

# BMC Module 10 - Retail Sales Accountability



**IMPORTANT INSTRUCTIONS:** Always use the 'EXIT COURSE' link in the upper right hand corner of the course window when exiting to save your progress!

Retail sales accountability (RSA) is a systematic process to monitor and manage retail/resale operations and ensure proper security and accountability for resale merchandise and consumable goods. The basic steps involved in using the retail sales accountability process are covered in this module.

Policies and procedures that guide decision making regarding inventory reconciliation are highlighted. Practical use of a simple worksheet to reconcile sales with inventory usage and to identify discrepancies that indicate inventory shortage provides you with a valuable management tool.

*Total hours anticipated to complete this module: approximately 1.6 hours*

## LESSON 1 RETAIL SALES ACCOUNTABILITY


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☰ 1.1 Overview; What is Retail Sales Accountability

☰ 1.2 Retail Sales Accountability Defined

 1.3 What are the Procedures for Retail Sales Accountability?

 1.4 Retail Sales Accountability Guidelines and Regulations

 1.5 Simple Accountability Testing

 1.6 Retail Sales Accountability Worksheets



Lesson 1 Knowledge Checks

## LESSON 2 RESALE INVENTORIES ACCOUNTABILITY

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 2.1 Overview: Resale Inventories Accountability

 2.2 Types of inventories

 2.3 Conducting the Inventory



Lesson 2 Knowledge Checks

## LESSON 3 COST OF GOODS SOLD TO MANAGE ACCOUNTABILITY

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 3.1 Overview: Using Cost of Goods Sold to Manage Accountability

 3.2 General Ledger Accounting Codes used for COGS

 3.3 Cost of Goods Sold in Dollars

 3.4 Cost of Goods Sold Percentages

 3.5 Allowable Maximum Variance



Lesson 3 Knowledge Checks

LESSON 4 RETAIL SALES AND ACCOUNTABILITY PROBLEMS AND SOLUTIONS

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 4.1 Overview: Retail Sales and Accountability Problems and Solutions

 4.2 Operational Problems

 4.3 Administrative Problems

 4.4 Problem Solving

 4.5 Applying Solutions

 Lesson 4 Knowledge Checks

# 1.1 Overview; What is Retail Sales Accountability

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The retailing process is the final step in the distribution of merchandise. Retailers are organized to sell merchandise in incremental quantities to their customers, generally without any changes. The buying of goods for resale is a characteristic of retail trade establishments.

Resale merchandise is merchandise available in sales outlets, such as bars, snack bars, pro shops, and restaurants. Both regulations and best business practices require that these sales operations enforce accountability standards.

At the end of this lesson, you will be able to:

- 1 Define retail sales accountability.
- 2 Relate the primary steps in the retail sales accountability process.
- 3 Identify regulations governing retail sales accountability.
- 4 List standard accountability tests.

CONTINUE

## 1.2 Retail Sales Accountability Defined

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### Retail Sales Accountability Defined

Retail sales accountability (RSA) is a management control process.

Specifically, it is a comparison of sales records to actual receipts, followed by applying standard accounting tests based on inventory turnover.

**This process enables a manager to identify issues such as:**

- Significant variances.
- The possible reasons for those variances.
- Actions that may be taken to correct the variances.

**Retail Sales Accountability compares cash received against inventory usage to ensure sufficient cash was received to offset the missing inventory.**



Comparing cash received to used inventory

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In other words, RSA means comparing actual sales to expected sales based on inventory usage.



Compare cash received to used inventory

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CONTINUE

## 1.3 What are the Procedures for Retail Sales Accountability?

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## What are the Procedures for Retail Sales Accountability?



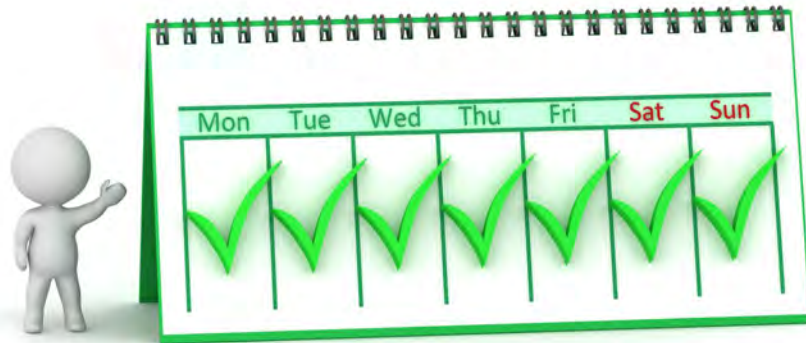
Retail sales accountability involves the following procedures:

Step 1



Daily accountability tests are performed on specific high cost or easily pilfered items.

## Step 2



Inventory documents are posted daily to reflect opening inventory, transfer in and out, and closing inventory.

### Step 3



Sales accountability tests are performed monthly in coordination with monthly inventories.

#### Step 4



Quantities sold are reconciled with RecTrac system generated cashier's history sales report, scatter sheet, or summary of sales recorded for each cashier.

## Step 5



Variations are explained in writing. Explanations are maintained with inventory records until the next audit.

