

P3-1

a.	Revenues	\$137,765	
	Expenses	123,970	
	Net income	\$ 13,795	
b.	Beginning retained earnings:	\$13,000	
	Net income	13,795	
	Ending retained earnings:	\$26,795	
c.	Accumulated Depreciation:	\$12,000	
	Depreciation expense	4,000 =	3 years
	The company has owned the equipment for three years.		
d.	Equipment cost:	\$40,000	
	Depreciation expense	4,000	= 10 years
e.	Interest revenue recorded:	\$60 = two months' interest	
	Annualized interest equals \$60 × 6	= \$360	
	Annualized interest / Principal balance	\$360/4,000	= 9%
f.	Total interest revenue:	\$60	
	Less interest receivable	– 20	
	Interest collected in cash	\$40	
g.	Total annual rent expense:	\$36,000/12 = \$3,000 per month	
	Prepaid rent = \$3,000 or one month paid in advance		
h.	Supplies expense	650	
	Supplies	650	
i.	Ending balance in supplies:	\$125	
	Adjusting entry	650	
	Beginning balance in supplies	\$775	
j.	Depreciation expense: Office equipment	4,000	
	Accumulated depreciation: Office equipment	4,000	
k.	Income tax expense	2,000	
	Income taxes payable	2,000	
l.	Beginning unearned revenue	\$ 5,000	
	Unearned revenue received	X	
	Services performed	<u>– 12,000</u>	
	Ending unearned revenue	2,000	X = \$9,000
m.	Unearned revenue	12,000	
	Service revenue	12,000	
n.	Current assets:	9,195	
	Current liabilities	16,000	=.57
o.	Interest revenue	60	
	Service revenue	137,705	
	Retained earnings	137,765	
	Retained earnings	123,970	
	Salary expense	65,020	
	Depreciation expense - office equipment	4,000	
	Insurance expense	4,800	

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Income tax expense	5,100
Rent expense	36,000
Utility expense	8,400
Supplies expense	650

P3-2

- a. Total of \$120,000 for services performed equals revenue recognized.
- b. $\$40,000 \times .06 = \$2,400$ interest expense recognized in 2003.
- c. Materials purchased: \$45,000
 Unused materials (10,000)
 Cost of goods sold \$35,000
- d. Cost of insurance policy equals \$7,200 (two-year). Insurance expense equals one-half of the cost of the policy or \$3,600.
- e. Total operating expenses incurred were \$40,000.
- f. Depreciation expense: tractor 10,000
 Accumulated depreciation: tractor 10,000 $\$50,000/5 = \$10,000$
- g. Cost of tractor: \$50,000
 Accumulated depreciation: (10,000)
 Book Value: \$40,000
- h. Interest expense 2,400
 Interest payable 2,400
- i. Principal balance: \$40,000
 2003 interest 2,400
2004 interest 1,200
 Total paid at 6/30/04: \$43,600
- j. Revenue: \$120,000
 Expenses:
 Cost of goods sold \$35,000
 Interest expense 2,400
 Operating expense 40,000
 Insurance expense 3,600
Depreciation expense 10,000 91,000
 Net income: \$29,000
- k. Retained earnings equals \$29,000, credit balance.
- l. Cash Balance: $\$100,000 + \$40,000 - \$50,000 + 100,000 + \$10,000 - \$35,000 - \$7,200 - \$45,000 = \$112,800$
- m. Cash \$112,800
 Accounts receivable 20,000
 Prepaid insurance 3,600
 Supplies 10,000
 Tractor, net 40,000
 \$186,400
- n. Notes payable \$40,000
 Accounts payable 10,000
 Interest payable 2,400

Unearned revenue	10,000
Total liabilities:	\$62,400
o. Equity:	
Common stock	\$100,000
Retained earnings	29,000
	\$129,000

PROOF OF ACCOUNTING EQUATION:

ASSETS = LIABILITIES + EQUITY

\$186,400 = \$57,400 + \$129,000

P3-3

a. Microsoft's sales grew \$2,340,000,000 from 2000 to 2001.

