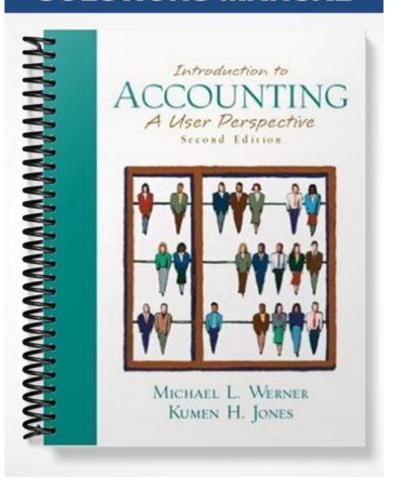
# **SOLUTIONS MANUAL**



# **2** Classifying Costs

### SOLUTIONS TO APPLY WHAT YOU HAVE LEARNED

### 2-12.

- 1. <u>I</u> Rent for the office space
- 2. D Rent for the store
- 3. <u>I</u> Brittany's salary
- 4. <u>D</u> The store manager's salary
- 5. <u>I</u> The personnel manager's salary
- 6. <u>I</u> Bookkeeper's salary
- 7. D Maintenance cost for the store
- 8. <u>D</u> Depreciation on sales equipment
- 9. <u>I</u> Depreciation on bookkeeping computer
- 10. D Sales clerk's salary
- 11. D Cost of shoes
- 12. <u>I</u> Advertising cost for the chain

### 2-13.

Student responses will vary and these lists provide some of the possibilities:

- a. 1. Cost of rent for one of the care centers
  - 2. Cost of electricity for one of the care centers
  - 3. Cost of telephone service for one of the care centers
  - 4. Wages of a child-care worker
  - 5. Cost of lawn service for one of the centers
- b. 1. Sue Lee's salary
  - 2. The bookkeeper's salary
  - 3. Cost of rent for the office space
  - 4. Cost of utilities, telephone, maintenance, and other items associated with the office space

### 2-14.

- 1. <u>I</u> Rent for the Florida district office building
- 2. <u>I</u> Rent for the home office building in New York
- 3. D Rent for the sales office
- 4. <u>I</u> The company president's salary
- 5. <u>I</u> The salary of the vice president in charge of the Florida division
- 6. <u>D</u> The salary of a sales office manager
- 7. <u>D</u> The salary of a sales associate

### 2-15.

- 1. <u>DM</u> Material incorporated into products
- 2. Sales supplies
- 3. MO Supplies used in the factory
- 4. MO Wages of plant security guard
- 5. S Wages of security guard for the sales office
- 6. MO Depreciation on a file cabinet used in the factory
- 7. A Depreciation on a file cabinet used in the general accounting office
- 8. A President's salary
- 9. A President's secretary's salary
- 10. MO Manufacturing vice president's salary
- 11. MO Salary of the manufacturing vice president's secretary
- 12. <u>DL</u> Wages paid to production line workers
- 13. MO Factory rent
- 14. A Accounting office rent
- 15. S Depreciation on a copy machine used in the sales department
- 16. MO Depreciation on a copy machine used to copy work orders in the factory
- 17. MO Salary of plant supervisor

### 2-16.

- 1. PR Material incorporated into products
- 2. <u>PE</u> Sales supplies
- 3. PR Supplies used in the factory
- 4. PR Wages of plant security guard
- 5. <u>PE</u> Wages of security guard for the sales office
- 6. PR Depreciation on a file cabinet used in the factory
- 7. <u>PE</u> Depreciation on a file cabinet used in the general accounting office
- 8. <u>PE</u> President's salary
- 9. <u>PE</u> President's secretary's salary
- 10. PR Manufacturing vice president's salary
- 11. PR Salary of the manufacturing vice president's secretary
- 12. <u>PR</u> Wages paid to production line workers
- 13. PR Factory rent
- 14. PE Accounting office rent
- 15. <u>PE</u> Depreciation on a copy machine used in the sales department
- 16. <u>PR</u> Depreciation on a copy machine used to copy work orders in the factory
- 17. <u>PR</u> Salary of plant supervisor

### 2-17.

- a. Direct materials: Wood used in production \$25,000
- b. Direct labor: Production line labor cost \$50,000

# 2-17. (Continued)

c.	Manufacturing overhead:
	Cleaning supplies

Cleaning supplies	•	300
Machine lubricants		100
Factory rent		2,000
Plant security guard		1,200
Plant supervision		2,500
Depreciation on prod. equip.		4,000
Total overhead	\$ <u>1</u>	0,100

# d. Total manufacturing cost:

Direct materials	\$25,000
Direct labor	50,000
Manufacturing overhead	10,100
Total manufacturing cost	\$ <u>85,100</u>

$$\$85.10 = \$85,100 \\ 1,000$$

f. Carole can use this valuable information about the cost per table to evaluate her selling price and to determine her gross profit.

### 2-18.

Beginning inventory	900 sq. ft.
Purchases	<u>12,000</u> sq. ft.
Total available	12,900 sq. ft.
Used during November	<u>(9,900</u> ) sq. ft.
Ending inventory	<u>3,000</u> sq. ft.

The foreman is being honest. The amount used in production actually declined during 2005, but the inventory grew at an alarming rate because the purchases increased substantially. If the inventory is allowed to decline back to a normal level, the purchases will decline.

### 2-20.

Sales have increased, but costs have increased at a higher rate. The Cost of Goods Sold was 81.79% of sales (\$620,000 / \$758,000) in 2005 and 85.51% of sales (\$761,000 / \$890,000) in 2006, an increase of 3.72%. It is important to determine the reason for the increase. It may result from having to lower the sales price to sell a larger volume of cars or from an increased cost to purchase the cars. In addition, the selling and administrative cost increased in amount during 2006. The inventory increased from \$66,000 at the beginning of 2005 to \$123,000, a net of \$57,000, during 2006. This required a larger amount of inventory financing. Brito needs to increase his profit margin to improve his net profit.

### 2-21.

Beginning inventory	\$ 1,450
Purchases	12,360
Cloth available	\$13,810
Cloth used in production	(12,750)
Ending inventory	\$ <u>1,060</u>

2-22.

a.

Beginning inventory	\$ 540,000
Purchases	4,680,000
Goods available	5,220,000
Ending inventory	(480,000)
Used in production	\$ <u>4,740,000</u>

b.

