Association. His research has been published in Auditing: A Journal of Practice and Theory, Journal of Accounting Research, The Accounting Review, Accounting Horizons, Abacus, The Journal of Accountancy, The Journal of Accounting, Auditing, and Finance, and Financial Executive. Ray also has authored a number of textbooks and monographs, and edits the CPA excel CPA Review Manuals.

## **Candidate Study Information**

## CMA Certification from ICMA

The Certified Management Accountant (CMA) certification provides accountants and financial professionals with an objective measure of knowledge and competence in the field of management accounting. The CMA designation is recognized globally as an invaluable credential for professional accountancy advancement inside organizations and for broadening professional skills and perspectives.

The two-part CMA exam is designed to develop and measure critical thinking and decision-making skills and to meet these objectives:

- To establish management accounting and financial management as recognized professions by identifying the role of the professional, the underlying body of knowledge, and a course of study by which such knowledge is acquired.
- To encourage higher educational standards in the management accounting and financial management fields.
- To establish an objective measure of an individual's knowledge and competence in the fields of management accounting and financial management.
- To encourage continued professional development.

Individuals earning the CMA designation benefit by being able to:

- Communicate their broad business competency and strategic financial mastery.
- Obtain contemporary professional knowledge and develop skills and abilities that are valued by successful businesses.
- Convey their commitment to an exemplary standard of excellence that is grounded on a strong ethical foundation and lifelong learning.
- Enhance their career development, salary qualifications, and professional promotion opportunities.

The CMA certification is granted exclusively by the Institute of Certified Management Accountants (ICMA).

## **CMA Learning Outcome Statements (LOS)**

The Certified Management Accountant exam is based on a series of Learning Outcome Statements (LOS) developed by the Institute of Certified Management Accountants (ICMA). The LOS describes the knowledge and skills that make up the CMA body of knowledge, broken down by part, section, and topic. The Wiley CMAexcel Learning System (WCMALS) supports the LOS by addressing the subjects they cover. Candidates should use the LOS to ensure they can address the concepts in different ways or through a variety of question scenarios. Candidates should also be prepared to perform calculations referred to in the LOS in total or by providing missing components of a calculation. The LOS should not be used as proxies for exact exam questions; they should be used as a guide for studying and learning the content that will be covered on the exam.

A copy of the ICMA Learning Outcome Statements is included in Appendix A at the end of this book. Candidates are also encouraged to visit the IMA Web site to find other exam-related information at www.imanet.org.

#### **CMA Exam Format**

The content tested on the CMA exams is at an advanced level—which means that the passing standard is set for mastery, not minimum competence. Thus, there will be test questions for all major topics that require the candidate to synthesize information, evaluate a situation, and make recommendations. Other questions will test subject comprehension and analysis. However, compared to previous versions, this CMA exam will have an increased emphasis on the higher-level questions.

The content is based on a series of LOS that define the competencies and capabilities expected of a management accountant.

There are two exams, taken separately: Part 1: Financial Reporting, Planning, Performance, and Control; and Part 2: Financial Decision Making. Each exam is four hours in length and includes multiple-choice and essay questions. One hundred multiple-choice questions are presented first, followed by two essay questions. All of these questions—multiple-choice and essay—can address any of the LOS for the respective exam part. Therefore, your study plan should include learning the content of the part as well as practicing how to answer multiple-choice and essay questions against that content. The study plan tips and the final section of this WCMALS book contain important information to help you learn how to approach the different types of questions.

## **Note on Candidate Assumed Knowledge**

The CMA exam content is based on a set of assumed baseline knowledge that candidates are expected to have. Assumed knowledge includes economics, basic statistics,

and financial accounting. Examples of how this assumed knowledge might be tested in the exam include:

- How to calculate marginal revenue and costs as well as understand the relevance of market structures when determining prices
- How to calculate variance when managing financial risk
- How to construct a cash flow statement as part of an analysis of transactions and assess the impact of the transactions on the financial statements

Please note that prior courses in accounting and finance are highly recommended to ensure this knowledge competency when preparing for the exam.

