GLEIM®

2022 EDITION

CMA REVIEW

PART 1:
FINANCIAL PLANNING, PERFORMANCE, AND ANALYTICS

GLEIM® CMA REVIEW | ima® Strategic Partner

by

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and

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A PERSONAL THANKS

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A MESSAGE FROM OUR AUTHORS

In 1981, we set out with one mission: to help you prepare to pass the CMA exam. We were the first CMA Review course and our goal was to provide an affordable, effective, and easy-to-use study program. While the delivery and technology have changed over the years, our mission and the core learning techniques that we have perfected over the last 40+ years remain the same. Our course

1. Explains how to maximize your score through learning strategies and exam-taking techniques.
2. Defines the subject matter tested on Part 1 of the CMA exam.
3. Outlines all of the Part 1 subject matter tested in 20 easy-to-use study units, including all relevant authoritative pronouncements.
4. Presents multiple-choice and essay questions taken or modeled from CMA examinations to prepare you for the types of questions you will find on your CMA exam.
   a. Our answer explanations are presented to the immediate right of each multiple-choice question for your convenience. Use a piece of paper to cover our detailed explanations as you answer the question and then review all answer choices to learn why the correct one is correct and why the other choices are incorrect.
   b. You also should practice answering these questions through our online platform, which mimics Prometric's user interface, so you are comfortable answering questions online like you will do on test day. Our adaptive course will focus and target your weak areas.

The outline structure, the spacing, and the question-and-answer formats in this book are designed to facilitate readability, learning, understanding, and success on the CMA exam. Our most successful candidates use the Gleim Premium CMA Review System, which includes our innovative SmartAdapt technology, first-of-their-kind Gleim Instruct video lectures, the Gleim Access Until You Pass guarantee, and comprehensive exam-emulating test questions.

This review book and all Gleim CMA Review materials comprehensively cover the ICMA's Content Specification Outlines and Learning Outcome Statements. Note that, with over 40 years of experience, we teach CSO Section D, Cost Management, before Section B, Planning, Budgeting, and Forecasting, and Section C, Performance Management, because there is foundational knowledge that needs to be acquired in cost accounting before tackling other topics. Also, we cover Integrated Reporting at the end, rather than in the middle, of Section A, External Financial Reporting Decisions.

To maximize the efficiency and effectiveness of your CMA preparation, start by reviewing the *CMA Exam Guide: A System for Success*, which has been carefully written and organized to provide important information to assist you in passing the CMA exam.

Thank you for trusting us with your CMA studies. We appreciate any and all feedback from candidates like you. Please go to www.gleim.com/feedbackCMA1 to share suggestions on how we can improve this edition.

We want your feedback immediately after you take the exam and receive your exam scores. The CMA exam is a nondisclosed exam, which means you must maintain the confidentiality of the exam by not divulging the nature or content of any CMA question or answer under any circumstances. We ask only for information about our materials and any improvements that can be made regarding topics that need to be added or expanded or areas that need more emphasis.

Gleim continues to celebrate 40+ years of being the leading CMA Review course. We want to thank, on behalf of our entire team, every candidate who has trusted us to help them pass the CMA exam and achieve career success.

Good Luck on the Exam,

Irvin N. Gleim
Dale L. Flesher

ACCOUNTING TITLES FROM GLEIM PUBLICATIONS

CMA Review:

- Part 1: Financial Planning, Performance, and Analytics
- Part 2: Strategic Financial Management

CIA Review:

- Part 1: Essentials of Internal Auditing
- Part 2: Practice of Internal Auditing
- Part 3: Business Knowledge for Internal Auditing

CPA Review:

- Auditing & Attestation (AUD)
- Business Environment & Concepts (BEC)
- Financial Accounting & Reporting (FAR)
- Regulation (REG)

EA Review:

- Part 1: Individuals
- Part 2: Businesses
- Part 3: Representation, Practices and Procedures

Exam Questions and Explanations (EQE) Series:

- Auditing & Systems
- Business Law & Legal Studies
- Cost/Managerial Accounting
- Federal Tax
- Financial Accounting

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WE MAKE IT EASIER TO KEEP
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Updates for the 2022 edition are
available until the next edition is released.

PREPARING FOR AND TAKING THE CMA EXAM

READ THE *CMA EXAM GUIDE: A SYSTEM FOR SUCCESS*

Access the free Gleim ***CMA Exam Guide*** at www.gleim.com/PassCMA and reference it as needed throughout your studying process to obtain a deeper understanding of the CMA exam. This booklet is your system for success.

OVERVIEW OF THE CMA EXAMINATION

The total exam is 8 hours of testing. It is divided into two parts, as follows:

Part 1 – Financial Planning, Performance, and Analytics
Part 2 – Strategic Financial Management

Each part consists of 100 multiple-choice questions and 2 essay scenarios, and testing lasts 4 hours (3 hours for the multiple-choice questions plus 1 hour for the essays). The exams are only offered during the following three testing windows: January/February, May/June, and September/October.

The CMA exam is computerized and offered at hundreds of Prometric testing centers worldwide. The online components of Gleim CMA Review provide exact exam emulations of the Prometric computer screens and procedures so you feel comfortable at the testing center on exam day.

