
Financial Reporting and Analysis (8th Ed.)
Chapter 2 Solutions
Accrual Accounting and Income Determination
Exercises

Exercises

E2-1. Distinguishing accrual-basis revenue from cash receipts
(AICPA adapted)

Because the subscription begins with the first issue of 20X2, no revenue is recognized in 20X1. No product or service has yet been provided by Gee Company to its customers.

Gee received in cash the full amount of \$36,000 in 20X1.

E2-2. Converting from cash receipts to accrual-basis revenue
(AICPA adapted)

We first analyze the activity in the Deferred fee revenue account, which is shown below. This account represents the liability to provide goods or services in exchange for consideration that has already been received. Once the goods or services are provided, the liability is relieved and the revenue is recognized in the income statement.

Deferred Fee Revenue		
	\$0	Beginning balance
	X	Payments received in advance of revenue recognition
	\$8,000	Ending balance

The account increased by \$8,000, which is explained by \$8,000 of payments received in advance of revenue being recognized. In total, Dr. Hamilton received \$200,000 from patients, so $\$200,000 - \$8,000 = \$192,000$ of the receipts were to pay off accounts receivable. Using that information and the amounts that are given for beginning and ending accounts receivable, we now analyze Accounts receivable and show that Sales revenues are \$199,000.

Accounts Receivable

Beginning balance	\$18,000	
Patient fee revenues	Y	\$192,000 Collections on account
Ending balance	\$25,000	

$$\$18,000 + Y - \$192,000 = \$25,000$$

$$Y = \underline{\underline{\$199,000}}$$

E2-3. Distinguishing between accrual basis expense and cash disbursement

(AICPA adapted)

The amount of premiums paid can be determined from a T-account analysis of prepaid insurance.

Prepaid Insurance

Beginning balance	\$210,000	
Premiums paid	X	\$875,000 Amounts charged to insurance expense
Ending balance	\$245,000	

$$\$210,000 + X - \$875,000 = \$245,000$$

$$X = \underline{\underline{\$910,000}}$$

E2-4. Converting from cash to accrual basis

We first determine sales revenue by analyzing Accounts receivable.

Accounts Receivable

Beginning balance	\$139,000	
Sales revenue	X	\$387,000 Collections on account
Ending balance	\$141,000	

$$\$139,000 + X - \$387,000 = \$141,000$$

$$X = \underline{\underline{\$389,000}}$$

In order to determine cost of goods sold, we must analyze two accounts – Inventory and Accounts payable. Each of these accounts explains a portion of

the difference between cash payments and cost of goods sold because Inventory changes by the difference between cost of goods sold and purchases, and Accounts payable change by the difference between purchases and payments to suppliers.

Accounts Payable			
Payments on account	\$131,000	BAP X	Beginning balance Inventory purchases
		BAP-19,000	Ending balance

We do not know the amount of Accounts payable at either the beginning or the end of the year, but we do know Accounts payable declined by \$19,000, which we represent above with the amounts BAP and BAP-19,000 for the beginning and ending balances, respectively.

$$\text{BAP} + \text{X} - \$131,000 = \text{BAP} - 19,000$$

$$\text{X} = \underline{\underline{\$112,000}}$$

The analysis indicates that knowing the *change* in Accounts payable is sufficient to determine the difference between purchases and payments.

Now that we have determined the amount of inventory purchases, we can analyze the Inventory account.

Inventory			
Beginning balance	BI	Y	Cost of goods sold
Inventory purchases	112,000		
Ending balance	BI-39,000		

$$\text{BI} + \$112,000 - \text{Y} = \text{BI} - \$39,000$$

$$\text{Y} = \underline{\underline{\$151,000}}$$

As was the case for Accounts payable, we do not know the beginning and ending Inventory balances, but the change is sufficient for our analysis. Cost of goods sold is \$151,000.

Therefore, gross profit is $\$389,000 - \$151,000 = \$238,000$.

E2-5. Preparing a multiple-step income statement

Hardrock Mining Co.
Income Statement
20X1

(\$ in thousands)

Net sales	\$5,281,954
Cost of products sold	<u>(4,765,505)</u>
Gross profit	516,449
Marrketing, administrative and other expenses	(193,147)
Interest expense	(17,143)
Investment losses*	(57,752)
Restructuring charges	<u>(8,777)</u>
Earnings before income taxes	239,630
Provision for income taxes	<u>(50,322)</u>
Income from continuing operations	189,308
Profit on discontinued operations, net of income tax effect of \$2,520**	<u>9,480</u>
Net income	<u><u>\$198,788</u></u>

Earnings per common share:

Income from continuing operations	\$18.93
Discontinued operations	<u>0.95</u>
Net income	<u><u>\$19.88</u></u>

*Investment losses can be inferred from "Other, net" as originally reported and its other components:

Restructuring charge	(\$8,777)
Discontinued operations	12,000
Investment losses (inferred from other items)	<u>(57,752)</u>
Other, net	<u><u>(\$54,529)</u></u>

**Profit on discontinued operations, net of tax, consists of:

Pretax profit on discontinued operations	\$12,000
Tax effect at 21%	<u>2,520</u>
	<u><u>\$9,480</u></u>

Discontinued operations are presented net of tax. The Restructuring loss is infrequent, thus it is a separately disclosed component of operating income. Removing these two items from Other, net leaves only the investment losses from the original caption, which is relabeled "Investment losses."

The foreign currency loss (\$55,000) does not surpass any reasonable materiality threshold (e.g., greater than 1% of net income) so it may remain in "marketing, administrative and other expenses." Had this loss been material,

separate disclosure as a component of operating income would have been warranted.

Per share disclosures are required on the face of the income statement for income from operations and items that follow on the income statement.

E2-6. Income statement presentation

Event 1 is a discontinued operation. Any gain or loss on the sale, net of tax, would appear on the income statement below income from continuing operations, as would any income or loss, net of tax, from operating the discontinued operation prior to sale. Note that prior periods would be de-consolidated retroactively so that net earnings from discontinued operations would also appear below income from continuing operations for those years presented in the current income statement.