CONTINUE

## 1.4 Retail Sales Accountability Guidelines and Regulations

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### Retail Sales Accountability Guidelines and Regulations

All Nonappropriated Fund Instrumentalities (NAFIs) that have resale activities use accountability controls regardless of volume. Accountability controls provide results of comparing sales records to actual receipts and applying standard accounting tests, based on inventory. Accountability tests involve the application of standard accounting calculations to detect variances between expected and actual receipts based on known factors such as inventory turnover and retail costs.

#### AR 215-1 Regulations

Specific guidelines for retail sales accountability are provided in the Army Regulation AR 215-1 Appendix G. Appendix G, titled: Cash Inventory and Retail Sales Accountability (Controls and Procedures) includes the following sections: Cash controls; Cash registers; Safekeeping of cash and bank deposit procedures; Petty cash funds; Checks; Inventory and warehouse controls; Retail sales accountability; Sales Accountability for Family and MWR-leased storage space; and Customer returns.



**AR215\_1\_Admin\_FINAL.pdf**

3.2 MB



## **DFAS-IN Regulation 37-1, Finance and Accounting Policy Implementation**

As directed in the AR 215-1, physical inventories of NAF property are conducted per DFAS-IN Regulation 37-1 Chapter 32. Table 4-2 of the Appendix provides a summary of the types and frequencies of physical inventories.



**DFAS-IN Regulation 37-1 Chapter 32 (NAF).pdf**

5.4 MB



**CONTINUE**

## 1.5 Simple Accountability Testing

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### Sales Calculation:

$$\begin{aligned} (\text{cash}) - (\text{Change fund}) &= (\text{sales}) \\ \$131.70 - \$25.00 &= \$106.70 \end{aligned}$$

### Sales Calculation:

$$\begin{aligned} \$106.70 &= 194 \text{ (sodas)} \\ &\$ .55 \text{ (per soda)} \end{aligned}$$

### Inventory Calculation:

$$\begin{aligned} (\text{beginning inventory}) - (\text{sold}) &= (\text{ending inventory}) \\ 350 - 194 &= 156 \end{aligned}$$

### Simple Accountability Testing

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Accountability begins with counting the money in the Point of Sale system or cash register and reconciling (or "balancing") the amount of change the cashier started with and the amount of money taken in from sales.

Let's say the cashier started out with a \$25.00 change fund for making change, and at the end of the day, there is \$131.70 in the register. What were the cashier's sales in dollars?

To check to see if the cashier took in enough money to cover the items sold, the manager counts the items and compares the count at the end of the day to the count at the close of business the day before. For example, let's say an activity is selling sodas for \$.55 each and the cashier starts the day with 350 sodas. Based upon actual sales in dollars (\$106.70), the cashier would have sold 194 sodas.

When the manager counts the sodas left at the end of the day, instead of the 156 expected (from the ending inventory) there are only 150, which means that six sodas are missing ( $156 - 150 = 6$ ). Some possible explanations for this discrepancy are:

- The manager miscounted the sodas at the end of the day yesterday.
- Some sodas were rung up at a lower price, leaving a shortage of  $\$0.55 \times 6$ , or \$3.30.
- Some sodas were pilfered.
- Some sodas were not rung up at all.
- Some combination of these causes.

## **Expected Sales Based on Usage in \$ dollars Calculation :**

$$\begin{aligned} &(\text{total sales}) - (\text{Change fund}) = (\text{expected sales in dollars}) \\ &\$135.00 - \$25.00 = \$110.00 \end{aligned}$$

## **Expected Sales Based on Usage in Units Calculation :**

$$\begin{aligned} &(\text{expected sales in units}) \\ &\frac{\$110.00}{.55 \text{ per soda}} = 200 \text{ units} \end{aligned}$$

The basis of RSA is to find any discrepancy (shortage or overage) by comparing inventory used to dollars in sales

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**Shortages may show up in different ways.**

**Another way to find the soda shortage is to deduct the change fund from the total soda sales (if sodas are the only products the activity sells) and determine how many sodas should have been sold based on that amount of money.**



## Simple Accountability Testing

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Expected sales in units represent the inventory used/sold. This number is calculated by dividing sales dollars by the cost per item which tells you what difference in inventory you should have. By comparison, actual sales are the dollar sales the cash register records on the cash register tape. The manager must account for any difference between these figures.

## 1.6 Retail Sales Accountability Worksheets

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### **Retail Sales Accountability Worksheets**

One way to manage daily sales accountability is with a worksheet. Although actual formats for the worksheet may vary, the purpose of the worksheet is to calculate actual retail sales and compare it to inventory used for an item or group of items. Daily worksheets are useful for managing specific items. For overall sales accountability, inventory is managed on a monthly basis.



Rec Trac

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## RecTrac reports can be helpful

### Congratulations!

You have completed this lesson — What Is Retail Sales Accountability?

In this lesson, you learned how to:

- Define retail sales accountability.
- Relate the primary steps in the retail sales accountability process.
- Identify regulations governing retail sales accountability.
- List standard accountability tests.