b. Sales grew 10.2%. Increase in sales: \$2,340
 2000 sales 22,956

c. Increase in operating income: 714
 2000 operating income 11,006 = 6.5%

d.		<u>. 2000.</u>	<u>. 2001.</u>
	Revenue:	\$22,956	\$25,296
	<u>Cost of revenue</u>	<u>3,002</u>	<u>3,455</u>
	Gross margin:	\$19,954	\$21,841
	Gross margin as a percent of sales	86.9%	86.3%
e.	Total operating expenses:	\$11,950	\$13,576
	<u>Cost of software sold</u>	<u>3,002</u>	<u>3,455</u>
	Total other operating expenses	8,948	10,121
	<u>Other operating expense</u>	<u>8,948</u>	<u>10,121</u>
	Revenues	22,956	25,296
	Other operating expense %	39%	40%

f. Assumptions may vary slightly. If the average cost of software percentage of 2000 and 2001 is used, it would be 86.6% of sales. Cost of revenues would be 13.4% of sales. If the average operating expenses as a percent of sales from 2000 and 2001 were used, 2002 operating expenses as a percentage of sales would be 39.5%.

Sales would increase to	\$28,584
Cost of revenue (13.4%)	3,830
<u>Other operating expenses (39.5%)</u>	<u>11,434</u>
Operating income	\$13,320
<u>Projected increase from 2001 to 2002:</u>	<u>\$1,600</u>
2001 operating income	11,720
Percentage increase:	13.7%

g. The company's operating income is expected to grow at a slower rate than sales because the company plans to spend more on operating expenses. In fact, Microsoft is spending on a wide variety of new projects designed to reduce reliance on selling operating systems. The company plans to increase employment by 5,000 people and increase R & D spending by nearly 21%. Because expenses will grow faster than revenues, the percentage increase in operating income will be less than the percentage increase in sales.

h. Two- and three-year software licenses will result in less upfront revenues and more unearned revenues in the first year that companies sign such agreements. This would result in lower revenues reported on the income statement, an increase in unearned revenue on the balance sheet. Since income will be less than it would have been, retained earnings will be less.

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i. A significant decrease in unearned revenue would imply that Microsoft’s sales growth is declining. To the extent that Microsoft records a portion of each agreement as unearned revenue, as long as sales are increasing, the unearned revenue account should increase. This might be viewed negatively by some, resulting in a drop in the stock price.

P3-4

Note: This answer is based on the knowledge and intuition that the student should have at this point, and does not consider discounting. This problem could be reassigned after Chapter 6 on present values or after Chapter 11 on fixed assets.

a. Assuming the stores have been rented in 2005, one-fourth of the \$450 thousand, or \$112.5 thousand, should be taken to expense in 2001, leaving three-fourths, or 337.5 thousand, on the December 31, 2005 balance sheet as an asset. (This reasoning relies on the statement that the rent is expected to be a constant \$840 thousand per year.)

b. The total rental revenue from project two is estimated to be \$1,500 thousand, of which \$200 thousand is earned in 2005. Therefore,

$$(200,000/1,500,000) \times 600,000 = 80,000$$

could be taken as expense in 2005, leaving \$520,000 on the balance sheet at December 31, 2005.

c. Because the “Up-front costs: Project 3” have no future benefits, there should be nothing on the balance sheet for these costs. All \$500 thousand should be taken to expense in 2005.

P3-5

Journal entries for transactions.

a.	Cash	3,000	
	Common Stock		3,000
b.	Cash	20,000	
	Note Payable		20,000
c.	Equipment	1,000	
	Cash		1,000
d.	Inventory	20,000	
	Cash		20,000
e.	Accounts Receivable	22,500	
	Sales Revenue		22,500
f.	Cash	20,500	
	Accounts Receivable		20,500
g.	Salaries Expense	3,000	
	Cash		3,000
h.	Retained Earnings	50	
	Cash		50
i.	Interest Expense	1,800	
	Cash		1,800

Note: \$1,800 = (\$20,000)(0.12)(0.75)

Adjusting journal entries.

A1.	Depreciation Expense	200	
	Accumulated Depreciation		200

Note: \$200 = \$1,000/5

A2.	Cost of Goods Sold	18,000	
	Inventory		18,000

Closing journal entries.