To qualify for discontinued operation treatment, the sold component must represent a strategic shift having a major effect on the operations or results. As the transactions are assumed to be material, this condition for discontinued operations treatment appears to be met.

Event 2 would be reported as an unusual or infrequently occurring item and thus would be included in income from continuing operations.

Event 3 is also an unusual or infrequently occurring item, included in income from continuing operations.

Event 4 is an unusual or infrequently occurring item and thus would be included in income from continuing operations.

Event 5 is an unusual or infrequently occurring item and thus would be included in income from continuing operations.

E2-7. Determining gain (loss) from discontinued operations

Munnster Corporation
Partial Income Statement
for the Years Ended December 31

	20X2	20X1
Operating income	\$1,405,000	\$920,000
Provision for income taxes	<u>295,050</u>	<u>193,200</u>
Income from continuing operations	1,109,950	726,800
Discontinued operations:		
Loss from discontinued division, net of tax benefits of \$106,050 in 20X2 and \$35,700 in 20X1	(398,950)	(134,300)
Gain from sale of discontinued division, net of taxes of \$73,500	<u>276,500</u>	<u> </u>
	<u>\$987,500</u>	<u>\$592,500</u>

The following analysis shows how the revised income statements are derived through reclassification of the amounts related to discontinued operations:

	20X2			20X1		
	As originally reported	Adjust.	GAAP	As originally reported	Adjust.	GAAP
Operating income	\$900,000	\$505,000	(1) \$1,405,000	\$750,000	\$170,000	(1) \$920,000
Gain on sale of division	350,000	(350,000)	(3) 0			0
		(106,050)	(2)			
Provision for income taxes	<u>(262,500)</u>	73,500	(4) <u>(295,050)</u>	<u>(157,500)</u>	(35,700)	(2) <u>(193,200)</u>
Income from continuing operations	987,500		1,109,950	592,500		726,800
		(505,000)	(1)		(170,000)	(1)
Loss from discontinued operations		106,050	(2) (398,950)		35,700	(2) (134,300)
		350,000	(3)			
Gain on sale of discontinued operations		<u>(73,500)</u>	(4) <u>276,500</u>			<u>0</u>
Net income	<u>\$987,500</u>	<u>\$0</u>	<u>\$987,500</u>	<u>\$592,500</u>	<u>\$0</u>	<u>\$592,500</u>

(1) Reclassify pretax loss on discontinued operations to discontinued operations section.

(2) Reclassify tax effect of (1) to discontinued operations section. ($\$505,000 \times 21\% = \$106,050$. $\$170,000 \times 21\% = \$35,700$.)

(3) Reclassify gain on sale of discontinued operations to discontinued operations section.

(4) Reclassify tax effect of (3) to discontinued operations section. ($\$350,000 \times 21\% = \$73,500$).

E2-8. Determining loss on discontinued operations

The results of operations of an entity classified as held for sale are to be reported in discontinued operations in the periods in which they occur (net of tax effects). For Revsine, the 20X1 loss from operations for the discontinued segment would be \$395,000 determined as follows:

Loss from 1/1/20X1 to 8/31/20X1	(\$300,000)
Loss from 9/1/20X1 to 12/31/20X1	<u>(200,000)</u>
Total pre-tax loss	(500,000)
Tax benefit at 21%	<u>105,000</u>
Operating loss, net of tax effects	<u><u>(\$395,000)</u></u>

None of the expected profit from operating the discontinued operation in 20X2 or the estimated gain on sale is recognized in 20X1. These amounts will be recognized in 20X2 as they occur.

E2-9. Determining period vs. product costs

	Period Cost	Traceable Cost
Depreciation on office building	X	
Insurance expense for factory building ¹		X
Product liability insurance premium	X	
Transportation charges for raw materials		X
Factory repairs and maintenance ¹		X
Rent for inventory warehouse ²	X	
Cost of raw materials		X
Factory wages		X
Salary to chief executive officer	X	
Depreciation on factory ¹		X
Bonus to factory workers		X
Salary to marketing staff	X	
Administrative expenses	X	
Bad debt expense ³		X
Advertising expense ⁴	X	
Research and development	X	
Warranty expense ⁵		X
Electricity for plant ¹		X

¹These are product costs; i.e. costs incurred in the manufacturing process. They are traceable in that they can be assigned to units produced in the current period, even if that is done by some allocation method.

²Rent for inventory warehousing could be argued to be a product cost. However, generally costs incurred after the production process is complete are treated as period costs.

³Bad debt expense is not an inventory cost that is part of Cost of goods sold, but it is still matched to the period of the related revenue.

⁴Advertising is not part of the manufacturing process and typically cannot be associated with specific units of production. Therefore, it is generally treated as a period cost.

⁵Warranty expense is matched against sales in the period in which the products subject to warranties are sold, not when the warranty costs are incurred. It is not an inventory cost that becomes part of cost of goods sold, but it is matched to the period of the related sale.

E2-10. Making year-end adjusting entries

1. DR	Maintenance expenses	\$9,000	
	CR Supplies inventory		\$9,000
2. DR	Deferred landscaping revenue	\$6,000	
	CR Landscaping revenue		\$6,000
3. DR	Gasoline expense	\$2,500	
	CR Accounts payable		\$2,500
4. DR	Interest expense	\$1,875	
	CR Interest payable		\$1,875
	(\$50,000 x 5% x 9/12 = \$1,875.)		
5. DR	Depreciation expense	\$10,000	
	CR Accumulated depreciation		\$10,000
	(10 x \$3,000 = \$30,000. \$30,000/3 = \$10,000.)		