SUBJECT MATTER FOR PART 1

Below, we have provided the ICMA's abbreviated Content Specification Outline (CSO) for Part 1. The percentage coverage of each topic is indicated to its right. We adjust the content of our materials for any changes in the CSO.

Candidates for the CMA designation are expected to have a minimum level of business knowledge that transcends both examination parts. This minimum level includes knowledge of basic financial statements, time value of money concepts, and elementary statistics. Specific discussion of the ICMA's Levels of Coverage (A, B, and C) is provided in Appendix D, which is a reprint of the ICMA's discussion of types and levels of exam questions.

Part 1: Financial Planning, Performance, and Analytics

External Financial Reporting Decisions	15%
Planning, Budgeting, and Forecasting	20%
Performance Management	20%
Cost Management	15%
Internal Controls	15%
Technology and Analytics	15%

Appendix D contains the CSOs in their entirety as well as cross-references to the subunits in Gleim CMA Review where topics are covered. Remember that we have studied the CSOs in developing our CMA Review materials. Accordingly, you do not need to spend time with Appendix D. Rather, it should give you confidence that Gleim CMA Review is the best and most comprehensive review course available to help you pass the CMA exam.

LEARNING OUTCOME STATEMENTS

In addition to the CSOs, the ICMA provides Learning Outcome Statements (LOSs). The LOSs are more specific and describe in greater detail what candidates need to know and the skills they are expected to have as CMAs. Gleim materials cover these LOSs thoroughly. For your convenience, Appendix D provides a complete reproduction of the LOSs along with cross-references to the subunits in Gleim CMA Review where they are covered. Like the CSOs, this does not need to be studied. Rather, it should give you confidence in your choice of using Gleim CMA.

WHICH PRONOUNCEMENTS ARE TESTED?

New pronouncements are eligible to be tested on the CMA exam in the testing window beginning 1 year after a pronouncement's effective date. Rest assured that Gleim updates our materials as appropriate when any new standard is testable and will only cover what candidates need for the current CMA exam.

HOW ETHICS ARE TESTED

Ethical issues and considerations are tested from the perspectives of both the individual and the organization in Part 2. Candidates will be expected to evaluate the issues involved and make recommendations for the resolution of the situation in both the multiple-choice section and the essay section of Part 2 of the exam.

NONDISCLOSED EXAM

The CMA is a nondisclosed exam, which means that exam questions are not released to review providers or the public while they are still testable. As part of the ICMA's nondisclosure policy and to prove each candidate's willingness to adhere to this policy, a confidentiality agreement must be accepted by each candidate before each part is taken. This statement is reproduced here to remind all CMA candidates about the ICMA's strict policy of nondisclosure, which Gleim consistently supports and upholds.

> *I hereby attest that I will not divulge the content of this examination, nor will I remove any examination materials, notes, or other unauthorized materials from the examination room. I understand that failure to comply with this attestation may result in invalidation of my grades and disqualification from future examinations. For those already certified by the Institute of Certified Management Accountants, failure to comply with the statement will be considered a violation of the standards of Ethical Conduct for Practitioners of Management Accounting and Financial Management and could result in revocation of the certification.*

THE ICMA'S REQUIREMENTS FOR CMA DESIGNATIONS

The CMA designation is granted only by the ICMA. Candidates must complete the following steps to become a CMA:

1. Become a member of the IMA, enter the certification program, and register for the part(s) you are going to take.
   a. The Gleim *CMA Exam Guide* contains helpful guidelines on the membership and certification application and registration processes.
   b. A useful worksheet to help you keep track of your process and organize what you need for exam day can be found within the Gleim Study Planner of the CMA Review Course.
2. Pass both parts of the exam within 3 years.
3. Satisfy the education requirement within 7 years.
4. Satisfy the experience requirement within 7 years.
5. Comply with the *IMA Statement of Ethical Professional Practice*.

ELIGIBILITY PERIOD

Once candidates are admitted into the Certification Program, they are required to pass both parts of the exam within 3 years. If a candidate is not able to pass both parts within this time period, the Certification Entrance Fee will have to be repaid and the passed part will have to be retaken.

MAINTAINING YOUR CMA DESIGNATION

When you have completed all requirements, you will be issued a numbered CMA certificate. This certificate is the property of the ICMA and must be returned upon request. To maintain your certificate, membership in the IMA is required. CMAs must pay the CMA Annual Fee, which covers active IMA membership and the CMA Maintenance Fee. You are also required to comply with the *IMA Statement of Ethical Professional Practice* and all applicable state laws. The final requirement is continuing professional education (CPE).

Beginning the calendar year after successful completion of the CMA exams, 30 hours of CPE must be completed, which is about 4 days per year. Qualifying topics include management accounting, corporate taxation, statistics, computer science, systems analysis, management skills, marketing, business law, and insurance. All CMAs are required to complete 2 hours of CPE on the subject of ethics as part of their 30-hour annual requirement. Contact Gleim for all of your CPE needs at www.gleim.com/CPE.

GLEIM PREMIUM CMA REVIEW WITH SMARTADAPT

Gleim Premium CMA Review features the most comprehensive coverage of exam content and employs the most efficient learning techniques to help you study smarter and more effectively. The Gleim Premium CMA Review System is powered by SmartAdapt technology, an innovative platform that continually zeros in on areas you should focus on when you move through the following steps for optimized CMA review:

Step 1:

Complete a Diagnostic Quiz. Your quiz results set a baseline that our SmartAdapt technology will use to create a custom learning track.