C1.	Sales Revenue	22,500	
	Income Summary		22,500
C2.	Income Summary	18,000	
	Cost of Goods Sold		18,000
C3.	Income Summary	3,000	
	Salaries Expense		3,000
C4.	Income Summary	1,800	
	Interest Expense		1,800
C5.	Income Summary	200	
	Depreciation Expense		200
C6.	Retained Earnings	500	
	Income Summary		500

T-accounts

Cash	
BB 0	
a 3,000	1,000 c
b 20,000	20,000 d
f 20,500	3,000 g
	50 h
	1,800 i
EB 17,650	

Accounts receivable	
BB 0	
e 22,500	20,500 f
EB 2,000	

Inventory	
BB 0	
d 20,000	18,000 A2
EB 2,000	

Accumulated Depr.	
	0 BB
	200 A1
	EB

	0 BB
	EB

Equipment	
BB 0	
c 1,000	
EB 1,000	

Common Stock	
	0 BB
	3,000 a
	3,000 BB

Retained Earnings	
	0 BB
h 50	
C6 500	
EB 550	

Note Payable	
	0 BB
	20,000 b
	EB

Sales	
	22,500 e
C1 22,500	
	0

Cost of goods sold	
A2 18,000	
	18,000 C2
	0

Income Summary	
C2 18,000	22,500 C1
C3 3,000	
C4 1,800	

Depr. Expense	
A1 200	

6

C5	200		
		500	C6
	0		

		200	C5

	Salaries Expense		
g	3,000		
		3,000	C3
	0		

	Interest Expense		
i	1,800		
		1,800	C4
	0		

Miloslav's Magazines—Statement of Income for the year ended Dec. 31, 2004

Revenues:	
Sales	\$22,500
Expenses:	
COGS	(18,000)
Salaries Expense	(3,000)
Depreciation Expense	(200)
Interest Expense	(1,800)
Total Expenses	(23,000)
Net Income	(500)

Miloslav's Magazines—Statement of Financial Position as of Dec. 31, 2004

Assets		Liabilities	
Cash	\$17,650	Note Payable	\$20,000
Accounts Receivable	2,000		
Inventory	2,000	Total Liabilities	\$20,000
Total Current Assets	\$21,650		
		Equity	
Equipment	1,000	Common Stock	\$3,000
Accumulative Depreciation	(200)	Retained Earnings	(550)
Total Assets	\$22,450	Total Equity	\$2,450
		Total Liabilities and Equity	\$22,450

P3-6

Journal entries:

a.	Cash	100,000	
	Common Stock		100,000
b.	Inventory	160,000	
	Cash		10,000
	Notes Payable		150,000
c.	Cash	50,000	
	Accounts Receivable	150,000	
	Consulting Revenue		200,000
d.	No entry		
e.	Salary (or Wages) Expense	100,000	

	Cash		100,000
f.	Rent Expense	6,500	
	Prepaid Rent	13,500	
	Cash		20,000

Note: \$1,083.33 per month x 6 months = \$6,500 for back rent for the period January 1 through June 30.

g.	Interest Expense	9,000	
	Notes Payable	6,000	
	Cash		15,000

Note: The holder would first take any interest owed off the note, then reduce the principal. The interest owed at December 31, 2004 is: $8\% \times \$150,000 \times (9/12) = 9,000$.

h.	Retained Earnings	19,000	
	Cash		19,000
i.	Cash	30,000	
	Accounts Receivable		30,000
j.	Cash	84,000	
	Sales Revenue		84,000

Adjustments:

A1.	COGS	60,000	
	Inventory		60,000
A2.	Rent Expense	6,500	
	Prepaid Rent		6,500

Note: No adjustment for interest is required, because it has been paid in full on December 31.

(The following closes all revenue and expense accounts to an account called 'Income Summary'. The balance in Income Summary should be equal to Net Income as shown on the income statement, below. Income Summary is then closed to Retained Earnings. This is an alternative to closing the revenue and expense accounts directly to retained earnings and provides a convenient check on the net income number on the income statement.)