CONTINUE

*Lesson 7 of 23*

# Lesson 1 Knowledge Checks

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*Question*

**01/03**

Retail sales is a form of management controls that compares sales records with which of the following?

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- Change Fund
- Bank Deposit
- Actual Sales Receipts
- Daily Activity Report (DAR)

*Question*

**02/03**

Accountability starts with counting the money in the Point of Sales cash drawer or the cash register

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True

False

*Question*

**03/03**

Table 4-2 of DFAS-IN Regulation 37-1 Chapter 32 provides guidance on which of the following?

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- Setting resale prices
- Summary of types and frequencies of inventories
- Determining sales mix
- Operating procedures for purchasing resale items

## 2.1 Overview: Resale Inventories Accountability

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It is the manager's responsibility to maintain controls on retail sales. Any item or category that makes up a large percentage of an activity's business can have the highest potential for loss, so the manager should monitor it on a regular basis to make sure all is well.

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The retail sales accountability method works on the principals that periodic physical inventories make it possible to anticipate the dollar amount of sales that should be recorded, and fix accountability for differences between anticipated and actual sales as to department, period of time, and personnel. Controlling shortages and managing inventories are simplified and ensured by periodic retail sales accountability measures.

At the end of this lesson, you will be able to:

- 1 Identify inventory types.
- 2 Select an inventory type based on described conditions and regulatory requirements.
- 3 Describe the procedures for conducting inventories.

CONTINUE

## 2.2 Types of inventories

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### **Types of Inventories**

Inventory refers to the periodic physical count and records reconciliation required in the control of Nonappropriated Fund Instrumentality (NAFI) property resources. Inventories may be done on a daily, monthly, or annual basis. The type of item being maintained determines how often an inventory is done and whether a full physical inventory is conducted.

## Full physical inventory

A **full physical inventory** means every item is counted (weighed or measured if the item happens to be candy or art supplies). While always conducting a full inventory will provide maximum control of resources, managers should be aware that taking a full physical inventory daily has some disadvantages that must be taken into consideration, such as:

- 1 Disruption of daily business and attention to customers.
- 2 Need for personnel to count and record.
- 3 Expense (time and money).

## Tracking

Items are identified and tracked for inventory using a point-of-sale system such as RecTrac, or an inventory management system like FOODTRAK. If these systems are not used, a key on the cash register should be assigned to each item (or category) and the key categories or items should be monitored using retail sales accountability processes.

## Daily Inventory

Most retail sales items do not require a daily inventory. However, according to the AR 215-1 Appendix G-6(9), a perpetual or continuous inventory is maintained for sensitive and high-dollar-value items. This would include food, beer, and wine as well as high volume, attractive, and/or easily pilfered items. The guidelines in the AR 215-1 Appendix G for items such as these specifically state:

- 1 A physical inventory is performed daily.

2

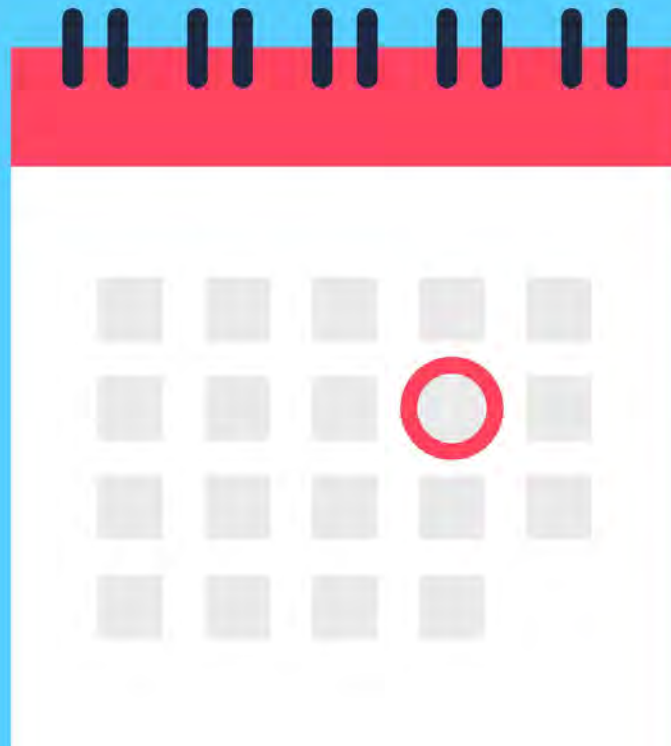
Inventory documents are posted daily to reflect opening inventory, transfer in and out, and closing inventory.

3

Quantities sold are reconciled with the cashier's scatter sheet, or summary of sales recorded for each cashier.

4

Variations are explained in writing. Explanations are maintained with inventory records until the next audit.



## End-of-the-Month Inventory

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**A complete physical inventory should be conducted monthly** for saleable merchandise, resale merchandise in sales outlets, and supplies.

This inventory is to be done by fund employees under the direct supervision of the fund custodian or a designated representative. Variances or differences will be researched, quantified, and documented by an appointed inventory team.