Step 2:

Solidify your knowledge by studying the suggested Knowledge Transfer Outline(s) or watching the suggested Gleim Instruct video(s).

Step 3:

Focus on weak areas and perfect your question-answering techniques by taking the adaptive quizzes and essays that SmartAdapt directs you to.

Final Review:

After completing all study units, take the first Exam Rehearsal. Then, SmartAdapt will walk you through a Final Review based on your results. Finally, a few days before your exam date, take the second Exam Rehearsal so you feel confident that you are ready to pass.

To facilitate your studies, the Gleim Premium CMA Review System uses the most comprehensive test bank of exam-quality CMA questions on the market. Our system's content and presentation are the most realistic representation of the whole exam environment so you feel completely at ease on test day.

GLEIM KNOWLEDGE TRANSFER OUTLINES

This edition of the CMA Part 1 Review book has the following features to make studying easier:

1. **Examples:** We use illustrative examples, set off in shaded, bordered boxes, to make the concepts more relatable.

EXAMPLE 1-6 Issuance of Stock

A company issued 50,000 shares of its $1 par-value common stock. The market price of the stock was $17 per share on the day of issue.

Cash (50,000 shares × $17 market price)	$850,000	
Common stock (50,000 shares × $1 par value)		$ 50,000
Additional paid-in capital -- common (difference)		800,000

The balances of cash, common stock, and additional paid-in capital were increased by $850,000, $50,000, and $800,000, respectively.

2. **Gleim Success Tips:** These tips supplement the core exam material by suggesting how certain topics might be presented on the exam or how you should prepare for an issue.

SUCCESS TIP

CMA candidates will be expected to understand the proper accounting procedure for normal and abnormal spoilage under both job-order costing and process costing. In job-order costing, normal spoilage is treated as a product cost while abnormal spoilage is treated as a period cost. It is important to understand not only that they are treated differently, but why. When answering questions pertaining to spoilage, pay attention to the question stem, what system is being used, and whether the product can be sold or not.

3. **Author's Note:** Our authors use these to call your attention to specific points of content and give more context.

AUTHOR'S NOTE

Under the **cash basis**, revenues are recognized when cash is received and expenses are recognized when cash is paid. Under GAAP, financial statements cannot be prepared under the cash basis of accounting.

4. **International Standards Differences:** When international standards differ significantly from U.S. GAAP, we note the differences. Currently, this feature applies to the Financial Reporting section of Part 1 only.

IFRS DIFFERENCE

Historical cost includes the cost of borrowing (i.e., interest) that is directly attributable to the acquisition, construction, or production of PPE **less** any investment income earned on the temporary investment of such borrowing.

TIME-BUDGETING AND QUESTION-ANSWERING TECHNIQUES FOR THE EXAM

Having a solid multiple-choice answering technique will help you maximize your score on each part of the CMA exam. Remember, knowing how to take the exam and how to answer individual questions is as important as studying/reviewing the subject matter tested on the exam. Competency in both will reduce your stress and the number of surprises you experience on exam day.

1. **Budget your time so you can finish before time expires.**
   - Spend about 1.5 minutes per question. This would result in completing 100 questions in 150 minutes to give you 30 minutes to review your answers and questions that you have marked.
2. **Answer the questions in consecutive order.**
   - Do **not** agonize over any one item or question. Stay within your time budget.
   - Never leave a multiple-choice question (MCQ) unanswered. Your score is based on the number of correct responses. You will not be penalized for answering incorrectly. If you are unsure about a question,
     - Make an educated guess,
     - Mark it for review at the bottom of the screen, and
     - Return to it before you submit the testlet as time allows. Remember, once you have selected the “End” button, you will no longer be able to review or change any answers in the MCQ section.
3. **Ignore the answer choices so that they will not affect your precise reading of the question.**
   - Only one answer option is best. In the MCQs, four answer choices are presented, and you know one of them is correct. The remaining choices are distractors and are meant to appear correct at first glance. *They are called distractors for a reason.* Eliminate them as quickly as you can.
   - In computational items, the distractors are carefully calculated to be the result of common mistakes. Be careful and double-check your computations if time permits.
4. **Read the question carefully to discover exactly what is being asked.**
   - Focusing on what is required allows you to
     - Reject extraneous information
     - Concentrate on relevant facts
     - Proceed directly to determining the best answer
   - Be careful! The requirement may be an **exception** that features a negative word.
5. **Decide the correct answer before looking at the answer choices.**
6. **Read the answer choices, paying attention to small details.**
   - Even if an answer choice appears to be correct, do not skip the remaining answer choices. Each choice requires consideration because you are looking for the best answer provided.
   - Tip: Treat each answer choice like a true/false question as you analyze it.
7. **Click on the best answer.**
   - You have a 25% chance of answering the question correctly by guessing blindly, but you can improve your odds with an educated guess.
   - For many MCQs, you can eliminate two answer choices with minimal effort and increase your educated guess to a 50/50 proposition.

LEARNING FROM YOUR MISTAKES

Learning from questions you answer incorrectly is very important. Each question you answer incorrectly is an **opportunity** to avoid missing actual test questions on your CMA exam. Thus, you should carefully study the answer explanations provided until you understand why the original answer you chose is wrong, as well as why the correct answer indicated is correct. This study technique is the difference between passing and failing for many CMA candidates.