E2-11. Preparing comprehensive income statement

JDW Corporation
Income Statement and Statement of Comprehensive Income
For the Year Ended December 31, 20X1

Sales	\$2,929,500
Cost of goods sold	<u>(1,786,995)</u>
Gross profit	1,142,505
Selling and administrative expenses	<u>(585,900)</u>
Income from operations, before income taxes	556,605
Income taxes (21%)	<u>(116,887)</u>
Net income	<u><u>\$439,718</u></u>
Net income	\$439,718
Unrealized holding loss	(22,000)
Foreign currency translation adjustment	26,250
Unrealized loss from pension adjustment	<u>(7,000)</u>
Comprehensive income	<u><u>\$436,968</u></u>

E2-12. Wellington International Airport Limited – Reporting asset revaluations in OCI.

Requirement 1:

Revaluations occur when the company hires and then receives a valuation report from a professional appraiser. The company has no current interest in selling the land or property, plant, and equipment, so any changes in value are **unrealized**. Because these changes in value are unrealized and the company has no current interest in realizing them through a sales transaction, the changes in value are reported in Other Comprehensive Income. If the company actually sold the property to realize the changes in value, then the changes would appear in Net Income.

Note, however, that not all unrealized gains and losses are reported in Other comprehensive income. For example, fair value adjustments on trading securities or minority-passive equity securities are recognized in net income.

Requirement 2:

The values of land and property, plant, and equipment went up because the company reports the Revaluation changes as increases in Other Comprehensive Income.

Requirement 3:

U.S. GAAP does not allow for upward Revaluation of land or property, plant, and equipment. Therefore there would be no entry observed for Revaluation in Other Comprehensive Income.

E2-13. Presentation of Net Income Attributable to Noncontrolling Interests.

Amiel Company and Subsidiary
Consolidated Statement of Income
20X1

(\$ in millions)

Sales*	\$27.3
Expenses*	<u>14.1</u>
Net income	13.2
Less: Net income attributable to noncontrolling shareholders**	<u>0.8</u>
Net income attributable to Amiel shareholders	<u><u>\$12.4</u></u>

*Sales and expenses include 100% of the subsidiary's amounts, as follows:

	Sales	Expenses
Amiel excluding subsidiary	\$20.3	\$11.1
Subsidiary	<u>7.0</u>	<u>3.0</u>
Consolidated totals	<u><u>\$27.3</u></u>	<u><u>\$14.1</u></u>

**Net income attributable to non-controlling shareholders is the portion of the subsidiary's net income not owned by the parent, in this case 20%.

Subsidiary's net income	\$4.0
Portion owned by non-controlling shareholders	<u>20%</u>
Non-controlling shareholders portion of subsidiary's net income	<u><u>\$0.8</u></u>

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Chapter 2 Solutions
Accrual Accounting and Income Determination
Problems

Problems

P2-1. Preparing journal entries and statement

Requirement 1:

1/1/20X1: To record cash contributed by owners

DR Cash	\$200,000	
CR Capital stock		\$200,000

1/1/20X1: To record rent paid in advance

DR Prepaid rent	\$24,000	
CR Cash		\$24,000

3/1/20X1: No entry upon signing of contract

7/1/20X1: To record purchase of office equipment

DR Equipment	\$100,000	
CR Cash		\$100,000

11/30/20X1: To record salary paid to employees

DR Salaries expense	\$66,000	
CR Cash		\$66,000

12/31/20X1: To record advance-consulting fees received from Norbert Corp.

DR Cash	\$20,000	
CR Advances from customer		\$20,000

Requirement 2:

DR Rent expense	\$12,000	
CR Prepaid rent		\$12,000

Only one year's rent is expensed in the income statement for 20X1. The balance will be expensed in next year's income statement.

DR Accounts receivable	\$150,000	
CR Revenue from services rendered		\$150,000

Revenue is recognized in 20X1 because Frances Corp. has provided services to its client.

DR Depreciation expense	\$10,000	
CR Accumulated depreciation		\$10,000

Annual depreciation is $\$100,000/5 = \$20,000$. Because the equipment was used for only 6 months, the depreciation charge for the year is only $\$20,000/2 = \$10,000$.

DR Salaries expense	\$6,000	
CR Salaries payable		\$6,000

To accrue salaries expense for December 20X1.

Requirement 3:

Frances Corporation		
Income Statement		
20X1		
Revenue from services rendered		\$150,000
Less: Expenses		
Salaries	72,000	
Rent	12,000	
Depreciation	10,000	
		94,000
		<u>\$56,000</u>

Requirement 4:

Balance Sheet December 31, 20X1

Assets:		
Cash		\$30,000
Accounts receivable		150,000
Prepaid rent		12,000
Equipment	\$100,000	
Less: Accumulated depreciation	10,000	90,000
Total assets		<u>\$282,000</u>
Liabilities:		
Salaries payable		\$6,000
Advances from customer		20,000
Total liabilities		<u>26,000</u>
Stockholders' Equity:		
Capital stock		200,000
Retained earnings		56,000
Total equity		<u>256,000</u>
Total liabilities and stockholders' equity		<u>\$282,000</u>

P2-2. Making adjusting entries and statement preparation

Requirement 1:

DR Advance to employee	\$5,000	
CR Salaries expense		\$5,000
DR Prepaid insurance	\$5,000	
CR Insurance expense		\$5,000
DR Bad debt expense	\$2,950	
CR Allowance for doubtful accounts		\$2,950
(\$425,000 x 5% = \$21,250. \$21,250 – \$18,300 = \$2,950)		
DR Dividends	\$20,000	
CR Dividends payable		\$20,000

Before preparing the income statement, let us re-construct the trial balance after incorporating all the adjusting entries:

Ralph Retailers, Inc.
Adjusted Preclosing Trial Balance
As of December 31, 20X1

	DR	CR
Cash	\$38,700	
Accounts receivable	71,600	
Prepaid rent	12,000	
Inventory	125,000	
Equipment	50,000	
Building	125,000	
Allowance for doubtful accounts		\$5,950
Accumulated depreciation - equipment		40,000
Accumulated depreciation - building		12,000
Advance from customers		18,000
Accounts payable		26,000
Salaries payable		5,500
Capital stock		70,000
Retained earnings 1/1/20X1		264,850
Sales revenue		425,000
Cost of goods sold	276,250	
Salaries expense	55,000	
Bad debt expense	21,250	
Rent expense	40,000	
Insurance expense	10,000	
Depreciation expense - building	6,000	
Depreciation expense - equipment	3,000	
Dividends	43,500	
Advance to employee	5,000	
Prepaid insurance	5,000	
Dividends payable		20,000
	\$887,300	\$887,300