C1.	Sales Revenue	84,000	
	Income Summary		84,000
C2.	Consulting Revenue	200,000	
	Income Summary		200,000
C3.	Income Summary	60,000	
	COGS		60,000
C4.	Income Summary	13,000	
	Rent Expense		13,000
C5.	Income Summary	9,000	
	Interest Expense		9,000
C6.	Income Summary	100,000	
	Salaries Expense		100,000
C7.	Income Summary	102,000	
	Retained Earnings		102,000

T-accounts (in thousands)

	<u>Cash</u>			<u>Accounts Receivable</u>			<u>Prepaid Rent</u>	
BB	0.0		BB	0.0		BB	0.0	
a	100.0	10.0	b	c	150.0	i	f	13.5
c	50.0	100.0	e				EB	7.0
i	30.0	20.0	f	EB	120.0			
								A2

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j	84.0	15.0	g					
		19.0	h					
EB	100.0							

Inventory			
BB	0.0		
b	160.0	60.0	A1 g
EB	100.0		

Notes Payable			
		0.0	BB
	6.0	150.0	b
		144.0	EB

Common Stock			
		0.0	BB
		100.0	a
		100.0	EB

Retained Earnings			
		0.0	BB
h	19.0	102.0	C7
		83.0	EB

Consulting Revenue			
		200.0	c C1
C2	200.0		
		0.0	EB

Sales Revenue			
	84.0	84.0	j
		0.0	EB

Cost of Goods Sold			
A1	60.0	60.0	C3
EB	0.0		

Salaries Expense			
e	100.0		f
		100.0	C6 A2
EB	0.0		EB

Rent Expense			
	6.5		
	6.5	13.0	C4
	0.0		

Interest Expense			
g	9.0		
		9.0	C5
EB	0.00		

Income Summary			
C3	60.0	84.0	C1
C4	13.0	200.0	C2
C5	9.0		
C6	100.0		
C7	102.0		
		0.0	

Ofer's Office Designs—Statement of Income for the year ended Dec. 31, 2004

Revenues:		
Sales		\$ 84,000
Consulting Revenues	200,000	
	Total Revenues	284,000
Expenses:		
COGS	(60,000)	
Salaries Expense	(100,000)	
Rent Expense	(13,000)	
Interest Expense	(9,000)	
Total Expenses	(182,000)	
Net Income	(102,000)	

Ofer's Office Designs—Statement of Financial Position as of Dec. 31, 2004

Assets

Liabilities

Cash	\$100,000		
Accounts Receivable	120,000	Total Current Liabilities	\$0
Inventory	100,000		
Prepaid Expenses	7,000	Note Payable	144,000
Total Current Assets	\$327,000	Total Liabilities	\$144,000
Total Assets	\$327,000	Equity	
		Common Stock	\$100,000
		Retained Earnings	83,000
		Total Equity	\$183,000
		Total Liabilities and Equity	\$327,000

P3-7

1. Journal entries			
a. Cash	100,000		
Common stock		100,000	
b. Equipment	60,000		
Cash		60,000	
c. Prepaid rent	4,000		
Cash		4,000	
d. Inventories	30,000		
Accounts payable		30,000	
e. Investments	25,000		
Cash		25,000	
f. Cash	20,000		
Bonds payable		20,000	
g. Accounts receivable	40,000		
Sales revenue		40,000	
COGS	25,000		
Inventory		25,000	
h. Accounts payable	15,000		
Cash		15,000	
i. Cash	30,000		
Accounts receivable		30,000	
j. Cash	50		
Bad debts expense	150		
Accounts receivable		200	
k. Salaries expense	6,000		
Cash		6,000	
2. Adjusting entries—(calculations below)			
A1. Salaries expense	1,000		
Salaries payable		1,000	
A2. Depreciation expense	7,500		
Accumulated depreciation		7,500	

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A3. Interest expense	1,500	
Interest payable		1,500
A4. Rent expense	3,000	
Prepaid rent		3,000
Closing entries.		
C1. Income summary	4,150	
Sales revenue	40,000	
COGS		25,000
Interest expense		1,500
Salaries expense		7,000
Depreciation expense		7,500
Bad debts expense		150
Rent expense		3,000
Close the balance in income summary to retained earnings.		
C2. Retained Earnings	4,150	
Income Summary		4,150

Calculations for adjusting entries:

The unpaid salaries at the end of the year is given.