Also, you **must** determine why you answered questions incorrectly to learn how to avoid the same errors in the future. Reasons for missing questions include

1. Misreading the requirement (stem)
2. Not understanding what is required
3. Making a math error
4. Applying the wrong rule or concept
5. Being distracted by one or more of the answers
6. Incorrectly eliminating answers from consideration
7. Not having any knowledge of the topic tested
8. Employing bad intuition when guessing

It is also important to verify that you answered correctly for the right reasons. Otherwise, if the material is tested on the CMA exam in a different manner, you may not answer it correctly.

HOW TO BE IN CONTROL WHILE TAKING THE EXAM

You have to be in control to be successful during exam preparation and execution. Control can also contribute greatly to your personal and other professional goals. Control is a process whereby you

1. Develop expectations, standards, budgets, and plans
2. Undertake activity, production, study, and learning
3. Measure the activity, production, output, and knowledge
4. Compare actual activity with expected and budgeted activity
5. Modify the activity, behavior, or study to better achieve the desired outcome
6. Revise expectations and standards in light of actual experience
7. Continue the process or restart the process in the future

Exercising control will ultimately develop the confidence you need to outperform other CMA candidates and PASS the CMA exam! Obtain our *CMA Exam Guide* for a more detailed discussion of control and other exam tactics.

> Gleim outlines cover everything in the ICMA Learning Outcome Statements and Content Specification Outlines and are more than sufficient to help you pass the CMA exam. However, some candidates may wish to review certain topics on a more fundamental level. For these candidates, Gleim has created our new **CMA Fundamentals video series**. Contact accountingteam@gleim.com if you would like access to these supplementary videos.

IF YOU HAVE QUESTIONS ABOUT GLEIM MATERIALS

Gleim has an efficient and effective way for candidates who have purchased the Premium CMA Review System to submit an inquiry and receive a response regarding Gleim materials directly through their course. This system also allows you to view your Q&A session in your Gleim Personal Classroom.

Questions regarding the **information in this introduction and/or the Gleim *CMA Exam Guide* (study suggestions, study plans, exam specifics)** may be emailed to personalcounselor@gleim.com.

Questions concerning **orders, prices, shipments, or payments** should be sent via email to customerservice@gleim.com and will be promptly handled by our competent and courteous customer service staff.

For **technical support**, you may use our automated technical support service at www.gleim.com/support, email us at support@gleim.com, or call us at (800) 874-5346.

FEEDBACK

Please fill out our online feedback form (www.gleim.com/feedbackCMA1) immediately after you take the CMA exam so we can adapt to changes in the exam. Our approach has been approved by the ICMA.

STUDY UNIT TWO

MEASUREMENT, VALUATION, AND DISCLOSURE: ASSETS -- SHORT-TERM ITEMS

(20 pages of outline)

This study unit is the **second of six** on **external financial reporting decisions**. The relative weight assigned to this major topic in Part 1 of the exam is **15%**. The six study units are

Study Unit 1: External Financial Statements
Study Unit 2: Measurement, Valuation, and Disclosure: Assets -- Short-Term Items
Study Unit 3: Measurement, Valuation, and Disclosure: Assets -- Long-Term Items
Study Unit 4: Measurement, Valuation, and Disclosure: Liabilities
Study Unit 5: Revenue and Impairment Recognition
Study Unit 6: Integrated Reporting

2.1 ACCOUNTS RECEIVABLE

1. **Overview**
   a. Accounts receivable **(trade receivables)** are amounts owed to an entity by its customers resulting from credit sales in the ordinary course of business that are due in customary trade terms.
      1) All other receivables are non-trade receivables.
   b. The recording of a receivable, which often coincides with revenue recognition, is consistent with the accrual method of accounting.
   c. Receivables should be separated into **current and noncurrent** portions. Most of the entity's accounts receivable are classified as current assets because they are expected to be collected within 1 year or the entity's normal operating cycle.
      1) **Current** accounts receivable are reported in the balance sheet at **net realizable value (NRV)**, i.e., net of allowance for credit losses (uncollectible accounts), allowance for sales returns, and billing adjustments.
      2) **Noncurrent** receivables are measured at net present value of future cash flows expected to be collected.
   d. The principal measurement issue for accounts receivable is the estimation of the **allowance for credit loss** and calculation of **credit loss expenses** for the period.
   e. The direct write-off method expenses bad debts when they are determined to be uncollectible.
      1) It is **not acceptable under GAAP** because it does not match revenue and expense when the receivable and the write-off are recorded in different periods.
      2) This method is used for tax purposes.

2. **Allowance for Customers' Right of Sales Return**
   a. When a right of return exists, an entity may recognize revenue from a sale of goods at the time of sale only if the amount of future returns can be reliably estimated. A provision must be made for the return of merchandise because of product defects, customer dissatisfaction, etc.
   b. To be consistent with the **matching principle** (recognition of revenue and related expense in the same accounting period), the revenue from the sale of goods and the expense for the estimated sales returns must be recognized on the same date.
      1) Accordingly, an **allowance** for sales returns should be established.

EXAMPLE 2-1 Allowance for Sales Returns

A company has $500,000 of sales in July, its first month of operations. Management estimates that total returns will be 1% of sales.