Requirement 2:

Ralph Retailers, Inc.		
Income Statement		
20X1		
Sales revenue		\$425,000
Cost of goods sold		<u>276,250</u>
Gross profit		148,750
Less: Operating expenses:		
Salaries expense	\$55,000	
Bad debt expense	21,250	
Rent expense	40,000	
Insurance expense	10,000	
Depreciation expense - building	6,000	
Depreciation expense - equipment	3,000	<u>135,250</u>
Net income		<u><u>\$13,500</u></u>

Requirement 3:

To prepare the balance sheet, we would close out all the income statement accounts to retained earnings by debiting accounts with credit balances and crediting accounts with debit balances so that they are all zero and ready to accumulate amounts in the next accounting period. The balancing entry, which is exactly equal to net income, is made to retained earnings. In addition, the dividends account is also closed to retained earnings (DR retained earnings, CR Dividends). Once all these closing entries are made, the post-closing trial balance would be as follows:

Ralph Retailers, Inc.
 Postclosing Trial Balance
 As of December 31, 20X1

	DR	CR
Cash	\$38,700	
Accounts receivable	71,600	
Prepaid rent	12,000	
Inventory	125,000	
Equipment	50,000	
Building	125,000	
Allowance for doubtful accounts		\$5,950
Accumulated depreciation - equipment		40,000
Accumulated depreciation - building		12,000
Advance from customers		18,000
Accounts payable		26,000
Salaries payable		5,500
Capital stock		70,000
Retained earnings 12/31/20X1		234,850
Advance to employee	5,000	
Prepaid insurance	5,000	
Dividends payable		20,000
	\$432,300	\$432,300

The resulting balance sheet is:

Ralph Retailers, Inc.
 Balance Sheet
 December 31, 20X1

Assets			Liabilities and Stockholders' Equity
Cash	\$38,700		Advance from customers
Accounts receivable	\$71,600		Accounts payable
Less: Allowance for doubtful accounts	(5,950)	65,650	Salaries payable
Prepaid rent		12,000	Dividends payable
Prepaid insurance		5,000	Total liabilities
Advance to employee		5,000	69,500
Inventory		125,000	Capital stock
Equipment	50,000		Retained earnings*
Less: Accumulated depreciation	(40,000)	10,000	Total stockholders' equity
			304,850
Building	125,000		Total liabilities and stockholders' equity
Less: Accumulated depreciation	(12,000)	113,000	<u>\$374,350</u>
Total Assets		<u>\$374,350</u>	
			*Retained earnings consists of:
			Beginning retained earnings
			Net income
			Dividends
			Ending retained earnings
			<u>\$234,850</u>

P2-3. Understanding the accounting equation

Flaps Inc. Balance Sheet					
	Year				
	20X1	20X2	20X3	20X4	20X5
Assets					
Current assets	\$ 5,098	\$ 5,130	\$ 5,200	\$ 5,275	\$ 5,315
Non-current assets	8,667	8,721	8,840	8,968	9,036
Total assets	<u>13,765</u>	<u>13,851</u>	14,040	<u>14,243</u>	<u>14,351</u>
Liabilities					
Current liabilities	3,399	3,420	3,467	3,517	3,543
Non-current liabilities	5,231	5,263	5,335	5,412	5,454
Total liabilities	<u>8,630</u>	<u>8,683</u>	<u>8,802</u>	<u>8,929</u>	<u>8,997</u>
Stockholders' Equity					
Common stock	138	139	140	142	144
Additional paid-in capital	2,202	2,216	2,247	2,280	2,296
Contributed capital	2,340	2,355	2,387	2,422	2,440
Retained earnings	2,795	2,813	2,851	2,892	2,914
Total stockholders' equity	<u>5,135</u>	<u>5,168</u>	<u>5,238</u>	<u>5,314</u>	<u>5,354</u>
Total liabilities and equity	<u>\$ 13,765</u>	<u>\$ 13,851</u>	<u>\$ 14,040</u>	<u>\$ 14,243</u>	<u>\$ 14,351</u>

Items in bold are unknowns solved below.

Item A: 20X1 Current liabilities: Current liabilities plus noncurrent liabilities equals total liabilities. Therefore, total liabilities (\$8,630) less noncurrent liabilities (\$5,231) equals current liabilities (\$3,399).

Item B: 20X1 Total assets: Total assets are equal to total liabilities and stockholders' equity (\$13,765).

Item C: 20X1 Additional paid-in capital: Common stock plus additional paid-in capital is equal to contributed capital. Therefore, contributed capital (\$2,340) less common stock (\$138) equals additional paid-in capital (\$2,202).

Item D: 20X1 Current assets: Current assets plus noncurrent assets equals total assets. So total assets (\$13,765) less noncurrent assets (\$8,667) equals current assets (\$5,098).