## **Overall Expectations for the CMA Candidates**

Completing the CMA exams requires a high level of commitment and dedication of up to 150 hours of study for each part of the CMA exam. Completing the two-part exam is a serious investment that will reap many rewards, helping you to build a solid foundation for your career, distinguish yourself from other accountants, and enhance your career in ways that will pay dividends for a lifetime.

Your success in completing these exams will rest heavily on your ability to create a solid study plan and to execute that plan. IMA offers many resources, tools, and programs to support you during this process—the exam content specifications, assessment tools to identify the content areas you need to study most, comprehensive study tools such as the Online Test Bank, classroom programs, and online intensive review courses. We encourage you to register as a CMA candidate as soon as you begin the program to maximize your access to these resources and tools and to draw on these benefits with rigor and discipline that best supports your unique study needs. We also suggest candidates seek other sources if further knowledge is needed to augment knowledge and understanding of the ICMA LOS.

For more information about the CMA certification, the CMA exams, or the exam preparation resources offered through IMA, visit www.imanet.org.

## **Updates and Errata Notification**

Please be advised that our materials are designed to provide thorough and accurate content with a high level of attention to quality. From time to time there may be clarifications, corrections, or updates that are captured in an Updates and Errata Notification.

To ensure you are kept abreast of changes, this notification will be available on Wiley's CMA update and errata page. You may review these documents by going to Wiley.com/go/cmaerrata.

# How to Use the Wiley CMAexcel Learning System

his product is based on the CMA body of knowledge developed by the Institute of Certified Management Accountants (ICMA). This material is designed for learning purposes and is distributed with the understanding that the publisher and authors are not offering legal or professional services. Although the text is based on the body of knowledge tested by the CMA exam and the published Learning Outcome Statements (LOS) covering the two-part exams, the Wiley CMAexcel Learning System (WCMALS) program developers do not have access to the current bank of exam questions. It is critical that candidates understand all LOS published by the ICMA, learn all concepts and calculations related to those statements, and have a solid grasp of how to approach the multiple-choice and essay exams in the CMA program.

Some exam preparation tools provide an overview of key topics; others are intended to help you practice one specific aspect of the exams such as the questions. The WCMALS is designed as a comprehensive exam preparation tool to help you study the content from the exam LOS, learn how to write the CMA exams, and practice answering exam-type questions.

## **Study the Book Content**

The **table of contents** is set up using the CMA exam content specifications established by ICMA. Each section, topic, and subtopic is named according to the content specifications and the **Learning Outcome Statements** (**LOS**) written to correspond to these specifications. As you go through each section and major topic, refer to the related LOS found in Appendix A. Then review the WCMALS book content to help learn the concepts and formulas covered in the LOS.

The **Learning Outcome Statements Overviews** provide a quick reference to the LOS as well as key points to remember within them. These sections should not replace the in-depth discussion of the material that is in this book. However, these overviews do serve as a refresher on what has been learned and can be used as a tool to reinforce the knowledge that you have obtained.

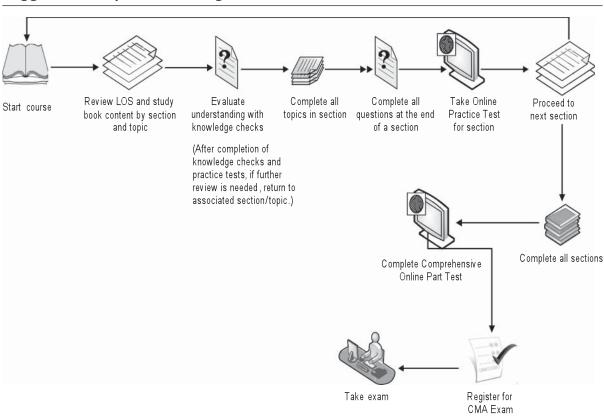
The **knowledge checks** are designed to be quick checks to verify that you understand and remember the content just covered by presenting questions and correct

answers. The answers refer to the appropriate sections in the book for you to review the content and find the answer yourself.

The **practice questions** are a sampling of the type of exam questions you will encounter on the exam and are considered complex and may involve extensive written and/or calculation responses. Use these questions to begin applying what you have learned, recognizing there is a much larger sample of practice questions available in the Online Test Bank (described in the next section).