Recognition of revenue from sale			Recognition of allowance for sales returns		
Cash/accounts receivable	$500,000		Sales returns (contra revenue)	$5,000	
Sales		$500,000	Allowance for sales returns (contra asset)		$5,000

3. **Allowance Method (Required under GAAP)**
   a. The allowance method attempts to match **credit loss expense** with the **related revenue**. This method is **required under GAAP**.
      1) The periodic journal entry to record credit loss expense is

Credit loss expense	$XXX	
Allowance for credit losses		$XXX

      2) As specific accounts receivable are written off, they are charged to the allowance account.

Allowance for credit losses	$XXX	
Accounts receivable		$XXX

      3) Thus, the **write-off** of a particular account has no effect on expenses.
         a) Write-offs do not affect the carrying amount of the net accounts receivable balance because the reductions of gross accounts receivable and the allowance are the same.
      4) In the balance sheet, the carrying amount of accounts receivable is reported at the net amount expected to be collected.

Gross accounts receivable − Allowance for credit losses = Carrying amount of accounts receivable

Balance Sheet:	
Accounts receivable	$X,XXX
Allowance for credit losses	(X,XXX)
Accounts receivable, net	$X,XXX

b. Under the allowance method, the two approaches to calculating the amount charged to credit loss expense are the income statement approach and the balance sheet approach.

AUTHOR'S NOTE

The direct write-off method (i.e., expense bad debts only when they are determined to be uncollectible) is **not acceptable under GAAP**. This method does not match revenues and expenses. Occasionally, a small company will use the direct write-off method under the assumption that the difference between it and the allowance method is immaterial. In other words, the materiality principle is used as an excuse to violate the matching principle.

4. **Income Statement Approach (Percentage of Sales)**

a. Under the income statement approach, the entity estimates the periodic credit loss expense as a percentage of sales on credit. The journal entry is

Credit loss expense	$XXX	
Allowance for credit losses		$XXX

b. The ending balance of the allowance for credit losses is determined after all the activity in the allowance account is recorded during the period.

EXAMPLE 2-2 Income Statement Approach

Midburg Co. has the following unadjusted account balances at year end:

Cash	$ 85,000 Dr.
Accounts receivable	100,000 Dr.
Allowance for credit losses	2,000 Cr.
Sales on credit	500,000 Cr.

Based on its experience, Midburg expects credit losses to average 2% of credit sales. Thus, the estimated credit loss expense is $10,000 ($500,000 × 2%). The year-end adjusting entry is

Credit loss expense	$10,000	
Allowance for credit losses		$10,000

The year-end adjusted balance of allowance for credit losses is a $12,000 credit ($10,000 + $2,000).

Balance sheet presentation	
Accounts receivable	$100,000
(Allowance for credit losses)	(12,000)
Accounts receivable, net	$ 88,000

5. **Balance Sheet Approach (Percentage of Receivables)**
   a. Under this approach, the ending balance of the allowance for credit losses is a percentage of the ending balance of accounts receivable.
      1) Credit loss expense reflects the adjustment of the allowance to its correct ending balance.

EXAMPLE 2-3 Balance Sheet Approach

Using the data from Example 2-2, assume that, based on Midburg's experience, 6% of accounts receivable are determined to be uncollectible. Thus, the ending balance of the allowance for credit losses is $6,000 ($100,000 × 6%). Because the allowance currently has a balance of $2,000, the following journal entry is required:

Credit loss expense ($6,000 – $2,000)	$4,000	
Allowance for credit losses		$4,000

Balance sheet presentation	
Accounts receivable	$100,000
(Allowance for credit losses)	(6,000)
Accounts receivable, net	$ 94,000

   b. An entity rarely experiences a single rate of uncollectibility on all its accounts. For this reason, entities using the balance sheet approach to estimate expected credit losses for accounts receivable generally prepare an **aging schedule**.

EXAMPLE 2-4 Balance Sheet Approach with Aging Schedule

Midburg prepares the following aging schedule of its accounts receivable:

Balance Range	Less than 30 Days	31-60 Days	61-90 Days	Over 90 Days	Total Balances
$0 - $100	$ 5,000	$ 200	$ 100	$ 100	$ 5,400
$100 - $1,000	8,000	3,800			11,800
$1,000 - $5,000	20,000	2,000	1,900		23,900
$5,000 - $10,000	38,000		8,000	900	46,900
Over $10,000		12,000			12,000
Totals	$71,000	$18,000	$10,000	$1,000	$100,000

Midburg then applies an appropriate percentage to each stratum based on experience.

Aging Intervals	Balance	Estimated Uncollectible	Ending Allowance
Less than 30 days	$ 71,000	2%	$1,420
30-60 days	18,000	12%	2,160
61-90 days	10,000	15%	1,500
Over 90 days	1,000	20%	200
Total	$100,000		$5,280

Because the allowance currently has a balance of $2,000, the following journal entry is required to establish the proper measurement:

Credit loss expense ($5,280 – $2,000)	$3,280	
Allowance for credit losses		$3,280

Balance sheet presentation	
Accounts receivable	$100,000
(Allowance for credit losses)	(5,280)
Accounts receivable, net	$ 94,720

6. **Collection of Accounts Previously Written Off**

   a. Occasionally, a customer pays on an account previously written off.