- Item E:** 20X1 Total stockholders' equity: Contributed capital (\$2,340) plus retained earnings (\$2,795) equals total stockholders' equity (\$5,135).
- Item F:** 20X2 Total liabilities and stockholders' equity: Total liabilities (\$8,683) plus total stockholders' equity (\$5,168) equals total liabilities and stockholders' equity (\$13,851).
- Item G:** 20X2 Contributed capital: Common stock (\$139) plus additional paid-in capital (\$2,216) equals contributed capital (\$2,355).
- Item H:** 20X2 Total assets: Total assets are equal to total liabilities and stockholders' equity (\$13,851) which was solved in (F).
- Item I:** 20X2 Noncurrent liabilities: Current liabilities plus noncurrent liabilities is equal to total liabilities. Therefore, total liabilities (\$8,683) less current liabilities (\$3,420) is equal to non-current liabilities (\$5,263).
- Item J:** 20X2 Current assets: Current assets plus noncurrent assets equals total assets. Accordingly, total assets (\$13,851) less noncurrent assets (\$8,721) equals current assets (\$5,130).
- Item K:** 20X3 Total liabilities and stockholders' equity: Total liabilities and stockholders' equity is equal to total assets (\$14,040).
- Item L:** 20X3 Common stock: Common stock plus additional paid-in capital equals contributed capital. So contributed capital (\$2,387) less additional paid-in capital (\$2,247) equals common stock (\$140).
- Item M:** 20X3 Noncurrent assets: Current assets plus noncurrent assets equals total assets. Therefore, total assets (\$14,040) less current assets (\$5,200) equals non-current assets (\$8,840).
- Item N:** 20X3 Total liabilities: Current liabilities (\$3,467) plus noncurrent liabilities (\$5,335) equals total liabilities (\$8,802).
- Item O:** 20X3 Total stockholders' equity: Contributed capital (\$2,387) plus retained earnings (\$2,851) equals total stockholders' equity (\$5,238).
- Item P:** 20X4 Total liabilities and stockholders' equity: Total liabilities (\$8,929) plus total stockholders' equity (\$5,314) equals total liabilities and stockholders' equity (\$14,243).

- Item Q:** 20X4 Retained earnings: Contributed capital plus retained earnings equals total stockholders' equity. Accordingly, total stockholders' equity (\$5,314) less contributed capital (\$2,422) equals retained earnings (\$2,892).
- Item R:** 20X4 Total assets: Total assets are equal to total liabilities and stockholders' equity (\$14,243) which was solved in (P).
- Item S:** 20X4 Noncurrent liabilities: Current liabilities plus noncurrent liabilities is equal to total liabilities. Therefore, total liabilities (\$8,929) less current liabilities (\$3,517) is equal to non-current liabilities (\$5,412).
- Item T:** 20X4 Additional paid-in capital: Common stock plus additional paid-in capital is equal to contributed capital. Therefore, contributed capital (\$2,422) less common stock (\$142) equals additional paid-in capital (\$2,280).
- Item U:** 20X5 Total liabilities and stockholders' equity: Total liabilities and stockholders' equity is equal to total assets (\$14,351).
- Item V:** 20X5 Current liabilities: Take total liabilities and stockholders' equity (\$14,351) which was calculated in (U), less total stockholders' equity (\$5,354). This equals total liabilities (\$8,997). Total liabilities (\$8,997) less noncurrent liabilities (\$5,454) equals current liabilities (\$3,543).
- Item W:** 20X5 Contributed Capital: Common stock (\$144) plus additional paid-in capital (\$2,296) equals contributed capital (\$2,440).
- Item X:** 20X5 Noncurrent assets: Current assets plus noncurrent assets equals total assets. Then total assets (\$14,351) less current assets (\$5,315) equals noncurrent assets (\$9,036).
- Item Y:** 20X5 Retained earnings: Contributed capital plus retained earnings equals total stockholders' equity. Accordingly, total stockholders' equity (\$5,354) less contributed capital (\$2,440, from (W)) equals retained earnings (\$2,914).
- Item Z:** 20X5 Total liabilities: Total liabilities and stockholders' equity (\$14,351), which was calculated in (U), less total stockholders' equity (\$5,354) equals total liabilities (\$8,997).

P2-4. Understanding the accounting equation

Bob Touret, Inc.					
Select Information from Financial Statements					
	Year				
	20X1	20X2	20X3	20X4	20X5
Assets					
Current assets	\$ 2,746	\$ 2,736	\$ 3,016	\$ 2,778	\$ 2,234
Non-current assets	4,002	4,501	3,900	4,230	4,805
Total assets	<u>\$ 6,748</u>	<u>\$ 7,237</u>	<u>\$ 6,916</u>	<u>\$ 7,008</u>	<u>\$ 7,039</u>
Liabilities					
Current liabilities	1,536	1,801	1,685	1,701	1,463
Non-current liabilities	2,212	2,345	2,175	2,206	2,252
Total liabilities	<u>3,748</u>	<u>4,146</u>	<u>3,860</u>	<u>3,907</u>	<u>3,715</u>
Stockholders' Equity					
Contributed capital	1,250	1,250	1,300	1,300	1,400
Retained earnings	1,750	1,841	1,756	1,801	1,924
Total stockholders' equity	<u>3,000</u>	<u>3,091</u>	<u>3,056</u>	<u>3,101</u>	<u>3,324</u>
Total liabilities and equity	<u>\$ 6,748</u>	<u>\$ 7,237</u>	<u>\$ 6,916</u>	<u>\$ 7,008</u>	<u>\$ 7,039</u>
Other Information					
Beginning retained earnings	\$ NA	\$ 1,750	\$ 1,841	\$ 1,756	\$ 1,801
Net income (loss)	NA	105	(76)	55	135
Dividends	NA	(14)	(9)	(10)	(12)
Ending retained earnings	<u>\$ 1,750</u>	<u>\$ 1,841</u>	<u>\$ 1,756</u>	<u>\$ 1,801</u>	<u>\$ 1,924</u>
Working capital	\$ 1,210	\$ 935	\$ 1,331	\$ 1,077	\$ 771

Items in **bold** are unknowns solved below. Items are not necessarily solved in alphabetical order.

Item A: 20X1 Current assets: Current assets plus noncurrent assets equals total assets. Therefore, total assets (\$6,748) less non-current assets (\$4,002) equals current assets (\$2,746).

Item C: 20X1 Total stockholders' equity: Contributed capital (\$1,250) plus retained earnings (\$1,750) equals total stockholders' equity (\$3,000).

Item D: 20X1 Total liabilities and stockholders' equity: Total liabilities and stockholders' equity is equal to total assets (\$6,748).