Depreciation: $(60000/6) \times (3/4)$

Interest: $2000 \times 1 \times (3/4)$

Rent: $4000 \times (3/4)$

1. & 2. T-accounts

Cash		Accounts Rec.		Inventory		Prepaid Rent	
BB	0	BB	0	BB	0	BB	0
a	100,000	b	40,000	i	30,000	g2	4,000
f	20,000	g1	30,000	j	25,000	c	3,000
i	30,000		200		5,000	A4	1,000
j	50		9,800				
	6,000						
	40,050						
		Accum. Depr		Investments		Equipment	
			0	BB	0	BB	0
			7,500	BB	25,000	b	60,000
			7,500	A2	25,000		60,000
		Interest Pay.		Salaries Payable		Accounts Pay.	
			0	BB	0		0
			1,500	A3	1,000	h	15,000
			1,500		1,000	d	30,000
							15,000
		Bonds Payable		Ret. Earnings		Common St.	
			0	BB	0	BB	0
			20,000	f	4,150		100,000
			20,000	C2	4,150	a	100,000
Income Summary						Add'l Paid in Capital	
	40,000						0
C1	25,000					BB	0
C1	7,000						0
C1	7,500						0
C1	1,500						0
C1	3,000						0
C1	150						0
subt	4,150						0
	4,150						0
	0						0
		Sales		Bad debts expense		COGS	
			40,000	g1		g2	25,000
			40,000	j	150		
			0	subt	150	subt	25,000
			0		150	C1	25,000
			0				0
Salaries Expense		Depreciation Exp.		Interest Exp		Rent Expense	
k	6,000		7,500	A3	1,500	A4	3,000
A1	1,000	A2	7,500				
	7,000	subt	7,500		1,500	subt	3,000
	7,000		7,500		1,500		3,000
	0		0		0		0

Note: subt denotes a subtotal.

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3. Ralphy's Business—Statement of Financial Position as of Dec. 31, 2004

Cash	40,050	Accounts Payable	15,000
Investments	25,000	Salaries Payable	1,000
Accounts Receivable	9,800	Interest Payable	1,500
Inventories	5,000	Total Current Liabilities	17,500
Prepaid Rent	1,000		
Total Current Assets	80,850	Bonds Payable	20,000
		Total Liabilities	37,500
Equipment	60,000		
Accum. Depr.	(7,500)	Common St.	100,000
		Add'l Paid-in Capital	0
Total Assets	133,350	Retained Earnings	(4,150)
		Total Equity	95,850
		Total Liabilities and SE	133,350

4. Ralphy's Business—Statement of Income for the Nine Months Ended Dec. 31, 2004

Sales	40,000
COGS	(25,000)
Salaries	(7,000)
Rent	(3,000)
Depreciation	(7,500)
Interest	(1,500)
Bad debts expense	(150)
Net Income	(4,150)

Notes:

Adjustments:

Depreciation expense , Rent expense, Interest expense

Close:

Sales	Cost of goods sold
Depreciation expense	Rent expense
Wage expense	Interest expense
Income summary	

3. Rick & Stan’s Business

Balance Sheet As of December 31, 2005

Cash	\$56.00	Accounts payable	\$4.00
Accounts receivable	9.00	Accrued compensation	2.00
Inventory	10.00	Interest payable	0.60
Prepaid rent	2.25		
Total Current Assets	\$77.25	Total Current Liabilities	\$6.60
		Bank loan	\$20.00
		Total Long-term Liabilities	\$20.00
		Total Liabilities	\$26.60
Property & equipment	\$ 57.00		
		Shareholders’ Equity	
		Common Stock	\$50.00
	\$ 57.00	Add'l Paid-in Capital	60.00
		Retained Earnings	(2.35)
		Total Shareholders’Equity	\$107.65
		Total Liabilities &	
Total Assets	\$134.25	Shareholders’ Equity	\$134.25

4. Rick & Stan’s Business

Income Statement

For the period October 1 to December 31, 2005

Sales	\$45.00
Cost of goods sold	(25.00)
Gross margin	\$20.00
Wages expense	(18.00)
Depreciation expense	(3.00)
Rent expense	(0.75)
Interest expense	(0.60)
<u>Net loss</u>	<u>\$(2.35)</u>

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Journal entries (Note: Some numbers must be found by analyzing the T-accounts.)