Cash	$XXX	
Allowance for credit losses		$XXX

      1) Credit loss expense is not affected when an account receivable is written off or when an account previously written off becomes collectible.

   b. The following equation illustrates the reconciliation of the beginning and ending balances of gross accounts receivable (accounts receivable before adjustment for allowance for credit losses):

      Beginning accounts receivable
    + Credit sales during the period
    – Cash collected on credit sales during the period
    – Accounts receivable written-off during the period
    = Ending accounts receivable

   c. The following equation illustrates the reconciliation of the beginning and ending balances of the allowance for credit losses:

      Beginning allowance for credit losses
    + Credit loss expense recognized for the period
    – Accounts receivable written off
    + Collection of accounts receivable previously written off
    = Ending allowance for credit losses

      1) Under the **income statement approach**, credit loss expense is a percentage of sales on credit, and the ending balance of the allowance is calculated using the equation above.

      2) Under the **balance sheet approach**, the ending balance of the allowance is a percentage of the ending balance of accounts receivable, and credit loss expense is calculated using the equation above.

7. **Factoring of Accounts Receivable**

   a. **Factoring** is a transfer of receivables to a third party (a factor) who assumes the responsibility of collection.

   b. Factoring discounts receivables on a **nonrecourse**, notification basis. Thus, payments by the debtors on the transferred assets are made to the factor. If the transferor (seller) surrenders control, **the transaction is a sale**.

      1) If a sale is **without recourse**, the transferee (credit agency) assumes the risks and receives the rewards of collection. This sale is final, and the seller has no further liabilities to the transferee. Accordingly, the receivables are no longer reported on the seller's books.

      2) If a sale is **with recourse**, the transferor (seller) may be required to make payments to the transferee or to buy back receivables in specified circumstances.

         a) In this circumstance, the transfer might not qualify as a sale. The parties account for the transaction as a secured borrowing with a pledge of noncash collateral.

         b) Accordingly, the receivables are still on the seller's books and it must recognize a liability for the amount of cash received.

EXAMPLE 2-5 Factoring of Accounts Receivable

A factor charges a 2% fee plus an interest rate of 18% on all cash advanced to a transferor of accounts receivable. Monthly sales are $100,000, and the factor advances 90% of the receivables submitted after deducting the 2% fee and the interest. Credit terms are net 60 days. What is the cost to the transferor of this arrangement?

Amount of receivables submitted	$100,000	
Minus: 10% reserve	(10,000)	
Minus: 2% factor's fee	(2,000)	
Amount accruing to the transferor	$ 88,000	
Minus: 18% interest for 60 days	(2,640)	[$88,000 × 18% × (60 ÷ 360)]
Amount to be received immediately	$ 85,360	

The transferor also will receive the $10,000 reserve at the end of the 60-day period if it has not been absorbed by sales returns and allowances. Thus, the total cost to the transferor to factor the receivables for the month is $4,640 ($2,000 factor fee + interest of $2,640). Assuming that the factor has approved the customers' credit in advance (the sale is without recourse), the transferor will not absorb any bad debts.

The journal entry to record the transaction is

Cash	$85,360	
Due from factor	10,000	
Loss on sale of receivables	2,000	
Prepaid interest	2,640	
Accounts receivable		$100,000

c. The main reasons for factoring transactions are as follows:

   1) A factor usually receives a high financing fee plus a fee for collection. Furthermore, the factor often operates more efficiently than its clients because of the specialized nature of its services.

   2) An entity (seller) that uses a factor tries to speed up its collections. Also, it can eliminate its credit department and accounts receivable staff. In addition, bad debts are eliminated from the financial statements.

      a) These reductions in costs can offset the fee charged by the factor.

d. Credit card sales are a common form of factoring. The retailer benefits by prompt receipt of cash and avoidance of bad debts and other costs. In return, the credit card company charges a fee.

STOP & REVIEW

You have completed the outline for this subunit.
Study multiple-choice questions 1 through 5 beginning on page 73.

2.2 INVENTORY -- FUNDAMENTALS

1. **Overview**

a. Inventory is the total of tangible personal property

   1) Held for sale in the ordinary course of business,

   2) In the form of work-in-process to be completed and sold in the ordinary course of business, or

   3) To be used up currently in producing goods or services for sale.

      a) Inventory does not include long-term assets subject to depreciation.

b. Inventories are generally classified as current assets in the financial statements. They are expected to be realized in cash or sold or consumed during the normal operating cycle of the business.

   1) Long-term assets either subject to depreciation or retired from regular use and held for sale are not classified as inventories.

c. The inventories of a **retailer** (trading entity) consist of goods purchased to be resold without substantial modification.

d. The inventories of a **manufacturer** consist of (1) goods to be consumed in production (materials), (2) goods in the process of production (work-in-process), and (3) finished goods.

e. The **gross profit** for the period is measured and presented in the income statement as the difference between the amount of sales and the amount of cost of goods sold.

   1) The calculation of cost of goods sold for a retailer and a manufacturer is discussed in Study Unit 1, Subunit 3.