	Penny Manufacturing Company General Journal				
		General Journal			Page 43
Date 2004		Description	Post Ref.	Debit	Credit
Jan	3	Raw Materials		4,680,000	
		Accounts Payable			4,680,000
		To record purchase of raw materials.			

c.

	Penny Manufacturing Company General Journal				
					Page 47
	ate )04	Description	Post Ref.	Debit	Credit
Jan	31	Work-in-Process		4,740,000	
		Raw Materials			4,740,000
		To record transfer of raw materials			
		materials to production.			

2-23.

a.

Beginning inventory	\$ 40,000
Purchases	437,000
Goods available	\$ 477,000
Ending inventory	(48,000)
Used in production	\$ <u>429,000</u>

b.

	_	Montoya Manufacturing C General Journal	Company	7	
					Page 22
Date 2004		Description	Post Ref.	Debit	Credit
Jun	3	Raw Material		437,000	
		Accounts Payable			437,000
		To record purchase of raw materials.			

c.

	Montoya Manufacturing Company General Journal				
		General Journal			Dogo 25
					Page 25
	ate )04	Description	Post Ref.	Debit	Credit
Jun	30	Work-in-Process		429,000	
		Raw Materials			429,000
		To record transfer of raw materials			
		materials to production.			

# 2-24.

Beginning inventory	\$ 4,210
Purchases	27,530
Goods available	\$31,740
Ending inventory	(3,840)
Used in production	\$ <u>27,900</u>

# 2-25.

Beginning inventory	\$ 3,560
Purchases	286,000
Goods available	\$289,560
Ending inventory	(4,260)
Used in production	\$285,300

# 2-26.

Beginning inventory	\$ 56,530
Purchases	488,668
Goods available	\$545,198
Ending inventory	(52,849)
Cost of Goods Sold	\$492,349

# 2-27.

# a. Direct materials:

Metal used in production	\$750,000
Wire used in production	40,000
Cost of direct materials	\$ <u>790,000</u>

# b. Direct labor:

Assembly line labor cost	\$ <u>960,000</u>
--------------------------	-------------------

# 2-27. (Continued)

c.	Manufacturing overhead:
∙.	Triandiatactaring or criticae.

Factory supplies	\$ 5,200
Factory depreciation	48,000
Factory security guard	8,200
Factory supervision	62,500
Depreciation on equipment	454,850
Total manufacturing overhead	\$ <u>578,750</u>

### Total product cost: d.

Direct materials	\$	790,000
Direct labor		960,000
Manufacturing overhead		578,750
Total product cost	\$ <u>2</u>	,328,750

e.

Total manufacturing cost Average cost per unit = Number of units manufactured

> \$20.25 = \$<u>2,328,750</u> 115,000 units

### 2-28.

### Direct materials: a.

Beginning direct material inventory	\$ 42,000
Direct materials purchased	850,000
Total materials available	\$892,000
Ending direct material inventory	(48,000)
Cost of direct materials used	\$ <u>844,000</u>
Direct labor:	

## b.

Assembly line labor cost \$820,000

# 2-28. (Continued)

c.	Manufacturing overhead:	
	Indirect materials used	\$ 4,000
	Factory supplies	6,200
	Factory depreciation	60,000
	Factory security guard	12,000
	Factory supervision	82,600
	Depreciation on equipment	560,000
	Total manufacturing overhead	\$724,800
d.	Total manufacturing cost:	
	Direct materials	\$ 844,000
	Direct labor	820,000
	Manufacturing overhead	724,800
	Total manufacturing cost	\$ <u>2,388,800</u>
e.	Cost of goods manufactured:	
	Beginning work-in-process	\$ 84,000
	Total manufacturing costs	2,388,800
		\$2,472,800
	Ending work-in-process	(93,000)
	Cost of goods manufactured	\$ <u>2,379,800</u>
f.	Cost of goods sold:	
	Beginning finished goods inventory	\$ 124,000
	Cost of goods manufactured	2,379,800
	Goods available for sale	\$2,503,800
	Ending finished goods inventory	(133,000)
	Cost of goods sold	\$ <u>2,370,800</u>
2-29.		
0	Diment materials.	
a.	Direct materials:  Reginning direct material inventory	\$ 82,000
	Beginning direct material inventory	, , , , , ,
	Direct materials purchased Total materials available	1,740,000 \$1,822,000
		\$1,822,000
	Ending direct material inventory	(98,000) \$1,724,000
	Cost of direct materials used	\$ <u>1,724,000</u>

# 2-29. (Continued)

b.	Direct labor:	
	Assembly line labor cost	\$ <u>2,120,000</u>
c.	Manufacturing overhead:	
	Indirect materials used	\$ 3,000
	Factory supplies	12,500
	Factory depreciation	134,000
	Factory security guard	22,000
	Factory supervision	183,500
	Depreciation on equipment	1,340,000
	Total manufacturing overhead	\$ <u>1,695,000</u>
d.	Total manufacturing cost:	
	Direct materials	\$1,724,000
	Direct labor	2,120,000
	Manufacturing overhead	1,695,000
	Total manufacturing cost	\$ <u>5,539,000</u>
e.	Cost of goods manufactured:	
	Beginning work-in-process	\$ 164,000
	Total manufacturing costs	5,539,000
		\$5,703,000
	Ending work-in-process	<u>(184,000</u> )
	Cost of goods manufactured	\$ <u>5,519,000</u>
f.	Cost of goods sold:	
	Beginning finished goods inventory	\$ 255,000
	Cost of goods manufactured	5,519,000
	Goods available for sale	\$5,774,000
	Ending finished goods inventory	(270,000)
	Cost of goods sold	\$ <u>5,504,000</u>

a.	Direct materials:	
	Beginning direct material inventory	\$ 2,000
	Direct materials purchased	22,000
	Total materials available	\$24,000
	Ending direct material inventory	(3,000)
	Cost of direct materials used	\$ <u>21,000</u>
b.	Direct labor:	
	Assembly line labor cost	\$ <u>120,000</u>
c.	Manufacturing overhead:	
	Factory supplies	\$ 12,500
	Factory depreciation	34,000
	Indirect factory costs	12,000
	Depreciation on equipment	42,000
	Total manufacturing overhead	\$ <u>100,500</u>
d.	Total manufacturing cost:	
	Direct materials	\$ 21,000
	Direct labor	120,000
	Manufacturing overhead	100,500
	Total manufacturing cost	\$ <u>241,500</u>
e.	Cost of goods manufactured:	
	Beginning work-in-process	\$ 4,000
	Total manufacturing costs	241,500
		\$245,500
	Ending work-in-process	(5,000)
	Cost of goods manufactured	\$ <u>240,500</u>
f.	Cost of goods sold:	
	Beginning finished goods inventory	\$ 9,500
	Cost of goods manufactured	240,500
	Goods available for sale	\$250,000
	Ending finished goods inventory	(8,000)
	Cost of goods sold	\$ <u>242,000</u>