The WCMALS also contains a **bibliography and references** in case you need to find more detailed content on an LOS. We encourage you to use published academic sources. While information can be found online, we discourage the use of open-source, unedited sites such as Wikipedia.

## **Suggested Study Process Using the WCMALS**



## **WCMALS Book Features**

The WCMALS books use a number of features to draw your attention to certain types of content:

**Key terms** are **bolded** where they appear in the text with their definition, to allow you to quickly scan through and study them.



**Key formulas** are indicated with this icon. Be sure you understand these formulas and practice applying them.



**Knowledge checks** at the end of each topic are review questions that let you check your understanding of the content just read. (They are not representative of the type of questions that appear on the exam.)



Study tips offer ideas and strategies for studying and preparing for the exam.



**Practice questions** are examples of actual exam questions. Presented at the end of each section, these questions help you solidify your learning of that section and apply it to the type of questions that appear on the exam.



**LOS icons** appear in the body of the Sections to highlight where we address each Learning Outcome Statement within the text.

## **Online Test Bank**

Included with your purchase of the Wiley CMAexcel Learning System Part 1 book is an Online Test Bank made available to you through www.wileycma.com. This test bank includes **five section-specific tests** that randomize questions from a selected section only. The course also includes **a comprehensive Part 1 test** that emulates the percentage weighting of each section on the actual Part 1 exam. All questions are drawn from a bank of more than 800 questions, so that each time you repeat the test, you will receive a different set of questions covering all the topics in the section. All the multiple-choice questions provide feedback in response to your answers.

It is suggested that you integrate the Online Test Bank throughout your study program instead of leaving them until the end. The section-specific tests are designed for you to practice questions related to the section content—read and learn a section and then practice the online questions related to the section. This also will help you identify whether further study of the section content is required before moving to the next section.

The comprehensive Part 1 test is designed to help you simulate taking the actual CMA exam. Try the comprehensive Part 1 test after you have studied all the Part 1 content. You can take this exam multiple times. Each time you will receive a different combination of questions. It is recommended that you set up your own exam simulation—set aside four hours in a room without interruption, do not have any reference books open, and work through the comprehensive part exam as if you were taking the real exam. This will prepare you for the exam setting and give you a good idea of how ready you are.

In addition, sample essay questions are provided that simulate the testing environment. The correct answer is provided which will enable you to self-score your answer.

You are strongly encouraged to make full use of all online practice and review features as part of your study efforts. Please note that these features are subscription based and available only for a specific number of months from the time of registration.

## **Learn to Write the CMA Exam**

The four-hour CMA exam will test your understanding of each part's content using both multiple-choice and essay questions. This means you must learn to write two types of tests in one sitting. The WCMALS books contain tips, instruction, and examples to help you learn to write an essay exam. Be sure to study the Essay Exam Support Materials section so that in addition to practicing with the Online Test Bank, you also learn to respond to the part content in essay format.

## **Create a Study Plan**

ach part of the two-part CMA exam uses a combination of a multiple-choice format and an essay format to test your understanding of the part concepts, terms, and calculations. Creating a study plan is an essential ingredient to planning a path to success. Managing your plan is critical to achieving success. The next tips and tactics are included to help you prepare and manage your study plan.

## **Study Tips**

There are many ways to study, and the plan you create will depend on things such as your lifestyle (when and how you can schedule study time), your learning style, how familiar you are with the content, and how practiced you are at writing a formal exam. Only you can assess these factors and create a plan that will work for you. Some suggestions that other exam candidates have found helpful follow.

- Schedule regular study times and stay on schedule.
- Avoid cramming by breaking your study times into small segments. For example, you may want to work intensely for 45 minutes with no interruptions, followed by a 15-minute break during which time you do something different. You may want to leave the room, have a conversation, or exercise.
- When reading, highlight key ideas, especially unfamiliar ones. Reread later to ensure comprehension.
- Pay particular attention to the terms and equations highlighted in this book, and be sure to learn the acronyms in the CMA body of knowledge.
- Create personal mnemonics to help you memorize key information. For example, CCIC to remember the four ethical standards: Competence, Confidentiality, Integrity, and Credibility.
- Create study aids such as flash cards.
- Use index cards, and write a question on one side and the answer on the other. This helps reinforce the learning because you are writing the information as well as reading it. Examples: What is \_\_\_\_\_? List the five parts of \_\_\_\_\_.
- In particular, make flash cards of topics and issues that are unfamiliar to you, key terms and formulas, and anything you highlighted while reading.
- Keep some cards with you at all times to review when you have time, such as in an elevator, while waiting for an appointment, and so on.