Team members will give an accurate accounting of owned inventory and determine how much inventory has been "lost" due to pilferage and paperwork errors. The tests will be conducted concurrently with scheduled inventory counts.

## End-of-the-Month Inventory

If the end-of-month inventory is inaccurate, the totals and percentages on the income statement, as well as the inventory turnover ratio for both the current month and the month that follows, will be inaccurate. The accuracy of the end-of-month inventory is critical to an activity's financial evaluation.

## Annual Inventory

As directed by Table 4-2 in DFAS-IN 37-1 Chapter 32, full physical inventories are required on fixed assets, all expensed equipment issued by DA Form 2062, and sensitive items. While most of these items are inventoried as part of management controls responsibilities, resale merchandise inventory must be performed as part of retail sales accountability.

These inventories are conducted annually by an appointed inventory team, while observed by an appointed independent observer. Variances or differences will be researched, costed, and documented.

Table 4-2 in DFAS-IN 37-1 Chapter 32 summarizes the types and frequencies of all physical inventories.

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## 2.3 Conducting the Inventory

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## Conducting the Inventory



Following the inventory policies and procedures identified in Table 4-2 in DFAS-IN 37-1 Chapter 32 will help the manager conduct a thorough and accurate inventory. Whether an activity is conducting a daily, monthly, or annual inventory, the activity manager will benefit from knowing and following specified inventory policies and procedures.

These procedures are:

## Step 1

### Inventory Printout

Essex Parks Clerk: ZZZ  
Essex Junction, VT 05452

Date: 12/05/2016 Time: 10:13:38

Daily Sale

Description	Ext Price
ITEM: 120003	1.00
Grapes	
ITEM: 120000	1.00
Apple	
ITEM: 120001	2.00
Watermelon	
Rcpt# 2555 Sub-Total:	4.00
	Sales Tax: 0.00
	Total Due: 4.00
	Tot Paid: 4.00

Clerk: Security Administrator-GUI

GIFT CERT Payment of:	4.00
G'Cert Number: 116	
G'Cert Amount Left:	\$46.00
G'Cert Name: Bob Barker	

Obtain a computer-generated inventory printout from a point of sales system for the activity. If a manual inventory listing is required, you can create an inventory worksheet with columns that include: Item, Inventory Unit, Number on Hand, Cost per Inventory Unit, Extended Cost. Organize the items in the store room or outlet in conjunction with the sequential listing of items on the form or printout. This will save time and eliminate the possibility of overlooking a product.

## Step 2

### Work in Pairs



Work in pairs. In addition to speeding up the process, pairs can verify the count and the documentation of the count. One person should identify, inspect, and count each item; the other should enter the count on the inventory list. Item identification should be made by stock number, if possible.

### Step 3

## Record the Count



Record the count on the inventory document in ink. If an error is made, draw one line through the mistake and initial it. Do not use whiteout or scratch it out. This is an original financial control document, so the mistakes and corrections must be readable.

#### Step 4

### Verify



Verify that the merchandise is usable/saleable. If merchandise is not usable/saleable, you will need to check your location's Breakage and Spoilage Report to see if the item is already listed or needs to be added.

## Step 5

### Reconcile



Reconcile the physical count with the automated or hardcopy stock records/in-house bin cards. The bin card should be updated to reflect any adjustment to the bin contents. All items requisitioned and received should be posted to the bin card.

## Summary

Balance Sheet			
For the year ended December 31			
(in thousands)			
<b>ASSETS</b>			
Investments			
Bonds	\$320,349		
Stocks	33,849		
Real Estate	4,107	\$303,002	\$285,748
Cash & Short-Term Investments	14,078	22,589	22,092
Total Investments	372,383	4,304	4,504
Net Premiums Receivable	30,491	21,812	13,941
Accrued Receivables	867	351,867	326,285
Other Assets	2,509	45,975	45,115
<b>TOTAL ASSETS</b>	<b>\$432,785</b>	<b>\$425,517</b>	<b>\$399,268</b>
<b>LIABILITIES</b>			
Unpaid Liabilities			
Loss Adjustment Expenses	583,868		24,011
Premiums/Reserves	19,981		2,364
Insurance Payable	168		1,513
<b>LIABILITIES</b>	<b>\$78,143</b>	<b>\$425,517</b>	<b>\$28,911</b>
<b>SURPLUS</b>			
Shareholders' Surplus	168	\$78,143	\$78,753
Reserve	94	15,829	12,598
Other	88	91,594	88,008
Retained Earnings	89	298	852
<b>TOTAL LIABILITIES &amp; SURPLUS</b>	<b>\$234,476</b>	<b>\$234,476</b>	<b>\$234,476</b>
		201,341	167,505
		<b>\$425,517</b>	<b>\$399,268</b>

Make any necessary adjustments to the stock cards/in-house bin cards and the accounting records.

## Congratulations!

You have completed this lesson — Resale Inventories Accountability.

In this lesson, you learned how to:

- Identify inventory types.
- Select an inventory type based on described conditions and regulatory requirements.
- Describe the procedures for conducting inventories.

Please continue to the next lesson.

[CONTINUE](#)

Lesson 11 of 23

## Lesson 2 Knowledge Checks

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Question

01/02

All resale items must be physically counted daily.