Income Statement Concepts: Income, Revenues, and Expenses **15**

a.	Accounts receivable	501.7	
	Sales revenue		501.7
b.	Cash	489.8	
	Accounts receivable		489.8
c.	COGS	337.2	
	Inventory		337.2
d.	Depreciation expense	10.5	
	Accumulated depreciation		10.5
e.	R & D expense	5.7	
	Cash		5.7
f.	Tax expense	7.0	
	Taxes payable		7.0
g.	Taxes payable	2.8	
	Cash		2.8
h.	Interest expense	15.9	
	Interest payable		15.9
i.	Selling, general, & admin. expenses	21.7	
	Cash		21.7
j.	Cash	47.3	
	Senior debt		47.3
k.	Retained earnings	16.7	
	Cash		16.7
l.	Selling, general, & admin. expenses	92.0	
	Wages payable		92.0
m.	Wages payable	92.8	
	Cash		92.8
n.	Taxes payable	13.9	
	Cash		13.9
o.	Other assets	9.3	
	Cash		9.3
p.	Land	0.5	
	Cash		0.5
q.	Cash	1.9	
	Accumulated depreciation	4.1	
	Buildings		6.0
r.	Inventory	348.1	
	Accounts payable		348.1
s.	Accounts payable	336.7	
	Cash		336.7
t.	Buildings	10.5	
	Cash		10.5
u.	Machinery	11.7	
	Cash		11.7
v.	Selling, general, & admin. expenses	6.0	

Income Statement Concepts: Income, Revenues, and Expenses

m	92.8	92.0	l	n	13.9	15.9	h	5.3	x	g	2.8	7.0	f
						5.8		29.3				5.7	
		6.9											

Senior Debt	
31.0	BB
47.3	j
<u>78.3</u>	

Subordinated Debt	
49.4	BB
<u>49.4</u>	

Other LTL	
41.6	BB
<u>41.6</u>	

Preferred Stock	
11.3	BB
<u>11.3</u>	

Sales	
501.7	a
<u>501.7</u>	Subt
501.7	C1
<u>0.0</u>	

Common St.	
1.1	BB
<u>1.1</u>	

APIC	
50.4	BB
<u>50.4</u>	

Ret. Earnings	
17.2	BB
16.7	k
0.4	C8
<u>0.9</u>	

Inc. Summary	
501.7	C1
<u>0.4</u>	
337.2	C2
10.5	C4
5.7	C7
7.0	C6
15.9	C3
125.0	C5
<u>0.4</u>	Subt
0.4	C8
<u>0.0</u>	

COGS	
337.2	c
<u>337.2</u>	Subt
337.2	C2
<u>0.0</u>	

Depr. Exp.	
10.5	d
<u>10.5</u>	Subt
10.5	C4
<u>0.0</u>	

R&D Exp.	
5.7	e
<u>5.7</u>	Subt
5.7	C7
<u>0.0</u>	

Tax Exp.	
7.0	f
<u>7.0</u>	Subt
7.0	C6
<u>0.0</u>	

Interest Exp.	
15.9	h
<u>15.9</u>	Subt
15.9	C3
<u>0.0</u>	

SG&A Exp.	
21.7	i
92.0	l
6.0	v
5.3	x
<u>125.0</u>	Subt
125.0	C5
<u>0.0</u>	

Subt Indicates a subtotal, not an entry.

2. Grow Co.—Statement of Financial Position as of Dec. 31, 2005

	2005	2004		2005	2004
Cash	22.1	13.5	Accounts Pay.	49.7	38.3
Accounts Rec.	82.6	70.7	Wages Pay.	6.9	7.7
Inventories	95.2	84.3	Interest Pay.	5.8	3.8
Prepaid Exp.'s	11.4	9.3	Other Accrued Exps.	29.3	24.0
			Taxes Payable	5.7	1.5
Land	4.2	3.7			
Buildings	54.3	49.8			
Machinery	69.3	57.6	Senior Debt	78.3	31.0
Accum. Depr.	(36.6)	(30.2)	Subordinated Debt	49.4	49.4
			Other LTL	41.6	41.6
Other Assets	27.9	18.6			
Total Assets	330.4	277.3	Preferred Stock	11.3	11.3
			Common St.	1.1	1.1
			APIC	50.4	50.4
			Ret. Earnings	0.9	17.2
			Total Liab. & SE	330.4	277.3

3. Grow Co.—Statement of Income for the year ended Dec. 31, 2005

Sales	501.7
COGS	(337.2)
SG&A	(125.0)
Interest	(15.9)
Depreciation	(10.5)
R&D	(5.7)
Taxes	(7.0)
Net Income	0.4