a.	Direct materials:	
	Beginning direct material inventory	\$ 22,000
	Direct materials purchased	280,000
	Total materials available	\$302,000
	Ending direct material inventory	(28,000)
	Cost of direct materials used	\$ <u>274,000</u>
b.	Direct labor:	
	Assembly line labor cost	\$ <u>290,000</u>
c.	Manufacturing overhead:	
	Factory rent	\$ 24,000
	Indirect factory costs	36,000
	Depreciation on equipment	80,000
	Total manufacturing overhead	\$ <u>140,000</u>
d.	Total manufacturing cost:	
	Direct materials	\$274,000
	Direct labor	290,000
	Manufacturing overhead	140,000
	Total manufacturing cost	\$ <u>704,000</u>
e.	Cost of goods manufactured:	
	Beginning work-in-process	\$ 16,000
	Total manufacturing costs	704,000
		\$720,000
	Ending work-in-process	(5,000)
	Cost of goods manufactured	\$ <u>705,000</u>
f.	Cost of goods sold:	
	Beginning finished goods inventory	\$ 30,000
	Cost of goods manufactured	705,000
	Goods available for sale	\$735,000
	Ending finished goods inventory	(28,000)
	Cost of goods sold	\$ <u>707,000</u>

# Adler Manufacturing Company Cost of Goods Manufactured Schedule For the Year Ended December 31, 2004

### **Direct Materials:**

Beginning Direct Material Inventory	\$ 12,000	
+ Purchases During 2004	122,000	
= Materials Available	\$134,000	
<ul> <li>Ending Direct Material Inventory</li> </ul>	(13,000)	
Total Direct Material Used During 2004		\$121,000
Direct Labor During 2004		86,000
Manufacturing Overhead Cost:		
Factory Rent	\$ 64,000	
Depreciation of Equipment	92,000	
Utilities	2,500	
Other Indirect Factory Costs	22,000	
Total Manufacturing Overhead Cost Durin	ig 2004	180,500
= Manufacturing Cost for Current Period		\$387,500
+ Beginning Work-in-Process Inventory (	(01-01-04)	<u>24,000</u>
= Cost of Goods Available to be Finished		\$411,500
<ul> <li>Ending Work-in-Process Inventory (12-</li> </ul>	-31-04)	(25,000)
= Cost of Goods Manufactured During 20	004	\$ <u>386,500</u>
b.		

# Adler Manufacturing Company Cost of Goods Sold Schedule For the Year Ended December 31, 2004

Beginning Finished Goods Inventory	\$ 29,500
+ Cost of Goods Manufactured During 2004	386,500
= Goods Available for Sale in 2004	\$416,000
<ul> <li>Ending Finished Goods Inventory</li> </ul>	(28,000)
= Costs of Goods Sold for 2004	\$ <u>388,000</u>

# Clifford Manufacturing Company Cost of Goods Manufactured Schedule For the Year Ended December 31, 2005

Direct Materials:		
Beginning Direct Material Inventory	\$ 2,300	
+ Purchases During 2005	12,300	
= Materials Available	\$14,600	
<ul> <li>Ending Direct Material Inventory</li> </ul>	(3,400)	
Total Direct Material Used During 2005		\$ 11,200
Direct Labor During 2005		48,600
Manufacturing Overhead Cost:		
Factory Supplies	\$ 500	
Other Indirect Factory Costs	4,700	
Factory Depreciation	22,000	
Depreciation of Equipment	12,000	
Total Manufacturing Overhead Cost During	2005	39,200
<ul> <li>Manufacturing Cost for Current Period</li> </ul>		\$ 99,000
+ Beginning Work-in-Process Inventory (01	-01-05)	5,500
= Cost of Goods Available to be Finished		\$104,500
<ul> <li>Ending Work-in-Process Inventory (12-31</li> </ul>	-05)	<u>(4,100</u> )
= Cost of Goods Manufactured During 2005	j	\$ <u>100,400</u>

b.

# Clifford Manufacturing Company Cost of Goods Sold Schedule For the Year Ended December 31, 2005

\$ 6,500
100,400
\$106,900
(5,100)
\$ <u>101,800</u>

## Lowell Manufacturing Company Cost of Goods Manufactured Schedule For the Year Ended December 31, 2005

### **Direct Materials: Beginning Direct Material Inventory** \$ 40,000 + Purchases During 2005 350,000 = Materials Available \$390,000 Ending Direct Material Inventory (50,000)Direct Material Used During 2005 \$340,000 Direct Labor During 2005 220,000 Manufacturing Overhead Cost: **Indirect Materials** \$ 24,000 **Factory Supervision** 42,000 **Factory Depreciation** 90,000 Depreciation of Equipment 160,000 **Factory Supplies** 6,000 **Factory Security Guard** 22,000 Total Manufacturing Overhead Cost During 2005 344,000 \$904,000 = Manufacturing Cost for Current Period + Beginning Work-in-Process Inventory (01-01-05) 70,000 = Cost of Goods Available to be Finished \$974,000 - Ending Work-in-Process Inventory (12-31-05) (60,000)

= Cost of Goods Manufactured During 2005

\$914,000

# 2-34. (Continued)

b.

# Lowell Manufacturing Company Cost of Goods Sold Schedule For the Year Ended December 31, 2005

Beginning Finished Goods Inventory	\$ 90,000
+ Cost of Goods Manufactured During 2005	914,000
= Goods Available for Sale in 2005	\$1,004,000
<ul> <li>Ending Finished Goods Inventory</li> </ul>	(80,000)
= Costs of Goods Sold for 2005	\$ <u>924,000</u>

c.