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True

False

*Question*

**02/02**

When conducting an end of the month inventory, which of these procedures should be followed:

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- The Installation Commander is present for the inventory.
- All items should be recorded in pencil so corrections can easily be made.
- Inventory teams should work in pairs.
- The last items purchased should be counted first.

## 3.1 Overview: Using Cost of Goods Sold to Manage Accountability

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### Overview

For Family and MWR resale activities, accounting tests are applied to the cost of goods sold and gross sales revenue. The actual cost of goods sold (COGS) is the best indicator the manager has of the health and profitability of an activity's operation.

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**Being able to determine the variance between actual goods sold and budgeted cost of goods sold is also important in deciding when to take corrective action.**

**Consistent use of the proper account codes is one of the first steps in monitoring COGS.**

**At the end of this lesson, you will be able to:**

- 1 Match General Ledger Accounting Codes commonly applied to cost of goods sold (COGS) calculation with their use.
- 2 Explain the formula used to determine the COGS.
- 3 Apply a formula to calculate cost of goods sold percentage.
- 4 Describe maximum variance as it applies to cost of goods sold.

CONTINUE

## 3.2 General Ledger Accounting Codes used for COGS

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Cost of Goods Sold

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### General Ledger Account Codes Used for COGS

Calculating COGS is a complex process. The important point of emphasis is that managers should be familiar with the accounts available and ensure that items posted in those accounts are handled correctly. Income Statements provide information for calculating cost of goods sold by summarizing information from invoices, inventories, and transfers by account codes. COGS takes

the Total Goods Available for Sale, and subtracts from this amount the Total Deductions from goods available for sale.

## General Ledger Account Codes Used in COGS Additions

In order to determine total goods available for sale, the following GLACs are added to the beginning inventory:

**Account 401**  
flip card for description

### **401 - Purchases**

Use this account to record the dollar value of all items purchased for resale.

1 of 4

**Account 402**  
flip card for description

### **402 - Warehouse Storeroom Requisitions**

Use this account to record the dollar value of merchandise

received by transfer from a warehouse or external storeroom.

2 of 4

**Account 403**  
flip card for description

**403 - Transfer from Other Funds**

Use this account to record the dollar value of merchandise received from another nonappropriated fund instrumentality (NAFI). Use this account to record a transfer from the post restaurant or

3 of 4

**Account 404**  
flip card for description

**404 - Transfer from Other Activities/Departments**

Use this account to record the dollar value of merchandise received from another program, location, or department. The department could be one in your own program or location. For example, use this GLAC if

## Deductions

In order to determine total deductions from goods available for sale, subtract the following GLACs from total goods available for sale:

**Account 411  
Purchase Returns and  
Allowances**  
flip card for description

### **411 - Purchase Returns and Allowances**

Use this account to record the dollar value of merchandise already purchased that is returned for credit to the vendor.

1 of 7

**Account 413  
Transfers to Other  
Fund**  
flip card for description

### **413 - Transfers to Other Fund**

Use this account to record the dollar value of merchandise transferred out to another fund.

**Account 414**  
**Transfers to Other**  
**Activities or Departments**  
flip card for description

**414 - Transfers to**  
**Other Activities or**  
**Departments**

Use this account to record the value of merchandise transferred out to another program, location, or department in the same fund.

**Account 416**  
**Other Inventory**  
**Reductions**  
flip card for description

**416 - Other Inventory**  
**Reductions**

Use this account to record the dollar value of merchandise when transferring the cost to an operating expense account. For example, the golf balls normally sold at the golf course could be given away as prizes for a

**452  
COGS, Promotions**

flip card for description

**452 - COGS,  
Promotions**

Use this account to record the cost value of merchandise that is given away to encourage customer attendance or return business. For example, this

5 of 7

**Account 453  
COGS, Customer  
Rejected Goods**

flip card for description

**Account 453 - COGS,  
Customer Rejected Goods**

Use this account, specifically for food and beverage activities, to record the cost of food or beverage that is rejected by customers. For example, a steak is

6 of 7

**Account 454  
COGS, Resale Merchandise,  
Spoilage, Breakage, and  
Obsolescence**

**Account 454 – COGS,  
Resale Merchandise,  
Spoilage, Breakage,  
and Obsolescence**

flip card for description

Use this account to record the cost of inventory that is written to zero value because it is spoiled, broken, or too old for

7 of 7

Match each Account with its Purpose by selecting a letter and dragging it to the appropriate number.

⋮ Account 404

Record \$ value of merch received by transfer from a warehouse or external storeroom.

⋮ Account 403

Record the \$ value of merchandise received from another program, location, or department.

⋮ Account 452

Record the dollar value of all items purchased for resale.

⋮ Account 402

Record cost value of merch. that is given away to encourage customer attendance/return.

⋮ Account 401

Record the dollar value of merchandise received from another NAFI.

SUBMIT

CONTINUE

## 3.3 Cost of Goods Sold in Dollars

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### Cost of Goods Sold in Dollars

COGS is defined as the cost associated with the purchase of goods sold at retail. In some cases, that would just be the specific cost for the product purchased for resale.