- Item B:** 20X1 Noncurrent liabilities: Total liabilities and stockholders' equity (\$6,748) less total stockholders' equity (\$3,000) is equal to total liabilities (\$3,748). Current liabilities plus noncurrent liabilities is equal to total liabilities. Therefore, total liabilities (\$3,748) less current liabilities (\$1,536) is equal to noncurrent liabilities (\$2,212).
- Item E:** 20X1 Working capital: Current assets (\$2,746) less current liabilities (\$1,536) equals working capital (\$1,210).
- Item H:** 20X2 Current liabilities: Current assets less current liabilities equals working capital. Hence, current assets (\$2,736) less working capital (\$935) equals current liabilities (\$1,801).
- Item K:** 20X2 Total liabilities and stockholders' equity: Current liabilities (\$1,801) plus noncurrent liabilities (\$2,345) is equal to total liabilities (\$4,146). Total liabilities (\$4,146) plus total stockholders' equity (\$3,091) is equal to total liabilities and stockholders' equity (\$7,237).
- Item G:** 20X2 Total assets: Total assets are equal to total liabilities and stockholders' equity (\$7,237).
- Item F:** 20X2 Noncurrent assets: Current assets plus noncurrent assets equals total assets. Then total assets (\$7,237) less current assets (\$2,736) equals noncurrent assets (\$4,501).
- Item J:** 20X2 Retained earnings: Beginning of the year retained earnings (\$1,750) plus net income (\$105) less dividends (\$14) equals end of the year retained earnings (\$1,841).
- Item I:** 20X2 Contributed capital: Contributed capital plus retained earnings equals total stockholders' equity. Accordingly, total stockholders' equity (\$3,091) less retained earnings (\$1,841) equals contributed capital (\$1,250).
- Item M:** 20X3 Total assets: Total assets are equal to total liabilities and stockholders' equity (\$6,916).
- Item L:** 20X3 Current assets: Current assets plus noncurrent assets equals total assets. Therefore, total assets (\$6,916) less noncurrent assets (\$3,900) equals current assets (\$3,016).

- Item N:** 20X3 Current liabilities: Current assets less current liabilities equals working capital. Hence, current assets (\$3,016) less working capital (\$1,331) equals current liabilities (\$1,685).
- Item O:** 20X3 Noncurrent liabilities: Total liabilities and stockholders' equity (\$6,916) less total stockholders' equity (\$3,056) equals total liabilities (\$3,860). Current liabilities plus noncurrent liabilities equals total liabilities. So total liabilities (\$3,860) less current liabilities (\$1,685) equals noncurrent liabilities (\$2,175).
- Item P:** 20X3 Contributed capital: Contributed capital plus retained earnings equals total stockholders' equity. Therefore, total stockholders' equity (\$3,056) less retained earnings (\$1,756) equals contributed capital (\$1,300).
- Item Q:** 20X3 Net income (loss): Beginning of the year retained earnings plus net income less dividends equals end of the year retained earnings. Therefore, end of the year retained earnings (\$1,756) plus dividends (\$9) less beginning of the year retained earnings (\$1,841) equals net loss (\$76).
- Item R:** 20X4 Noncurrent assets: Current assets plus noncurrent assets equals total assets. Therefore, total assets (\$7,008) less current assets (\$2,778) equals noncurrent assets (\$4,230).
- Item T:** 20X4 Retained earnings: Beginning of the year retained earnings plus net income less dividends equals end of the year retained earnings. Therefore, end of the year retained earnings from 20X5 (\$1,924) plus dividends from 20X5 (\$12) less net income from 20X5 (\$135) equals beginning of the year retained earnings (\$1,801) which is also the end of the year retained earnings for 20X4.
- Item U:** 20X4 Total stockholders' equity: Contributed capital (\$1,300) plus retained earnings (\$1,801) equals total stockholders' equity (\$3,101).
- Item S:** 20X4 Current liabilities: Total liabilities and stockholders' equity (\$7,008) less total stockholders' equity (\$3,101) equals total liabilities (\$3,907). Current liabilities plus noncurrent liabilities equals total liabilities. Therefore, total liabilities (\$3,907) less noncurrent liabilities (\$2,206) equals current liabilities (\$1,701).
- Item V:** 20X4 Working capital: Current assets (\$2,778) less current liabilities (\$1,701) equals working capital (\$1,077).

Item W: 20X4 Dividends: Beginning of the year retained earnings plus net income, less dividends, equals end of the year retained earnings. Accordingly, end of the year retained earnings (\$1,801) less net income (\$55) and beginning of the year retained earnings (\$1,756) equals dividends (\$10).

Item X: 20X5 Current assets: Current assets less current liabilities equals working capital. So working capital (\$771) plus current liabilities (\$1,463) equals current assets (\$2,234).

Item Y: 20X5 Total assets: Current assets (\$2,234) plus noncurrent assets (\$4,805) equals total assets (\$7,039).

Item BB: 20X5 Total liabilities and stockholders' equity: Total liabilities and stockholders' equity is equal to total assets (\$7,039).

Item AA: 20X5 Total stockholders' equity: Current liabilities (\$1,463) plus noncurrent liabilities (\$2,252) equals total liabilities (\$3,715). Total liabilities and stockholders' equity (\$7,039) less total liabilities (\$3,715) equals total stockholders' equity (\$3,324).

Item Z: 20X5 Contributed capital: Contributed capital plus retained earnings equals total stockholders' equity. Therefore, total stockholders' equity (\$3,324) less retained earnings (\$1,924) equals contributed capital (\$1,400).

P2-5. Converting from cash to accrual basis

Requirement 1:

		Accounts receivable
Beginning accounts receivable	\$128,000	
		\$319,000 Cash received on account
Solve for: sales on account	\$326,000	
Ending accounts receivable	\$135,000	

Requirement 2:

Salaries payable	
	\$8,000 Beginning salaries payable
Cash paid for salaries \$47,000	
	\$44,000 Solve for: salary expense
	\$5,000 Ending salaries payable

Requirement 3:

To solve for cost of goods sold we must first determine the amount of inventory purchases for August by analyzing Accounts payable.