- Use a flash card partner. This person does not need to understand accounting. He or she only needs the patience to sit with you and read the questions off the flash card.
- As test time approaches, start to eliminate the questions you can easily answer from your stack so you can concentrate on the more challenging topics and terms.
- If particular topics are difficult, tap into other resources, such as the Internet, library, accountant colleagues, or professors, to augment your understanding.
- Use your study plan—treat it as a living document and update it as you learn more about what you need to do to prepare for the exam.
- Use the knowledge checks in the book to assess how well you understand the content you just completed.
- Use the Online Test Bank to test your ability to answer multiple-choice practice questions on each section's content as you finish it. After completing the first 40 questions presented, review areas in the book that you were weak on in the practice test. Then try the section test again.
- Be sure to learn how to take a multiple-choice question exam—there are many online resources with tips and guidance that relate to answering multiplechoice exams.
  - Make an attempt to answer all questions. There is no penalty for an incorrect answer—if you don't try, even when you are uncertain, you eliminate the potential of getting a correct answer.
  - Create your own "simulated" multiple-choice trial exam using the full Part 1 Online Practice Test.
- Learn to write an effective essay answer.
  - Use the Essay Exam Support Materials section of this book. This content shows a sample grading guide and includes a sample of a good, a better, and a best answer in addition to some helpful tips for writing an essay answer.
  - Learn how points are awarded for an essay answer so that you can ensure you get the most points possible for your answers, even when you are very challenged by a question.
  - Practice essay responses using the questions in this WCMALS book as well as the Online Test Bank.
- Be sure to access the Online Test Bank and its Essay Questions until you are comfortable with the content.

Ensure you are both well rested and physically prepared for the exam day as each exam is four hours in length with no break for meals. Learning how to answer a multiple-choice and essay exam and being mentally and physically prepared can improve your grade significantly. Know the content and be prepared to deal with challenges with a focused, confident, and flexible attitude.

## Introduction

elcome to Part 1: Financial Reporting, Planning, Performance, and Control of the Wiley CMAexcel Learning System.

This Part 1 textbook is composed of five sections:

- **Section A: External Financial Reporting Decisions** covers the four financial statements (balance sheet, income statement, statement of changes in equity, and statement of cash flows) as well as recognition, measurement, valuation, and disclosure concepts.
- **Section B: Planning, Budgeting, and Forecasting** looks at basic budgeting concepts and forecasting techniques that provide the information a company can use to execute its strategy and pursue its short- and long-term goals.
- **Section C: Performance Management** deals with the methods of comparing actual financial performance to the budget. It also describes tools that incorporate both financial and nonfinancial measures to aid an organization in matching its planning to its overall strategy.
- **Section D: Cost Management** describes various costing systems that can be used to monitor a company's costs and provide management with information it needs to manage the company's operations and performance.
- **Section E: Internal Controls** begins with a discussion of the assessment and management of risk. Understanding risk provides the basis for internal auditing activities and the means of ensuring the security and reliability of the information on which the company bases its decisions.

Many of these subjects, tested in the Part 1 CMA exam, provide a foundation for the concepts and methodologies that will be the subject of the Part 2 exam.

# **External Financial Reporting Decisions**

o perform their duties, management accountants must understand the four external financial statements—the balance sheet, income statement, statement of changes in equity, and statement of cash flows—and the concepts underlying these statements. Concepts underlying the four financial statements include recognition, measurement, valuation, and disclosure as well as an understanding of the key differences between U.S. generally accepted accounting principles (GAAP) and International Financial Reporting Standards (IFRS).

Topics covered in this section include the financial statements themselves, asset and liability valuation, income taxes, lease, equity transactions, revenue and expense recognition, income measurement and determination, and U.S. GAAP and IFRS differences.