For example, if we purchase a gross of golf balls for \$223.20, the cost per unit would be \$1.55 each.



$$\text{\$223.20} \div 144 \text{ (number in gross)} = \text{\$1.55}$$

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## Cost of Goods Sold in Dollars

In another case, the COGS would be the specific cost of the item plus the freight cost. We might purchase a bowling ball at a cost of \$44.60 but have to pay \$3.65 each for shipping to our location. Thus the actual cost of goods sold would be \$48.25.



$$\text{\$44.60} + \text{\$3.65} = \text{\$48.25}$$

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## Cost of Goods Sold in Dollars

In a third case, the cost of goods would be the aggregate cost of all of the items used to "manufacture" the product we sell. When we sell a hot dog, the cost of the product is the total of

the hot dog (\$.16), the hot dog bun (\$.11), and the estimated cost of mustard, onions, relish, etc. (\$.03) or a total cost of \$.30.



$$\$0.16 + \$0.11 + \$0.03 = \$0.30$$

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	Cost of Goods \$	
COGS% =	-----	X 100
	Net Sales \$	

## COGS Formula

Based on this definition, the relationship between cost of goods sold and sales should be a direct relationship. Specifically, when more items are sold, the COGS in dollars increases proportionally to the total sales in dollars.

The formula for calculating Cost of Goods Sold is beginning inventory plus all purchases and receipts, minus all issues to other activities, minus any returns to vendors, minus ending inventory.

<b>Part 1 Beginning Inventory</b>	<b>\$2,000</b>
+ 401 Purchases	\$1,000
+402 Warehouse/Storeroom Requisitions	\$250
+403 Transfer from Other Funds	\$300
+ 404 Transfer from Other Activity/Dept	\$100
= Total Good Available for Sale	\$3,600

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Let's look at this equation as it is formatted and presented on the income statement.

It is shown in two separate parts:

Part 1 Total Goods Available for Sale and

Part 2 Total Deductions (for those goods not sold).

## COGS Formula Part 1

Part 1 is the dollar value of all of the products that were available for sale during the entire accounting period. The value of the beginning inventory is determined by a physical count of the products, multiplied by the individual cost of each item. The remaining dollar values for GLACs 401 through 404 are posted from the value of the invoice or transfer voucher. All of these accounts are combined to yield the Total Goods Available for Sale.

## COGS Formula Part2

Part 2 is the dollar value of all the items that are left at the end of the month or were no longer available for sale during the period. The items no longer available for sale include items charged off to an expense account; items moved to another fund, activity, or department; and items returned to the warehouse. The value of the ending inventory is determined by a physical count of the products multiplied by the individual price of each item. The dollar value for all of the remaining GLACs is obtained from the total of the transfer out or credit voucher.

Part 2	
Remaining items	\$100
Items no longer available for sale	\$50
Items transferred out	\$50
= Total Deductions	\$200

Calculating COGS: Final Step	
Part 1	\$3,700
Part 2	- \$200
= COGS	\$3,500

### COGS Formula

In the final step of calculating COGS, Total Deductions are subtracted from the Total Goods Available for Sale.

CONTINUE

## 3.4 Cost of Goods Sold Percentages

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Cost of goods sold is monitored in terms of the cost of goods sold percentage (COGS%).

By calculating cost of goods sold as a percentage on entire inventories or categories of merchandise, it can be compared to the approved budget.

The desired percentage for COGS is established during budget formulation.

The budgeted percentage is compared to the actual percentage each month in order to determine if the COGS% is increasing, decreasing, or fluctuating.

**COGS should be an absolute variable cost, always consuming the same percent of the resale price. Based on that ideal premise, we monitor these expenses in terms of increases or decreases in the cost of goods sold percentage.**

	Cost of Goods \$	
COGS% =	-----	X 100
	Net Sales \$	

## Cost of Goods Sold Percentage

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### What does a 71.6% cost of goods sold really mean?

We hear the figure bantered around often, but seldom do we stop and think that it really means that 71.6 cents out of every dollar collected are going to pay for the product we sold.

Conversely, this leaves only 28.4 cents out of every dollar to pay all of the other expenses associated with Sales: labor, utilities, supplies, depreciation on assets, etc.

CONTINUE

## 3.5 Allowable Maximum Variance

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### Allowable Maximum Variance

If the actual cost of goods sold exceeds the budgeted cost of goods sold, the manager will not realize the profit he or she planned during the budget process. Each activity has an established percentage of variance from the budgeted cost of goods sold that indicates when corrective action must be taken.

Because different businesses have different characteristics, the maximum allowable variance between expected and actual COGS may be different from activity to activity. These percentages are based on historical performance of each type of business.

Allowable Cost Of Goods Sold Percentage Point Variance		
Activity	Expected COGS	Actual Sales vs Expected Sales
Food	2%	.5%
Bar	1%	2%
Other	1%	1%

### Allowable Maximum Variance



Food activities have a larger percentage of allowable variation from expected COGS. An operation with a salad bar or buffet would

probably have a higher shortage from spillage than would a traditional restaurant where the plate is prepared in the kitchen. Operations with merchandise like golf or bowling items will generally have a lower variance.