# Lowell Manufacturing Company Income Statement For the Year Ended December 31, 2005

Sales		\$1	,267,000
Cost of Goods Sold			924,000
Gross Profit		\$	343,000
Operating Expenses:			
Selling Expenses:			
Sales Salaries	\$110,000		
Depreciation-Sales Office	24,000		
Total Selling Expenses	\$ <u>134,000</u>		
Administrative Expenses:			
Depreciation-Adm. Office	\$ 36,000		
Depreciation-Office Equipment	16,000		
Total Administrative Expenses	\$ <u>52,000</u>		
Total Operating Expenses			186,000
Operating Income		\$_	157,000

# Quintana Manufacturing Company Cost of Goods Manufactured Schedule For the Year Ended December 31, 2005

### **Direct Materials:** \$ 45,000 Beginning Direct Material Inventory + Purchases During 2005 370,000 = Materials Available \$415,000 Ending Direct Material Inventory (56,000)Direct Material Used During 2005 359,000 Direct Labor During 2005 240,000 Manufacturing Overhead Cost: **Indirect Materials** \$ 34,000 **Factory Supervision** 48,000 **Factory Supplies** 8,000 Depreciation of Equipment 145,000 Depreciation of Factory 96,000 **Factory Security Guard** 32,000 Total Manufacturing Overhead Cost During 2005 363,000 = Manufacturing Cost for Current Period 962,000 + Beginning Work-in-Process Inventory (01-01-05) 72,000 = Cost of Goods Available to be Finished \$1,034,000 - Ending Work-in-Process Inventory (12-31-05) (77,000)= Cost of Goods Manufactured During 2005 \$ 957,000

# 2-35. (Continued)

b.

# Quintana Manufacturing Company Cost of Goods Sold Schedule For the Year Ended December 31, 2005

Beginning Finished Goods Inventory	\$ 93,000
+ Cost of Goods Manufactured During 2005	957,000
= Goods Available for Sale in 2005	\$1,050,000
<ul> <li>Ending Finished Goods Inventory</li> </ul>	(86,000)
= Costs of Goods Sold for 2005	\$ <u>964,000</u>

c.

# Quintana Manufacturing Company Income Statement For the Year Ended December 31, 2005

Sales		\$1	,302,000
Cost of Goods Sold			964,000
Gross Profit		\$	338,000
Operating Expenses:			
Selling Expenses:			
Sales Salaries	\$122,000		
Depreciation-Sales Office	34,000		
Total Selling Expenses	\$156,000		
Administrative Expenses:			
Depreciation-Adm. Office	\$ 30,000		
Depreciation-Adm. Office Equip	19,000		
<b>Total Administrative Expenses</b>	\$ <u>49,000</u>		
Total Operating Expenses			205,000
Operating Income		\$	133,000

# Rodriguez Manufacturing Company Cost of Goods Manufactured Schedule For the Year Ended December 31, 2004

### Direct Materials:

Beginning Direct Material Inventory	\$ 55,000	
+ Purchases During 2004	290,000	
= Materials Available	\$345,000	
<ul> <li>Ending Direct Material Inventory</li> </ul>	(56,000)	
Direct Material Used During 2004		\$289,000
Direct Labor During 2004		220,000
Manufacturing Overhead Cost During 2004	•	286,000
= Manufacturing Cost for Current Period		\$795,000
+ Beginning Work-in-Process Inventory (0	1-01-04)	62,000
= Cost of Goods Available to be Finished		\$857,000
<ul> <li>Ending Work-in-Process Inventory (12-3)</li> </ul>	1-04)	(67,000)
= Cost of Goods Manufactured During 200	4	\$ <u>790,000</u>

b.

# Rodriguez Manufacturing Company Cost of Goods Sold Schedule For the Year Ended December 31, 2004

Beginning Finished Goods Inventory	\$ 83,000
+ Cost of Goods Manufactured During 2004	790,000
= Goods Available for Sale in 2004	\$873,000
<ul> <li>Ending Finished Goods Inventory</li> </ul>	<u>(96,000</u> )
= Costs of Goods Sold for 2004	\$ <u>777,000</u>

# 2-36. (Continued)

c.

# Rodriguez Manufacturing Company **Income Statement** For the Year Ended December 31, 2004

Sales	\$1	,124,000
Cost of Goods Sold		777,000
Gross Profit	\$	347,000
Operating Expenses:		
Selling Expenses \$122,000	)	
Administrative Expenses <u>140,000</u>	<u>)</u>	
Total Operating Expenses		262,000
Operating Income	\$_	85,000

2-37.

a.

# Avener Manufacturing Company Cost of Goods Manufactured Schedule For the Year Ended December 31, 2004

Direct Materials:	
Beginning Direct Material Inventory \$ .	5,000
+ Purchases During 2004 <u>5</u>	<u>6,000</u>
= Materials Available \$6	1,000
<ul> <li>Ending Direct Material Inventory (4)</li> </ul>	<u>4,000</u> )
Direct Material Used During 2004	\$ 57,000
Direct Labor During 2004	96,000
Manufacturing Overhead Cost During 2004:	86,000
<ul> <li>Manufacturing Cost for Current Period</li> </ul>	\$239,000
+ Beginning Work-in-Process Inventory (01-01	-04) <u>6,000</u>
= Cost of Goods Available to be Finished	\$245,000
<ul> <li>Ending Work-in-Process Inventory (12-31-04)</li> </ul>	4) <u>(7,000)</u>
= Cost of Goods Manufactured During 2004	\$ <u>238,000</u>
24 Cl	napter 2 – Classifying Cost

M-24

# 2-37. (Continued)

b.

# Avener Manufacturing Company Cost of Goods Sold Schedule For the Year Ended December 31, 2004

Beginning Finished Goods Inventory	\$ 8,000
+ Cost of Goods Manufactured During 2004	238,000
= Goods Available for Sale in 2004	\$246,000
<ul> <li>Ending Finished Goods Inventory</li> </ul>	(10,000)
= Costs of Goods Sold for 2004	\$ <u>236,000</u>

c.

# Avener Manufacturing Company Income Statement For the Year Ended December 31, 2004

Sales		\$333,000
Cost of Goods Sold		236,000
Gross Profit		\$ 97,000
Operating Expenses:		
Selling Expenses	\$46,000	
Administrative Expenses	34,000	
Total Operating Expenses		80,000
Operating Income		\$ <u>17,000</u>

### a. Direct materials:

Beginning direct material inventory	\$ 9,000
Direct materials purchased	120,000
Total materials available	\$129,000
Ending direct material inventory	(11,000)
Cost of direct materials used	\$118,000

b.