## Learning Outcome Statements Overview: External Financial Reporting Decisions

Note: within the Overview section below, each LOS appears in bold followed by a brief review of the material. In the body of the Section, we address all LOSs in greater depth. Readers can identify them with the LOS icon in the margin.

#### Section A.1. Financial Statements

For the balance sheet, income statement, statement of changes in equity, and the statement of cash flows, the candidate should be able to:

#### a. Identify the users of these financial statements and their needs.

- A. The users of financial statements are the following:
  - Investors
  - Employees
  - Lenders
  - Trade creditors
  - Customers
  - Governments and governmental agencies
  - The public

Investors require information to help them to decide whether to buy, sell, or hold an interest in a corporation. Shareholders require information regarding the corporation's ability to pay dividends. Employees are interested in the stability, sustainability, and profitability of employer organizations. Lenders need to assess the borrower's ability to pay debts in full and on time. Trade creditors need information to determine whether they should sell on credit and whether amounts owed them will be paid. Customers require information regarding the organization's continuity and sustainability. Governments and their agencies need information to regulate organizational activities, to determine tax policies, and for national income statistics. The public requires information on an organization's contributions to the local community and its development.

## b. Demonstrate an understanding of the purposes and uses of each statement.

A. The purpose of the balance sheet is to show the financial position (assets and claims on those assets) of an organization at a point in time. The income statement shows the results of operations (revenues and gains less expenses, losses, and taxes) for an organization for a period of time (fiscal period). The statement of changes in equity shows the changes in capital received and retained earnings for a fiscal period. Changes in capital received include the issuance and repurchase of shares. Changes in retained earnings include net income and dividends for the period. The statement of cash flow presents the change in cash and cash equivalents, which are classified as operations, investing, or financing.

## c. Identify the major components and classifications of each statement.

#### A. Balance sheet

- i. Current assets—Assets that may be converted into cash, sold, or consumed within a year or operating cycle, whichever is longer.
- ii. Long-term assets—Assets that are not expected to be converted to cash, sold, or consumed within a year or operating cycle, whichever is longer.
- iii. Current liabilities—Debts that are due to be paid within a year or operating cycle, whichever is longer.
- iv. Long-term liabilities—Debts that are to be paid at some date beyond the longer of one year or one operating cycle.
- v. Shareholder's equity—Represents investments from shareholders and retained earnings. Represents shareholders' interest in the net assets of the company.

#### B. Income statement

- i. Sales—Total sales (revenues) from the ordinary course of business.
- ii. Cost of goods sold—Direct costs related to the product sold or service rendered.
- iii. Operating expenses—Other necessary and ordinary expenses of a company that are not included in cost of goods sold.
- iv. Other revenues and expenses—Other inflows and outflows not related directly to operations.
- v. Taxes—Tax liability incurred in connection with the reported income.

#### C. Statement of cash flows

- i. Operating activities—Cash flows related to the normal course of business; cash from customers; cash paid to employees, suppliers, vendors, and interest paid on debt.
- ii. Investing activities—Cash flows related to long-term asset accounts; sale and purchase of property, plant, and equipment, intangibles, and investments.
- iii. Financing activities—Cash flows related to long-term liability or equity accounts; inflows from issuance of debt or stock, outflows from payment of debt, reacquisition of treasury stock, and payment of dividends to shareholders.

- D. Statement of changes in shareholders' equity
   Beginning Equity + New Investments + Net Income Dividends = Ending Equity
- d. Identify the limitations of each financial statement.
  - A. All four of the statements are limited by the use of historical costs, the use of different accounting principles and methods, estimates, and judgments. The balance sheet in particular excludes human capital and liabilities that are handled off balance sheet.
- e. Identify how various financial transactions affect the elements of each of the financial statements, and determine the proper classification of the transaction.
  - A. Financial transactions and their classification on financial statements are covered in Topic 2: Recognition, Measurement, Valuation, and Disclosure.
- f. Identify the basic disclosures related to each of the statements (footnotes, supplementary schedules, etc.).
  - A. The footnotes or disclosures to financial statements are used when parenthetical explanations would not suffice to describe situations particular to the entity. Typical disclosures include contingencies, contractual situations, accounting policies, and subsequent events.
- g. Demonstrate an understanding of the relationship among the financial statements.
  - A. The four financial statements are integrally related. The balance sheet is connected to the income statement (net income) through the change in retained earnings shown in the statement of changes in shareholders' equity. The balance sheet change in cash and other changes in financial position are presented in the statement of cash flow. Changes in capital received in the balance sheet are shown in the statement of changes in shareholders' equity.
- h. Prepare a balance sheet, an income statement, a statement of changes in equity, and a statement of cash flows (indirect method).
  - A. Balance sheet