## Congratulations!

You have completed this lesson — Managing Accountability Using Cost of Goods Sold.

In this lesson, you learned how to:

- Match General Ledger Accounting Codes commonly applied to cost of goods sold (COGS) calculation with their use.
- Explain the formula used to determine the COGS. Apply a formula to calculate cost of goods sold percentage.
- Describe maximum variance as it applies to cost of goods sold.

CONTINUE

Lesson 17 of 23

# Lesson 3 Knowledge Checks

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Question

01/04

Match each Account with its Purpose by selecting a letter and dragging it to the appropriate number. "Use account \_\_\_\_\_ to record the \_\_\_\_\_.

---

⋮ Account 404

dollar value of merchandise received by transfer from a warehouse or external storeroom.

⋮ Account 452

dollar value of merchandise received from another program, location, or department.

⋮ Account 403

dollar value of all items purchased for resale.

⋮ Account 402

cost value of merchandise given away to encourage customer attendance or return business.

⋮ Account 401

dollar value of merchandise received from another NAFI.

Question

02/04

When recording items purchased for resale purposes during the month, which GLAC is used?

---

401

404

411

414

Question

03/04

COGS should be an absolute variable cost always consuming the same percent of the resale price.

---

True

False

Question

04/04

The maximum acceptable variance for COGS% in bar operations is:

---

1%

2%

3%

4%

# 4.1 Overview: Retail Sales and Accountability Problems and Solutions

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## Overview

There are many questions management may need to ask before they begin to hypothesize causes for a large variance in cost of goods sold percentage (COGS%). There is a fairly comprehensive list of changes or problems which could impact COGS%. In order to organize the list slightly, they have arbitrarily been grouped into operational and administrative problems.

At the end of this lesson, you will be able to:

- 1 Describe and list operational problems that affect COGS%.
- 2 Describe and list administrative problems that affect COGS%.
- 3 List possible solutions to COGS% problems.
- 4 Identify a sequence for applying solutions.

CONTINUE

## 4.2 Operational Problems

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### Operational Problems

Operational problems are defined as management or employees failing to follow prescribed procedures. This definition is provided to differentiate them from the type of problems that we have arbitrarily titled administrative errors. Operational problems that may occur include:

- Employees counted the end of month inventory incorrectly.
- Receiving report not submitted when merchandise was received.
- Partial receiving document not prepared.
- Pricing did not generate required COGS%.
- Merchandise moved between locations or departments without a transfer voucher.
- Sales incorrectly recorded at the point of sale, such as: Wrong Department or Discounts not recorded.
- Customer or employee pilferage.
- Portion control not achieved.

- Spoilage, breakage, obsolescence not recorded.
- Waste not controlled.
- Sales mix changed.



Transfers ("in" or "out"), also known as "TBA's" (transfers between activities), affect the amount of inventory an activity has available for sale. TBA's are accomplished through the use of an automated transfer in FOODTRAK, RecTrac, or DA Form 4080.

**CONTINUE**

## 4.3 Administrative Problems

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### Administrative Problems

Administrative problems are those that involve pricing, extending, or posting paperwork. These errors could be caused by a mistake in completing paperwork, as opposed to not initiating the paperwork at all. This category of problems normally focuses on inaccurate pricing, incorrect extension, or miss-dating some type of paperwork. Specific problems could include:

- End of month inventory priced inaccurately.
- End of month inventory extended incorrectly.
- Receiving document processed against the wrong month.
- Freight cost not included in calculation of the price.
- Transfer voucher improperly priced.
- Transfer not extended correctly.
- Inventory unit costs are entered incorrectly.
- Valuation report run incorrectly – last cost vs. average cost.

CONTINUE

## 4.4 Problem Solving

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### Problem Solving

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Solving Operational or Administrative problems can best be achieved by following certain procedures.

Review the following 10 cards for some common problems then flip each one for the suggested possible solutions.

## Read Problems and Review Possible Solutions by Flipping each Flash Card Below

### **Problem:**

Incorrect Inventory

### **Possible Solutions:**

- Establish organized and specific procedures to conduct end of month inventories using a detailed Standard Operating Procedures (SOP) document.
- Procedures should specifically include requirements to

1 of 10

### **Problem:**

Receiving Report Not Submitted

**Possible Solutions:** In order to properly control receiving, you should have a detailed SOP that prescribes the specific procedures that will be used.

- Designate only those people fully trained and familiar with the requirements outlined by

2 of 10

**Problem:**

Transfer Voucher Not Prepared

**Possible Solutions:**

- Limit access to storeroom and warehouse areas to employees who are trained on how to issue merchandise to sales areas, other departments, expense accounts, and

3 of 10

**Problem:**

Sales not properly documented

**Possible Solutions:** Review the entire sales documentation system.

\*\* Ensure that employees have available on hand a reference document that designates where to ring each item on the cash register.