Megan Hat Manufacturing Company Cost of Goods Manufactured Schedule For the Year Ended December 31, 2005

Direct Material Used During 2005	\$118,000
Direct Labor During 2005	250,000
Manufacturing Overhead Cost During 2005	140,000
Manufacturing Cost for Current Period	\$508,000
Beginning Work-in-Process Inventory (01-01-05)	22,000
Cost of Goods Available to be Finished	\$530,000
Ending Work-in-Process Inventory (12-31-05)	(18,000)
Cost of Goods Manufactured During 2005	\$ <u>512,000</u>
	Direct Labor During 2005 Manufacturing Overhead Cost During 2005 Manufacturing Cost for Current Period Beginning Work-in-Process Inventory (01-01-05) Cost of Goods Available to be Finished Ending Work-in-Process Inventory (12-31-05)

c.

# Megan Hat Manufacturing Company Cost of Goods Sold Schedule For the Year Ended December 31, 2005

Beginning Finished Goods Inventory	\$ 42,000
+ Cost of Goods Manufactured During 2005	512,000
= Goods Available for Sale in 2005	\$554,000
<ul> <li>Ending Finished Goods Inventory</li> </ul>	(38,000)
= Costs of Goods Sold for 2005	\$ <u>516,000</u>

# 2-38. (Continued)

d.		Megan Hat Manufacturing General Journal	Company	,	Page 516
	Date 2005 Description		Post Ref.	Debit	Credit
Dec	31	Raw Materials Inventory		120,000	
		Accounts Payable			120,000
		To record the purchase of raw			
		materials.			
	31	Work-in-Process Inventory		118,000	
		Raw Materials Inventory			118,000
		To record transfer of materials			
		to production.			
	31	Work-in-Process Inventory		250,000	
		Cash			250,000
		To record direct labor costs.			
	31	Work-in-Process Inventory		140,000	
		Various Accounts		,	140,000
		To record the transfer of			
		overhead costs to production.			
	31	Finished Goods Inventory		512,000	
		Work-in-Process Inventory		·	512,000
		To record the transfer of goods			
		manufactured to finished goods.			
	31	Accounts Receivable		600,000	
		Sales			600,000
		To record sales.			·
	31	Cost of Goods Sold		516,000	
		Finished Goods Inventory		,	516,000
		To record cost of sales.			

### a. Direct materials:

Beginning direct material inventory	\$ 22,000
Direct materials purchased	280,000
Total materials available	\$302,000
Ending direct material inventory	(24,000)
Cost of direct materials used	\$278,000

b.

# Friedman Shelving Manufacturing Company Cost of Goods Manufactured Schedule For the Year Ended December 31, 2005

	Direct Material Used During 2005	\$ 278,000
+	Direct Labor During 2005:	540,000
+	Manufacturing Overhead Cost During 2005	240,000
=	Manufacturing Cost for Current Period	\$1,058,000
+	Beginning Work-in-Process Inventory (01-01-05)	42,000
=	Cost of Goods Available to be Finished	\$1,100,000
_	Ending Work-in-Process Inventory (12-31-05)	(43,000)
=	Cost of Goods Manufactured During 2005	\$ <u>1,057,000</u>

c.

# Friedman Shelving Manufacturing Company Cost of Goods Manufactured Schedule For the Year Ended December 31, 2005

Beginning Finished Goods Inventory	\$ 82,000
+ Cost of Goods Manufactured During 2005	1,057,000
= Goods Available for Sale in 2005	\$1,139,000
<ul> <li>Ending Finished Goods Inventory</li> </ul>	(78,000)
= Costs of Goods Sold for 2005	\$ <u>1,061,000</u>

# 2-39. (Continued)

d.	l. Friedman Shelving Manufacturing Company General Journal				
		General Journal			Page 105
	Date 2005 Description		Post Ref.	Debit	Credit
Dec	31	Raw Materials Inventory		280,000	
		Accounts Payable			280,000
		To record the purchase of raw			
		materials.			
	31	Work-in-Process Inventory		278,000	
		Raw Materials Inventory			278,000
		To record transfer of materials			·
		to production.			
	31	Work-in-Process Inventory		540,000	
		Cash		·	540,000
		To record direct labor costs.			<u> </u>
	31	Work-in-Process Inventory		240,000	
		Various Accounts			240,000
		To record the transfer of			·
		overhead costs to production.			
	31	Finished Goods Inventory		1,057,000	
		Work-in-Process Inventory			1,057,000
		To record the transfer of goods			
		manufactured to finished goods.			
	31	Accounts Receivable		1,400,000	
		Sales			1,400,000
		To record sales.			
	31	Cost of Goods Sold		1,061,000	
		Finished Goods Inventory			1,061,000
		To record cost of sales.			

# Tatum Manufacturing Company Cost of Goods Manufactured Schedule For the Year Ended December 31, 2005

### Direct Materials:

Beginning Direct Material Inventory	\$ 2,000	
+ Purchases During 2005	8,000	
= Materials Available	\$10,000	
<ul> <li>Ending Direct Material Inventory</li> </ul>	<u>(4,000</u> )	
Direct Material Used During 2005		\$ 6,000
Direct Labor During 2005		12,000
Manufacturing Overhead Cost During 200	5:	9,000
= Manufacturing Cost for Current Period		\$27,000
+ Beginning Work-in-Process Inventory (0	1-01-05)	4,000
= Cost of Goods Available to be Finished		\$31,000
- Ending Work-in-Process Inventory (12-3	1-05)	(3,000)
= Cost of Goods Manufactured During 200	5	\$ <u>28,000</u>

b. Cost of goods sold computation required for the last journal entry:

Tatum Manufacturing Company Cost of Goods Manufactured Schedule For the Year Ended December 31, 2005

Beginning Finished Goods Inventory	\$ 8,000
+ Cost of Goods Manufactured During 2005	28,000
= Goods Available for Sale in 2005	\$36,000
<ul> <li>Ending Finished Goods Inventory</li> </ul>	(6,000)
= Costs of Goods Sold for 2005	\$30,000

# 2-40. (Continued)

b.		Tatum Manufacturing C General Journal	ompany		Page 621
	Date 2005 Description		Post Ref.	Debit	Credit
Dec	c 31 Raw Materials Inventory		8,000		
		Accounts Payable			8,000
		To record the purchase of raw			
		materials.			
	31	Work-in-Process Inventory		6,000	
		Raw Materials Inventory			6,000
		To record transfer of materials			
		to production.			
	31	Work-in-Process Inventory		12,000	
		Cash			12,000
		To record direct labor costs.			
	31	Work-in-Process Inventory		9,000	
		Various Accounts			9,000
		To record the transfer of			
		overhead costs to production.			
	31	Finished Goods Inventory		28,000	
		Work-in-Process Inventory			28,000
		To record the transfer of goods			
		manufactured to finished goods.			
	31	Cash		40,000	
		Sales			40,000
		To record sales.			
	31	Cost of Goods Sold		30,000	
		Finished Goods Inventory			30,000
		To record cost of sales.			