Accounts payable	
	\$21,000 Beginning accounts payable
Cash paid to suppliers \$130,000	
	\$134,000 Solve for: purchases on account
	\$25,000 Ending accounts payable

We can now solve for Cost of goods sold by using the amount of inventory purchases in the analysis of the Inventory account.

Inventory	
Beginning inventory \$33,000	
Purchases (solved above) \$134,000	
	\$142,000 Solve for: cost of goods sold
Ending inventory \$25,000	

P2-6. Journal entries and statement preparation

a. DR Cash	\$90,000	
CR Common stock		\$90,000
 b. DR Equipment	 \$30,000	
CR Cash		\$30,000
 DR Depreciation expense	 \$ 417	
CR Accumulated depreciation		\$ 417
[(\$30,000 - \$5,000)/ 60 months]		

c. DR Inventory	\$15,000	
CR Accounts payable		\$15,000
DR Accounts payable	\$10,000	
CR Cash		\$10,000
d. DR Rent expense	\$ 500	
DR Prepaid rent	1,000	
CR Cash		\$ 1,500
e. DR Utilities expense	\$ 800	
CR Cash		\$ 800
f. DR Accounts receivable	\$35,000	
CR Sales revenue		\$35,000
DR Cash	\$26,000	
CR Accounts receivable		\$26,000
DR Cost of goods sold	\$9,000	
CR Inventory		\$ 9,000
(\$15,000 x .60 = \$9,000)		
g. DR Wages expense	\$ 5,600	
CR Wages payable		\$ 400
CR Cash		5,200
h. DR Cash	\$12,000	
CR Notes payable		\$12,000
DR Notes payable	\$ 3,000	
CR Cash		\$ 3,000
DR Interest expense	\$ 450	
CR Interest payable		\$ 450

Bob's Chocolate Chips and More		
Income Statement		
For the month ending October 31, 20X1		
Sales revenue		\$35,000
Cost of goods sold		<u>9,000</u>
Gross profit		26,000
Less: Operating expenses:		
Wages expense	\$5,600	
Rent expense	500	
Utilities expense	800	
Depreciation expense	417	
Interest expense	<u>450</u>	<u>7,767</u>
Net income		<u><u>\$18,233</u></u>

Bob's Chocolate Chips and More			
Balance Sheet			
October 31, 20X1			
Assets		Liabilities	
Cash	\$77,500	Accounts payable	\$5,000
Accounts receivable	9,000	Interest payable	450
Inventory	6,000	Wages payable	400
Prepaid rent	1,000	Notes payable	<u>9,000</u>
Equipment	30,000	Total liabilities	<u>14,850</u>
Less: Accumulated depreciation	<u>417</u>		
Net equipment	29,583	Shareholders' equity	
Total Assets	<u><u>\$123,083</u></u>	Common stock	90,000
		Retained earnings	<u>18,233</u>
		Total stockholders' equity	<u>108,233</u>
		Total liabilities and shareholders' equity	<u><u>\$123,083</u></u>

P2-7. Determining income from continuing operations and gain (loss) from discontinued operations

(AICPA adapted)

Requirements 1 and 2:

The amounts to be reported for income from continuing operations after taxes excludes the losses from the discontinued operations.

Helen Corporation
 Partial Income Statement
 for the Years Ended December 31

	20X1	20X0
Income from continuing operations	\$1,769,600	\$1,343,000
Discontinued operations:		
Loss from operation of discontinued division, net of tax benefits of \$134,400 in 20X1 and \$105,000 in 20X0	(505,600)	(395,000)
Gain on sale of discontinued division, net of tax of \$189,000	711,000	
	\$1,975,000	\$948,000

The following analysis derives the adjusted income statements shown above:

	20X1			20X0		
	As Reported	Adjustments	Adjusted	As Reported	Adjustments	Adjusted
Operating income	\$1,600,000	\$640,000	(1) \$2,240,000	\$1,200,000	\$500,000	(1) \$1,700,000
Gain on sale of division	900,000	(900,000)	(2) 0	0		0
Net income before taxes	2,500,000		2,240,000	1,200,000		1,700,000
Provision for income taxes	(525,000)	(134,400)	(1) (470,400)	(252,000)	(105,000)	(1) (357,000)
		189,000	(2)			
Income from continuing operations	1,975,000		1,769,600	948,000		1,343,000
Loss from operation of discontinued division, net of tax		(505,600)	(1) (505,600)		(395,000)	(1) (395,000)
Gain from sale of discontinued division, net of tax		711,000	(2) 711,000			
	\$1,975,000		\$1,975,000	\$948,000		\$948,000

(1) Reclassify operating income and associated tax effect of discontinued operations.

(2) Reclassify gain on sale and associated tax effect.

P2-8. Discontinued operations components held for sale

Silvertip Construction, Inc.
Partial Income Statement
20X1

Income from continuing operations	\$1,650,000
Discontinued operations:	
Loss from operation of held for sale business component, net of tax benefit of \$19,950	(75,050) *
Impairment loss on held for sale component, net of tax benefit of \$14,511	(54,589) **
Net income	<u>\$1,520,361</u>

Earnings per share:	
Income from continuing operations	\$1.65
Discontinued operations:	
Loss from operation of held for sale business component, net of tax	(0.08)
Impairment loss on held for sale component, net of tax	(0.05)
Net income	<u>\$1.52</u>

*Operating loss on held for sale component:

Pre-tax loss on operation of discontinued operations	\$95,000
Less tax benefit at 21%	<u>19,950</u>
After-tax loss	<u>\$75,050</u>

**Impairment loss on held for sale component:

Book value	\$760,000
Estimated selling price	\$735,000
Less: Brokerage commission (6%)	<u>44,100</u>
Estimated net realizable value	<u>690,900</u>
Pre-tax impairment loss	69,100
Less tax benefit at 21%	<u>14,511</u>
After-tax loss	<u>\$54,589</u>

P2-9. Manipulation of receivables

Accounts receivable turnover = sales ÷ average accounts receivable.