\*\* Frequently used keys on the

4 of 10

**Problem:**

**Possible Solutions:** Secure merchandise not in the resale area. If access is limited, there is

Merchandise or Goods Diverted

less chance for diversion by either employees or customers.  
\*\* Establish sales accountability inventories for items that continue to show overages or

5 of 10

**Problem:**

Under or Over Portioning

**Possible Solutions:** Spot check the portions being served by employees.

\*\* Ensure that the correct portioning utensils and containers are the only ones available for employee use.

\*\* Develop and display portion size lists in places where they

6 of 10

**Problem:**

Change in Sales Mix

**Possible Solutions:**

\*\*Check the number of products sold and the sell price for each item. Using this data, calculate the expected sales (if all missing product was sold). This total is then compared to the actual sales on the income statement.

\*\*100% of the total sales should be accounted for

**Problem:**

Errors on the Inventory  
Paperwork

**Possible Solutions:**

\*\* Establish, to the maximum extent possible, two-person teams to conduct inventories. Insist that counter and recorder review quantity and unit of issue at the time of inventory.

\*\* Price and extend the inventory in the activity with an

**Problem:**

Errors on the Transfer Voucher

**Possible Solutions:**

\*\* All prices and units of issue and extension of the document should be rechecked prior to leaving the activity.

\*\* If two signatures are required (one by issuing person and one by receiving person), then each should check the accuracy of

**Problem:**

Errors on Receiving Reports

**Possible Solutions**

\*\* Receiving reports must be completed and dated at the time the merchandise is received.

\*\* Annotate receiving reports near the end of the month as

10 of 10

CONTINUE

## 4.5 Applying Solutions

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**The recommended order of attack is on the following list.**

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### **Applying Solutions**

Unfortunately, there is no step by step order or format for applying solutions.

Much of the order and what to try first will come with experience and practice. Start with the simplest and easiest things first.

It is relatively easy to ensure the accuracy of the inventory. All that's required as corrective action is checking and rechecking. It is not as easy to ensure that all of the transfer vouchers are prepared or all of the income is recorded properly.

In these cases, it involves a longer time span to train employees, apply proper management follow up, and retrain as required.

1

**Review and Fix Administrative Problems.** Errors in pricing, extending, and dating inventories, transfers, and receiving reports can be identified from financial records and generally require only more attention to detail and review.

2

**Sales Mix Problems.** Perhaps preparing the sales mix should be the first step, but it is less time consuming to review the administrative problems. Performing the sales mix is next because, if it reveals a shift in customer preference, then all of the other operational "fixes" are no longer required.

3


**Inventory Problems.** Improving inventory procedures can be fixed rapidly and, when combined with number 1 above, the value of the inventory will be verified.

4

**Pricing Problems.** Once again, pricing is on a par with inventory because it can be reviewed and fixed quickly and just requires periodic management attention.

5

**Receiving Problems.** This category goes next because establishing the procedures and training a few people you trust to do it right is relatively easy to accomplish. Providing the follow up is a little more difficult.



6

**Sales Documentation Problems.** This category falls in the same area as receiving. The major reason it falls after receiving is that it requires more review, retraining, and follow up.

7

**Portioning Problems.** Requirements for portion control are easy to review but may be difficult in practice. Train and retrain to gain consistency. This is a category that always seems to slip through the crack!

8

**Transfer Problems.** It is difficult to track merchandise that moves around. The major effort must be with employees to get them to realize that the movement of merchandise must be recorded. You will be extremely fortunate to get this one absolutely correct unless you lock everything up and keep the keys and issue yourself; however, most managers find this is not a workable solution.

9

**Theft/Waste.** All staff need to be constantly vigilant to eliminate or reduce theft/waste. While we will never identify all of the problems in this category, the focus must be to minimize the opportunity.

## Applying Solutions

Remember, this is a general prioritization which may not work for the specific Family and MWR activity you operate. For those attacking the problem for the first time, it is a starting point.



The list is just a starting point.

---

## Congratulations!

You have completed this lesson — Retail Sales Accountability Problems and Solutions.

In this lesson, you learned how to:

- Describe and list operational problems that affect COGS%.
- Describe and list administrative problems that affect COGS%.
- List possible solutions to COGS% problems.
- Identify a sequence for applying solutions.

CONTINUE

# Lesson 4 Knowledge Checks

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Question

01/04

Which of the following is an example of an operation problem that can cause a variance in COGS%?

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- Incorrect pricing
- Moving merchandise between locations or departments without a transfer voucher
- Customer or employee pilferage
- All of the above

Question

02/04

One way to correct problems with sales not properly recorded is to require training for all new employees who will be using the cash register or point of sales system.

---

- True
- False

Question

03/04

Match each Operational or Administrative Problem with its appropriate Corrective Procedure by selecting a choice from the left and dragging it to the appropriate match on the right.

⋮ Change in Sales Mix

⋮ Over/Under Portioning

⋮ Errors on the Inventory Paperwork

⋮ Incorrect Inventory

Check prices on the inventory

Managers should recheck at least 10% of the physical inventory

Check sales by item

Check for use of standard recipes

Question

04/04

Usually, the first step to use when accountability problems are found is to check the administrative details.

---

True

False