# Munter Manufacturing Company Cost of Goods Manufactured Schedule For the Year Ended December 31, 2005

### **Direct Materials:**

\$10,000
10,000
<u> 11,000</u>
\$31,000
3,000
\$34,000
_(4,000)
\$ <u>30,000</u>

b. Cost of goods sold computation required for the last journal entry:

Munter Manufacturing Company Cost of Goods Manufactured Schedule For the Year Ended December 31, 2005

	Beginning Finished Goods Inventory	\$ 7,000
+	Cost of Goods Manufactured During 2005	30,000
=	Goods Available for Sale in 2005	\$37,000
_	Ending Finished Goods Inventory	<u>(9,000</u> )
=	Costs of Goods Sold for 2005	\$28,000

# 2-41. (Continued)

b.		Tatum Manufacturin General Jou			
		General vou	11141		Page 321
Date 2005		Description	Post Ref.	Debit	Credit
Dec 31	31	Raw Materials Inventory		9,000	
		Accounts Payable			9,000
		To record the purchase of raw			
		materials.			
	31	Work-in-Process Inventory		10,000	
		Raw Materials Inventory			10,000
		To record transfer of materials			
		to production.			
	31	Work-in-Process Inventory		10,000	
		Cash		,	10,000
		To record direct labor costs.			· · · · · · · · · · · · · · · · · · ·
	31	Work-in-Process Inventory		11,000	
		Various Accounts		,	11,000
		To record the transfer of			
		overhead costs to production.			
	31	Finished Goods Inventory		30,000	
	1	Work-in-Process Inventory		·	30,000
	1	To record the transfer of goods			·
		manufactured to finished goods.			
	31	Accounts Receivable		39,000	
	+	Sales			39,000
		To record sales.			,
	31	Cost of Goods Sold		28,000	
		Finished Goods Inventory			28,000
		To record cost of sales.			

# Collins Manufacturing Company Cost of Goods Manufactured Schedule For the Year Ended December 31, 2005

### **Direct Materials:**

<b>Beginning Direct Material Inventory</b>	\$ 16,000	
+ Purchases During 2005	159,000	
= Materials Available	\$175,000	
<ul> <li>Ending Direct Material Inventory</li> </ul>	(14,000)	
Direct Material Used During 2005		\$161,000
Direct Labor During 2005		110,000
Manufacturing Overhead Cost During 2005	5	221,000
= Manufacturing Cost for Current Period		\$492,000
+ Beginning Work-in-Process Inventory (	01-01-05)	23,000
= Cost of Goods Available to be Finished		\$515,000
<ul> <li>Ending Work-in-Process Inventory (12-</li> </ul>	31-05)	(25,000)
= Cost of Goods Manufactured During 20	05	\$ <u>490,000</u>
b.		

# Collins Manufacturing Company Income Statement For the Year Ended December 31, 2005

Sales		\$760,000
Cost of Goods Sold:		
Beginning Finished Goods Inventory	\$ 33,000	
Cost of Goods Manufactured	490,000	
Goods Available for Sale	\$523,000	
<b>Ending Finished Goods Inventory</b>	(36,000)	
Costs of Goods Sold		487,000
Gross Profit		\$273,000
Operating Expenses:		
Selling Expenses	\$ 62,000	
Administrative Expenses	47,000	
Total Operating Expenses		109,000
Operating Income		\$ <u>164,000</u>
M-34	Chapter 2 –	Classifying Cost

# Richard Manufacturing Company Cost of Goods Manufactured Schedule For the Year Ended December 31, 2005

### Direct Materials:

Beginning Direct Material Inventory	\$ 14,000	
+ Purchases During 2005	162,000	
<ul><li>Materials Available</li></ul>	\$176,000	
<ul> <li>Ending Direct Material Inventory</li> </ul>	(16,000)	
Direct Material Used During 2005		\$160,000
Direct Labor During 2005		140,000
Manufacturing Overhead Cost During 2005		234,000
<ul> <li>Manufacturing Cost for Current Period</li> </ul>		\$534,000
+ Beginning Work-in-Process Inventory (0)	1-01-05)	25,000
= Cost of Goods Available to be Finished		\$559,000
<ul> <li>Ending Work-in-Process Inventory (12-3)</li> </ul>	1-05)	(28,000)
= Cost of Goods Manufactured During 2003	5	\$ <u>531,000</u>
b.		

# Richard Manufacturing Company Income Statement For the Year Ended December 31, 2005

Sales		\$790,000
Cost of Goods Sold:		
Beginning Finished Goods Inventory	\$ 32,000	
Cost of Goods Manufactured	531,000	
Goods Available for Sale	\$563,000	
<b>Ending Finished Goods Inventory</b>	(36,000)	
Costs of Goods Sold		527,000
Gross Profit		\$263,000
Operating Expenses:		
Selling Expenses	\$ 72,000	
Administrative Expenses	57,000	
Total Operating Expenses		129,000
Operating Income		\$ <u>134,000</u>

# Bonnie's Pet Cage Company Income Statement For the Year Ended December 31, 2004

Sales		\$300,000
Cost of Goods Sold:		
Beginning Finished Goods Inventory	\$ 21,000	
Cost of Goods Manufactured	200,000	
Goods Available for Sale	\$221,000	
<b>Ending Finished Goods Inventory</b>	(28,000)	
Costs of Goods Sold		193,000
Gross Profit		\$107,000
Operating Expenses:		
Selling Expenses	\$ 30,000	
Administrative Expenses	25,000	
Total Operating Expenses		55,000
Operating Income		\$ <u>52,000</u>
2-45.		