Days sales outstanding = 365 ÷ Accounts receivable turnover.

A growing days sales outstanding figure is often a telltale sign that a company's receivables are impaired due to channel stuffing or other revenue recognition issues. This growth results from receivables growing at a faster

rate than sales; the growth rate disparity is attributable to a lack of cash collections on the “managed” sales. The spike in Holman’s days sales outstanding figure could have raised questions from analysts (and auditors) about the company’s revenue recognition practices that the CFO probably did not want to have raised. The actions taken, which were not disclosed, may have been intended to create an illusion of normal business activity and thus avert scrutiny of the growing trade receivables.

Financial Reporting and Analysis (8th Ed.)
Chapter 2 Solutions
Accrual Accounting and Income Determination
Cases

Cases

C2-1. Conducting financial reporting research: Discontinued operations

Requirement 1:

FASB ASC Paragraph 360-10-45-9 specifies the following criteria* to be met in order to classify assets as held for sale:

- a. Management commits to a plan to sell the assets.
- b. The assets are available for immediate sale in their present condition subject only to usual and customary terms for sales of such assets.
- c. An active program to locate a buyer and other actions required to complete the sale have been initiated.
- d. The sale is probable, and transfer of the assets is expected to qualify for recognition as a completed sale within one year.
- e. The assets are being actively marketed for sale at a reasonable price.
- f. It is unlikely that significant changes to the disposal plan will be made or that it will be withdrawn.

*Paraphrased for brevity.

Management's classification of the business units in question as discontinued operations indicates that these conditions were met.

Requirement 2:

At issue is whether the regulatory approval delay violates the requirement that assets are expected to be transferred within one year to qualify for "held for sale" treatment. FASB ASC Paragraph 360-10-45-11 lists several exceptions to the "one-year" requirement for completing the sale. Waiting for pending regulatory approval would qualify as such an exception if management reasonably expected approval would ultimately be granted. Thus, the intended sale of the Rohrback Cosasco Systems division should be treated as a discontinued operation.

Requirement 3:

The scenario for this requirement implies that management's plans have changed since the original disposal plan was adopted. Clearly, the unit in question is no longer available for immediate sale in its present condition. While it is permissible to continue to classify assets as held for sale when conditions are unexpectedly imposed that delay transfer of the assets, actions must have been initiated—or will be initiated on a timely basis—to respond to the conditions. Management's decision to defer remediation until it is less expensive to do so leads to the conclusion that this business unit should no longer be classified as held for sale.

Requirement 4:

Corrpro's net income would not be affected by denying discontinued operations treatment to these business units. However, Corrpro has suffered losses from continuing operations in each of the last three years. These operating losses would appear even more severe if the losses from operations now classified as discontinued were included. Given the focus of many analysts on continuing operations, management will likely prefer that these non-core business units remain classified as they were in 20X3.

C2-2. Channel stuffing

The Securities and Exchange Commission alleged that ClearOne improperly recognized revenue, thus inflating net income and accounts receivable, through "channel stuffing." According to the complaint, the company shipped inventory to distributors near quarter ends with the understanding that the distributors did not have to pay for these products until the distributors resold them. Some distributors were given the right to return or exchange inventory they were unable to sell.

Physically transferring inventory to a distributor, but not requiring the distributor to pay until the goods are resold, does not meet the criteria for revenue recognition. This case pre-dates the new revenue recognition rules, so the guiding principle would have been that the earnings process is substantially complete and collection is reasonably assured. Those criteria are clearly not met in the circumstances described. (Even under the new revenue recognition rules, it would have been inappropriate to recognize revenue.)

C2-3. Earnings management

The ethical issues involved are integrity and honesty in financial reporting, full disclosure, and the accountant's professionalism. In violating GAAP, the

Chief Accounting Officer also violated the AICPA's Code of Professional Conduct. Various parties were affected by the conduct of the Chief Accounting Officer (and others in Mystery Technologies management).

Honesty in financial reporting: Although estimates are pervasive in the preparation of financial statements, accountants are expected to use their best expectations in making those estimates, and are not permitted to base estimates on desired reporting outcomes rather than beliefs about the underlying economics.

Full disclosure: Accountants are expected to provide disclosures that are sufficient to make the financial statements not misleading. Thus, failing to disclose the over-reserve was a violation of securities laws.

Professionalism: Accountants are expected to act in the interests of the financial statement users in order to provide faithful representation of the firm's economic situation. This requirement is inconsistent with over-reserving in order to prop up subsequent period earnings artificially.

Note to the instructor: Details of the SEC's complaint against the company on which this case is based can be found at:
www.sec.gov/litigation/complaints/comp18194.htm

- The Chief Accounting Officer pleaded guilty to criminal charges based on his conduct at Mystery Technologies, the result of which was various monetary penalties and the loss of future employment opportunities.
- Mystery Technologies, after an SEC investigation, was charged with filing false and misleading financial statements.
- Mystery Technologies' auditors were named in shareholder lawsuits filed as a result of the false and misleading financial statements. The firm's professional reputation cannot be enhanced by the fact that the firm did not detect earnings management schemes involving millions of dollars.
- Investors in Mystery Technologies' stock suffered. **Note to the instructor:** By 20X0, Mystery Technologies' stock had climbed to over \$40 per share where it more or less remained before falling rapidly to the low teens in June of 20X1—about the time that it became public that the SEC was investigating Mystery Technologies' reported earnings. (While this drop in share price may have been purely the result of a down market at the time, suits were filed that allege otherwise.)
- The accounting profession suffers in the eyes of the public whenever one of its members acts unprofessionally.

- Employees of Mystery Technologies were placed in a position where their superiors were pressuring them to engage in unethical and/or illegal practices.