2. **Cost Basis of Inventory -- Initial Measurement**
   a. The **cost of inventory** includes all costs incurred in bringing the inventories to their existing location and ready-to-use condition.
   b. The **cost of purchased inventories** includes
      1) The price paid or consideration given to acquire the inventory (net of trade discounts, rebates, and other similar items);
      2) Import duties and other unrecoverable taxes; and
      3) Handling, insurance, freight-in, and other costs directly attributable to (a) acquiring finished goods and materials and (b) bringing them to their present location and condition (salable or usable condition).
      4) The following is the calculation of net purchases:

	Purchases
–	Returns and allowances
–	Purchase discounts
+	Transportation-in
=	Net purchases

      5) **Cost of goods available for sale** is calculated as beginning inventory plus net purchases.
   c. The **cost of manufactured inventories** (work-in-process and finished goods) includes the costs of direct materials used and conversion costs. Conversion costs consist of (1) direct labor costs and (2) manufacturing overhead costs.
3. **Inventory Accounting Systems**
   a. A **perpetual inventory system** updates inventory accounts after each purchase or sale. This system is generally more suitable for entities that sell relatively expensive and heterogeneous items and requires continuous monitoring of inventory and cost of goods sold accounts. Automobile dealers are an example. Under this system,
      1) Purchases and other items related to inventory costing are charged directly to inventory.
      2) Inventory and cost of goods sold are adjusted as sales occur.
   b. An **advantage** of the perpetual inventory system is that the amount of inventory on hand and the cost of goods sold can be determined at any time. A **disadvantage** of the perpetual inventory system is that the bookkeeping is more complex and expensive.
      1) A perpetual system is more often used when individual inventory items are of high value because a perpetual system provides better internal control.

c. In the **periodic inventory system**, inventory and cost of goods sold are updated at specific intervals, such as quarterly or annually, based on the results of a **physical count**.

1) Bookkeeping is simpler under this system. Thus, entities with relatively inexpensive and homogeneous items, such as grain dealers, that have no need to continuously monitor their inventory and cost of goods sold generally use this system.

2) Under the periodic system,

a) Goods bought from suppliers and other items related to inventory costs are tracked during the period in a separate temporary account **(purchases)**.

b) The beginning inventory balance remains unchanged until the end of the period when the purchases account is closed.

c) Changes in inventory and cost of goods sold are recorded **only at the end of the period**, based on the physical count.

EXAMPLE 2-6 Perpetual System vs. Periodic System

Entity A's January 1, Year 1, inventory consists of 1,000 units with a cost of $5 per unit. The following are Entity A's Year 2 transactions:

April 1: Sold 600 inventory units for $4,800 in cash.

May 1: Purchased 250 inventory units for $5 in cash per unit.

The year-end result of the physical count was 650 inventory units. The following are Entity A's journal entries under the perpetual and periodic systems:

Perpetual System			**Periodic System**		
Inventory sale April 1:					
Cash	$4,800		Cash	$4,800	
Sales		$4,800	Sales		$4,800
Cost of goods sold (600 × $5)	$3,000				
Inventory		$3,000			
Inventory purchase May 1:					
Inventory (250 × $5)	$1,250		Purchases	$1,250	
Cash		$1,250	Cash		$1,250
After the physical count on December 31:					
No journal entry is needed because the physical count equals the amount of inventory on the books (1,000 – 600 + 250 = 650).			Inventory (year-end) (650 × $5)	$3,250	
			Cost of goods sold (difference)	3,000	
			Inventory (beginning)		$5,000
			Purchases		1,250

Beginning inventory (1,000 × $5)	$5,000
Purchases of inventory during the period	1,250
Ending inventory	(3,250)
Cost of goods sold	**$3,000**

The perpetual and periodic systems have the same result. However, under the periodic system, the amounts of inventory and cost of goods sold are updated only at the end of the period after the physical count.

4. **Inventory Period-End Physical Count**

   a. An annual period-end **inventory physical count** is necessary under both the perpetual and periodic inventory accounting systems. The amount of inventory reported in the annual financial statements should be based on a physical count.

      1) Under the **perpetual system**, a physical count helps to detect (a) misstatements in the records and (b) thefts of inventory.

         a) The differences between the physical count and the inventory in the books (inventory shortages and overages) are recognized in the cost of goods sold account or as a separate line item in the current period income statement.

      2) Under the **periodic system**, the amounts of inventory and cost of goods sold can be determined based only on the results of a physical count.

         a) Thus, the amount of cost of goods sold for the period includes both (1) inventory cost of goods sold and (2) inventory shortages and overages.

   b. For a physical count to be accurate, the entity must count all items considered to be inventory and eliminate all items that are not. Items to be counted as inventory include the following:

      1) **Goods in transit** – Items in transit are inventories that on the physical count date (a) are not on the entity's premises and are on the way to the desired location and (b) whose legal title is held by the entity; i.e., the entity bears the risk of loss on inventory in transit. The following are the most common shipping terms:

         a) **FOB shipping point** (sometimes called FOB Factory) – Legal title and risk of loss pass to the buyer when the seller delivers the goods to the carrier. The **buyer** must include the goods in inventory during shipping.

         b) **FOB destination** – Legal title and risk of loss pass to the buyer when the seller delivers the goods to a specified destination. The **seller** must include the goods in inventory during shipping.