# Albert's Manufacturing Company Income Statement For the Year Ended December 31, 2004

Sales \$600,000 Cost of Goods Sold:

Cost of Goods Sold:		
Beginning Finished Goods Inventory	\$ 41,000	
Cost of Goods Manufactured	400,000	
Goods Available for Sale	\$441,000	
<b>Ending Finished Goods Inventory</b>	(58,000)	
Costs of Goods Sold		383,000
Gross Profit		\$217,000
Operating Expenses:		
Selling Expenses	\$ 90,000	
Administrative Expenses	60,000	
Total Operating Expenses		150,000
Operating Income		\$ <u>67,000</u>

# Phillips Merchandising Company Income Statement For the Year Ended December 31, 2004

Sales		\$400,000
Cost of Goods Sold:		
Beginning Inventory	\$ 40,000	
Cost of Merchandise Purchased	300,000	
Goods Available for Sale	\$340,000	
Ending Inventory	(50,000)	
Costs of Goods Sold		290,000
Gross Profit		\$110,000
Operating Expenses:		
Selling Expenses	\$ 30,000	
Administrative Expenses	20,000	
Total Operating Expenses		50,000
Operating Income		\$ <u>60,000</u>
2-47.		

# Robinson Merchandising Company Income Statement For the Year Ended December 31, 2005

	\$840,000
\$ 60,000	
630,000	
\$690,000	
(50,000)	
	640,000
	\$200,000
\$ 90,000	
40,000	
	130,000
	\$ <u>70,000</u>
	630,000 \$690,000 (50,000) \$ 90,000

# a. Cost of Service Provided:

Bookkeeping Salaries	\$42,000
Office Rent for Bookkeepers	12,000
Depreciation of Bookkeeping Equipment	2,000
Bookkeeping Supplies Used	700
Total Cost of Services Provided	\$56,700

b.

# Butterfield's Bookkeeping Service Income Statement For the Year Ended December 31, 2005

Service Revenue		\$ 80,000
Operating Expenses		
Bookkeeping Salaries	\$42,000	
Office Rent	12,000	
Depreciation of Bookkeeping Equip.	2,000	
Bookkeeping Supplies Used	700	
Advertising	800	
<b>Total Operating Expenses</b>		57,500
Operating Income		\$22,500

# a. Cost of Service Provided:

Driver Wages	\$22,000
Fuel Cost	2,700
Depreciation of Truck	4,000
Total Cost of Services Provided	\$28,700

b.

# Tony's Film Delivery Service Income Statement For the Year Ended December 31, 2005

Delivery Revenue		\$40,000
Operating Expenses		
Driver Wages	\$22,000	
Fuel Cost	2,700	
Depreciation of Truck	4,000	
Bookkeeping Cost	240	
Advertising	800	
<b>Total Operating Expenses</b>		29,740
Operating Income		\$ <u>10,260</u>

# Cam's Swimsuit Shop Income Statement For the Year Ended December 31, 2005

Sales			\$190,000
Cost of Goods Sold:			
Beginning Inventory		\$16,000	
Cost of Merchandise Purchased		82,000	
Goods Available for Sale		\$98,000	
Ending Inventory		<u>(19,000</u> )	
Costs of Goods Sold			79,000
Gross Profit			\$111,000
Operating Expenses:			
Selling Expenses:			
Advertising	\$ 1,200		
Sales Salaries	22,000		
Store Rent	2,400		
Store Utilities	3,600		
Sale Supplies Used	1,000		
Total Selling Expenses		\$30,200	
Administrative Expenses:			
Office Rent	\$ 800		
Administrative Salaries	18,000		
Total Administrative Expenses		18,800	
Total Operating Expenses			49,000
Operating Income			\$ <u>62,000</u>

# Leroy's Auto Parts Income Statement For the Year Ended December 31, 2005

Sales			\$280,000
Cost of Goods Sold:			
Beginning Inventory		\$ 19,000	
Cost of Merchandise Purchased		182,000	
Goods Available for Sale		\$201,000	
Ending Inventory		(21,000)	
Costs of Goods Sold			180,000
Gross Profit			\$100,000
Operating Expenses:			
Selling Expenses:			
Advertising	\$ 2,200		
Sales Salaries	21,000		
Store Depreciation	18,000		
Store Utilities	1,200		
Total Selling Expenses		\$42,400	
Administrative Expenses:			
Office Depreciation	\$ 4,000		
Administrative Salaries	15,000		
Office Utilities	600		
Total Administrative Expenses		19,600	
Total Operating Expenses			62,000
Operating Income			\$ <u>38,000</u>

# Dan's Security Service Income Statement For the Year Ended December 31, 2005

Service Revenue		\$480,000
Operating Expenses		
Security Guard Wages	\$362,000	
Depreciation of Office	12,000	
Administrative Salaries	21,000	
Sales Salaries	24,000	
Utilities	1,200	
Advertising	12,000	
Total Operating Expenses		432,200
Operating Income		\$ <u>47,800</u>
2-53.		
Margaret's Flower	Chon	

# Margaret's Flower Shop Income Statement For the Year Ended December 31, 2005

Sales			\$ 42,400
Cost of Goods Sold:			
Beginning Inventory		\$ 1,000	
Cost of Merchandise Purchased		18,000	
Goods Available for Sale		\$19,000	
Ending Inventory		(1,200)	
Costs of Goods Sold			17,800
Gross Profit			\$ 24,600
Operating Expenses:			
Advertising	\$ 3,200		
Sales Salaries	21,000		
Store Rent	1,200		
Sales Supplied Used	9,000		
Store Utilities	1,300		
Total Operating Expenses			35,700
Operating Income (Loss)			\$ <u>(11,100)</u>
Store Rent Sales Supplied Used Store Utilities Total Operating Expenses	1,200 9,000		35,700 \$(11,100)

Team A is responsible for preparing a presentation on the cost of goods sold for the hardware store division, a merchandising division. Team A should be able to prepare more quickly because the cost of goods sold for a merchandiser includes only purchases of goods and minor preparation to get them ready to sell, adjusted for the change in inventory.

In contrast, Team B is responsible for preparing a presentation on the cost of goods sold for a manufacturing division. Unlike the cost of goods sold of a merchandiser, a manufacturer's cost of goods sold includes the cost of raw materials purchased and used in production, direct labor cost, and manufacturing overhead cost. Each of these components must be reviewed separately and presentations made for each. The presentations for labor and manufacturing overhead can be particularly complex, especially for overhead which may include a variety of costs that could be difficult to trace to specific products. The presentation for Team B will not only take much longer to prepare, but will also take considerably more time to present.