## Robin Manufacturing Company Balance Sheet December 31, Year 1

Assets	
Current assets:	
Cash and short-term investments	\$24,628
Trade receivables, net of \$30K allowance	552,249
Other receivables	18,941
Note receivable—related party	80,532
Inventory	252,567
Prepaid insurance	<u>7,500</u>
Total current assets	936,417

Fixed assets:	
Property and equipment	209,330
Less: Accumulated depreciation	(75,332)
Net fixed assets	133,998
Total assets	\$1,070,415
Liabilities and Equity	
Current liabilities	\$175,321
Accounts payable	2,500
Accrued expenses	
Current portion of long-term debt	36,000
Line of credit	<u>145,000</u>
Total current liabilities	358,821
Long-term debt	<u>117,343</u>
Total current and long-term liabilities	476,164
Shareholders' equity:	
Common stock, par	25,680
Additional paid-in capital	360,320
Retained earnings	208,251
Total shareholders' equity	594,251
Total liabilities and shareholders' equity	<u>\$1,070,415</u>

#### B. Income statement

## Robin Manufacturing Company Income Statement For the Year Ended December 31, Year 1 (Y1)

income statement for the real Ended December 31, real 1 (11)				
Sales Revenue				
Sales			\$2,808,835	
Less: Sales discounts		\$22,302		
Less: Sales returns and allowances		<u>51,913</u>	74,215	
Net sales revenue			2,734,620	
Cost of Goods Sold				
Merchandise inventory, Jan. 1, Y1		424,321		
Purchases	\$1,830,518			
Less: Purchase discounts	<u>17,728</u>			
Net purchases	1,812,790			
Freight and transportation—in	37,363	<u>1,850,153</u>		
Total merchandise available for sale		2,274,474		
Less: Merchandise inventory, Dec. 31, Y1		450,536		
Cost of goods sold			<u>\$1,823,938</u>	
Gross profit on sales			910,682	
Operating Expenses				
Selling expenses				
Sales salaries and commissions	186,432			
Sales office salaries	54,464			

Travel and entertainment	45,025		
Advertising expense	35,250		
Freight and transportation—out	37,912		
Shipping supplies and expense	22,735		
Postage and stationery	15,445		
Depreciation of sales equipment	8,285		
Telephone and Internet expense	<u>11,238</u>	416,786	
Administrative expenses			
Officers' salaries	171,120		
Office salaries	56,304		
Legal and professional services	21,823		
Utilities expense	21,413		
Insurance expense	15,667		
Building depreciation	16,614		
Office equipment depreciation	14,720		
Stationery, supplies, and postage	2,645		
Miscellaneous office expenses	<u>2,403</u>	322,709	<u>739,495</u>
Income from operations			171,187
Other Revenues and Gains			
Dividend revenue		90,620	
Rental revenue		<u>67,077</u>	<u>157,697</u>
			328,884
Other Expenses and Losses			
Interest on bonds and notes			<u>115,975</u>
Income before income tax			212,909
Income tax			<u>61,579</u>
Net income for the year			<u>\$151,330</u>
Earnings per common share			<u>\$1.89</u>

## C. Statement of cash flows

#### Statement of Cash Flows—Indirect Method

Operating Activities	
Net income	\$151,330
Adjustments to convert net income to a cash basis:	
Depreciation and amortization charges*	75,332
Decrease (increase) in accounts receivable	(31,445)
Increase (decrease) in merchandise inventory	(4,165)
Increase (decrease) in accounts payable	6,740
Increase (decrease) in accrued wages and salaries payable	4,543