      2) **Goods out on consignment** – A consignment sale is an arrangement between the owner of goods (consignor) and the sales agent (consignee). Consigned goods are not sold but rather transferred to an agent for possible sale. The consignor records sales only when the goods are sold to third parties by the consignee.

         a) Goods out on consignment are included in the **consignor's** inventory at cost. Costs of transporting the goods to the consignee are inventoriable costs, not selling expenses.

         b) The **consignee** never records the consigned goods as an asset.

EXAMPLE 2-7 Goods Out on Consignment

Entity A's December 31, Year 1, warehouse inventory physical count results in the amount of inventory of $50,000. The following is additional information regarding Entity A's year-end inventory:

- During the year, Entity A consigned goods with a total cost of $60,000 to Entity B (the consignee). The annual statement that was sent from Entity B to Entity A states that 60% of the consignment goods were sold for $42,000.
- Merchandise costing $40,000 shipped FOB shipping point from a vendor on December 29, Year 1, and was received by Entity A on January 4, Year 2.
- Merchandise costing $70,000 shipped FOB destination from a vendor on December 30, Year 1, and was received by Entity A on January 5, Year 2.
- The goods billed to the customer FOB destination on December 27, Year 1, had a cost of $25,000. The goods were shipped by Entity A on December 28, Year 1, and were received by the customer on January 3, Year 2.

In the December 31, Year 1, balance sheet, Entity A reports an inventory amount of $139,000. This amount consists of

Warehouse physical inventory count	$ 50,000
Goods held on consignment ($60,000 × 40%)	24,000
Merchandise shipped FOB shipping point (title and risk of loss passed to Entity A on December 29, Year 1, at the time of shipment)	40,000
Goods shipped FOB destination to customer (title and the risk of loss will pass to the customer only on January 3, Year 2)	25,000
December 31, Year 1, inventory balance	**$139,000**

5. **Inventory Estimation**

   a. An estimate of inventory may be needed when an exact count is not feasible, e.g., for interim reporting purposes or when inventory records have been destroyed. The gross profit method may be used for inventory estimation, even when the inventory may have been stolen or destroyed by fire.

      1) **Gross profit margin** is sales less cost of goods sold. This term may also be referred to simply as **gross profit** or **gross margin**.

      2) **Gross profit percentage** equals gross profit divided by sales.

Gross profit percentage = Gross profit ÷ Sales

EXAMPLE 2-8 Inventory Estimation

A retailer needs to estimate ending inventory for quarterly reporting purposes. The firm's best estimate of the gross percentage is its historical rate of 25%. The following additional information is available:

Net sales	$1,000,000
Purchases	300,000
Beginning inventory	800,000

Beginning inventory		$ 800,000
Purchases		300,000
Goods available for sale		$1,100,000
Sales	$1,000,000	
Gross profit (Sales × Gross profit %)	(250,000)	
Cost of goods sold [Sales × (1 – Gross profit %)]		(750,000)
Ending inventory		$ 350,000

6. **Inventory Errors**

   a. These errors may have a material effect on current assets, working capital (Current assets – Current liabilities), cost of goods sold, net income, and equity. A common error is inappropriate timing of the recognition of transactions.

      1) If a purchase on account is not recorded and the goods are not included in ending inventory, cost of goods sold (BI + Purchases – EI) and net income are unaffected. But current assets and current liabilities are understated.

      2) If purchases and beginning inventory are properly recorded but items are excluded from ending inventory, cost of goods sold is overstated. Net income, inventory, retained earnings, working capital, and the current ratio are understated.

   b. Errors arising from recording transactions in the wrong period may reverse in the subsequent period.

      1) If ending inventory is overstated, the overstatement of net income will be offset by the understatement in the following year that results from the overstatement of beginning inventory.

   c. An **overstatement error in year-end inventory** of the current year affects the financial statements of 2 different years.

      1) The **first year's** effects may be depicted as follows:

Balance Sheet Effects		Income Statement Effects		
		Net sales revenue		$XXX,XXX
		Beginning inventory	$XXX,XXX	
		Plus: Cost of goods purchased/produced	XXX,XXX	
Current assets:		Goods available for sale	XXX,XXX	
Ending inventory	Overstated ↑	Minus: Ending inventory	Overstated ↑	
		Cost of goods sold		Understated ↓
Equity:		Gross profit		Overstated ↑
Retained earnings, 12/31/Yr 0	$XXX,XXX	Expenses		(XX,XXX)
Plus: Net income	Overstated ↑	Net income		Overstated ↑
Retained earnings, 12/31/Yr 1	Overstated ↑			

Figure 2-1

      2) At the end of the **second year**, retained earnings is correctly stated as follows:

Balance Sheet Effects		Income Statement Effects		
		Net sales revenue		$XXX,XXX
		Beginning inventory	Overstated ↑	
		Plus: Cost of goods purchased/produced	XXX,XXX	
Current assets:		Goods available for sale	Overstated ↑	
Ending inventory	$XXX,XXX	Minus: Ending inventory	$(XXX,XXX)	
		Cost of goods sold		Overstated ↑
Equity:		Gross profit		Understated ↓
Retained earnings, 12/31/Yr 1	Overstated ↑	Expenses		(XX,XXX)
Plus: Net income	Understated ↓	Net income		Understated ↓
Retained earnings, 12/31/Yr 2	$XXX,XXX			

Figure 2-2

STOP & REVIEW

You have completed the outline for this subunit.
Study multiple-choice questions 6 through 8 beginning on page 75.