2-55.

a. and b.

For the firm to make a profit, total billings for work performed must exceed the total of all the costs of operating the firm. A formula for charging hourly rates for various staff members could be devised so that the hourly billing rate for each staff member is set high enough to cover his or her salary plus an amount for other costs of operating the firm and an amount for profit. To do this, detailed historical information would be needed for the hours of service provided and for all the costs of operating the company. The cost would include wages and salaries, rent, utilities, maintenance, telephone, insurance, taxes, advertising, and all other costs.

A single flat billing rate would be unfair because of the varying levels of ability and experience of the staff members. The billing rates could be developed based on the relative salary levels of the staff members and the type of work they perform for the client.

The three inventory classifications break down inventory into more manageable parts. In almost all cases the manager responsible for raw materials or Work-in-Process inventory is not the same individual as the one responsible for finished goods inventory. By using at least three inventory classifications, the managers responsible for each of these inventories can be provided with specific information about the inventory for which he or she is responsible. Managers need this information to help assess the adequacy of the investment to meet the needs of the company. Managers can then work to balance the need to maintain adequate inventory levels with the desire to keep the investment in inventory low.

### 2-57.

This problem is open-ended, and student presentations can become quite elaborate. Instructors are encouraged to provide students with guidance regarding the depth of their presentation.

The most basic presentation should elaborate on the notion that the cost of inventory includes the cost of acquiring goods and the cost of getting the goods ready for sale. For a manufacturer such as Acme Wire Manufacturing, these costs would include raw materials cost, direct labor cost, and manufacturing overhead costs. The manufacturing overhead cost constitutes all costs associated with the manufacturing facility except for direct material and direct labor coats.

Costs that are associated with the product but incurred after the product is ready to sell would not be included in inventory. Examples of such costs include the cost of insurance, personal property taxes, advertising costs, sales salaries, and the cost of delivering the product to the customer. These costs would generally be classified as selling or administrative costs.

This problem is open-ended, and the reports that students prepare can be quite elaborate. Instructors are encouraged to provide students with some guidance regarding the depth of their report.

The students' most basic reports should focus on two areas.

- 1. Should Mr. Smith have kept his money in the bank and his job at Adcox, or was the change worth while?
  - a. When Mr. Smith worked for Adcox, he made \$28,000 in salary from Adcox and an estimated \$10,800 in interest, for a total of \$38,800. The interest amount is based on Mr. Smith's life savings, which he used to start the company, times an annual interest rate of 4%. We estimated his life's savings at \$270,000. Because the company is so new, the current equity in the company minus the current year's earnings would closely approximate Mr. Smith's investment in the company.

The investment, based on the facts presented, appear to be \$270,000 determined as follows:

Inventory	\$300,000
Other Assets	30,000
Total Assets	\$330,000
Less Liabilities	50,000
Total Equity at current time	\$280,000
Minus current earnings (see below)	10,000
Estimated initial investment	\$270,000

### Estimated earnings from the Super CD Store are:

Sales		\$600,000
Cost of Goods Sold		450,000
Gross Profit		\$150,000
Operating Expenses:		
Selling Expenses	\$90,000	
Administrative Expenses	50,000	140,000
Operating Income		\$ <u>10,000</u>

The \$270,000 should have been earning about \$10,800, calculated as follows:

270,000 X 4% = 10,800

Mr. Smith's salary from the CD store is \$30,000 and the company's profit is \$10,000 for combined earnings of \$40,000. Compared to the \$38,800 Smith earned before he opened the CD store, his total earnings actually increased by a modest \$1,200.

It may be possible for Mr. Smith to further improve his situation by increasing the CD store's profits by increasing sales or reducing costs. Sales and profits from the CD store might increase naturally as time goes by and more people learn of the store and begin to shop there.

Mr. Smith can further improve his situation by reducing the amount invested in the company. If the amount invested in the company is reduced, the funds could be put back into the bank to earn interest.

2. <u>Should the company invest in the new computer?</u> It is unclear whether the computer system would be beneficial to the company.

A computer system could capture and report information for both management and financial accounting. The management and financial accounting information could be used by Mr. Smith to help make informed business decisions. A computer system could help Mr. Smith track sales and profits by product so he could make more prudent decisions regarding the type and quantity of CDs to purchase for inventory. The inventory appears to be quite high relative to sales and a computer system could be used to prepare sales reports that could indicate slow-moving products. Smith could reduce the inventory levels for those products. This would benefit the company because if Smith reduces the inventory, the investment funds could be put back into the bank to earn interest. The computer could also be used to generate financial statements and reports for external reporting to creditors, government agencies and others.

### 2-58. (Continued)

On the down side, the computer system would require a substantial investment in time and money to install and maintain. The computer purchase would require an additional investment of \$5,000 plus the cost of tailoring and setting up the system.

Because the CD store is relatively small, Mr. Smith might be able to monitor his sales, set and maintain inventory levels, and make other decisions using manually prepared information and observations. It is also feasible for Smith to have the necessary financial accounting information manually prepared.

### 2-59.

This group problem is open-ended, and student responses can be quite elaborate. Instructors are encouraged to provide students with guidance regarding the depth of their responses. The most basic responses should elaborate on the following areas:

### Income statement items:

- 1. Cost of goods sold has increased more than the increase in sales.
- 2. There was a conservative increase in selling expense.
- 3. There was a more dramatic increase in administrative expense.
- 4. More dramatic than the dollar decline in profits is the decrease in the net profit percentage.

Percent of Sales	<u>2004</u>	<u>2005</u>
Cost of Goods Sold	55.63%	59.37%
Gross Profit	44.37%	40.63%
Selling Expenses	20.19%	20.60%
Administrative Expenses	10.81%	12.87%
Net Profit	13.37%	7.17%

# 2-59. (Continued)

# <u>Inventories</u>:

The direct materials, Work-in-Process, and finished goods inventories increased dramatically from January 1, 2004 to December 31, 2005, requiring additional investment by the company.

<u>Inventory</u>	01/02/04	12/31/05	<u>Increase</u>
Direct Materials	\$ 15,000	\$ 73,000	\$ 58,000
Work-in-Process	40,000	154,000	114,000
Finished Goods	65,000	93,000	28,000
	\$120,000	\$320,000	\$200,000