CHAPTER 1

UNDERSTANDING THE ISSUES

1. (a) horizontal combination—both are marine engine manufacturers
(b) vertical combination—manufacturer buys distribution outlets
(c) conglomerate—unrelated businesses

2. By accepting cash in exchange for the net assets of the company, the seller would have to recognize an immediate taxable gain. However, if the seller were to accept common stock of another corporation instead, the seller could construct the transaction as a tax-free reorganization. The seller could then account for the transaction as a tax-free exchange. The seller would not pay taxes until the shares received were sold.

3.

Identifiable assets (fair value).........	$600,000
Deferred tax liability ($200,000 × 40%)......................	(80,000)
Net assets.......................................	$520,000
Goodwill [($850,000 – $520,000) ÷ 60%]..	$550,000
Deferred tax liability ($550,000 × 40%)......................	(220,000)
Net goodwill....................................	$330,000

4. (a) The net assets and goodwill will be recorded at their full fair value on the books of the parent on the date of acquisition.
(b) The net assets will be "marked up" to fair value and goodwill will be recorded at the end of the fiscal year when the consolidated financial statements are prepared through the use of a consolidated worksheet.

5. Puncho will record the net assets at their fair value of $800,000 on its books. Also, Puncho will record goodwill of $100,000 ($900,000 – $800,000) resulting from the excess of the price paid over the fair value. Semos will record the removal of its net assets at their book values. Semos will record a gain on the sale of business of $500,000 ($900,000 – $400,000).

6.

Zone Analysis	Group Total	Cumulative Total
Priority	$ 20,000	$ 20,000
Nonpriority	500,000	520,000

(a) This price exceeds the fair value of all accounts and allows for goodwill.

Current assets (fair value)...............	$120,000
Land (fair value)..............................	80,000
Liabilities (fair value)........................	(100,000)
Building & equipment (fair value)....	400,000
Customer list (fair value).................	20,000
Goodwill...	280,000
Extraordinary gain..........................	—
	$800,000

(b) This price is a bargain. The nonpriority accounts are discounted. There is $430,000 ($450,000 – $20,000 to priority accounts) available to be allocated to these accounts.

Current assets (fair value)...............	$120,000
Liabilities (fair value)........................	(100,000)
Land [(80 ÷ 500) × $430,000]..........	68,800
Building & equipment [(400 ÷ 500) × $430,000]............	344,000
Customer list [(20 ÷ 500) × $430,000]	17,200
Goodwill...	—
Extraordinary gain..........................	—
Total..	$450,000

(c) This price creates an extraordinary gain. Only priority accounts are recorded.

Current assets (fair value)...............	$120,000
Liabilities (fair value)........................	(100,000)
Building & equipment (no amount available)................	—
Customer list (no amount available)................	—
Goodwill...	—
Extraordinary gain..........................	(5,000)
Total..	$ 15,000

7. (a) Direct cost—Included with the price paid to assign values to net assets, and possibly to goodwill.

(b) Direct cost—Included with the price paid to assign values to net assets, and possibly to goodwill.
(c) Direct cost—Included with the price paid to assign values to net assets, and possibly to goodwill.
(d) Issue cost—Deducted from the amount assigned to stock issued in the combination.
(e) Indirect cost—Expensed in the current period.

8. (a) Additional goodwill is recorded because the target was met. The entry would take the following form:

Goodwill (fair value of stock issued)
    Common Stock (par value of stock issued)
    Paid-In Capital in Excess of Par (fair value of stock issued minus par value)

(b) In this case, the paid-in capital in excess of par account is reduced for the par value of the additional shares to be issued. The fair value of the stock originally issued is being devalued.

The entry would take the following form:

Paid-In Capital in Excess of Par (par value of additional shares issued)
    Common Stock (par value of additional shares issued)

EXERCISES

EXERCISE 1-1

Current-year income using the purchase method:

Combined Net Income
Year Ended December 31, 20xx

Sales [$800,000 + (1/2 × $500,000)]	$1,050,000
Less:	
Cost of goods sold [$400,000 + (1/2 × $300,000)]	550,000
Operating expenses [$150,000 + (1/2 × $75,000)]	187,500
Goodwill amortization*	10,000
Other expenses [$50,000 + (1/2 × $25,000)]	62,500
Net income	$ 240,000

*Purchase price	$ 400,000	
Book value of net assets	200,000	
Goodwill	$ 200,000	
Divide by	÷ 10 years	
Amortization amount	$ 20,000	½ year = $10,000

Current-year income using the pooling method:

Combined Net Income
Year Ended December 31, 1998

Sales ($800,000 + $500,000)	$1,300,000
Less:	
Cost of goods sold ($400,000 + $300,000)	700,000
Operating expenses ($150,000 + $75,000)	225,000
Other expenses ($50,000 + $25,000)	75,000
Net income	$ 300,000

EXERCISE 1-2

(1) Current Assets	100,000	
Land	75,000	
Building	300,000	
Equipment	275,000	
Goodwill	167,000	
Liabilities		102,000
Cash (includes direct acquisition costs)		815,000

Exercise 1-2, Concluded

(2) Cash	800,000	
Liabilities	100,000	
Accumulated Depreciation—Building	200,000	
Accumulated Depreciation—Equipment	100,000	
Current Assets		80,000
Land		50,000
Building		450,000
Equipment		300,000
Gain on Sale of Business		320,000

Note: Seller does not receive direct acquisition costs.

(3) Investment in Cardinal Company	815,000	
Cash		815,000

Note: At year-end, Cardinal would be consolidated with Benz, as explained in Chapter 2.

EXERCISE 1-3

Cash**	100,000	
Inventory	250,000	
Equipment	220,000	
Land	180,000	
Buildings	300,000	
Discount on Bonds Payable	140,000	
Goodwill*	665,000	
Current Liabilities		80,000
Bonds Payable		550,000
Common Stock		300,000
Paid-In Capital in Excess of Par		900,000
Cash**		25,000

*Total consideration:

Common stock (60,000 shares × $20)	$1,200,000	
Direct acquisition costs	25,000	
Price paid		$1,225,000
Less fair value of assets acquired:		
Cash	$ 100,000	
Inventory	250,000	
Current liabilities	(80,000)	
Bonds payable	(410,000)	
Equipment	220,000	
Land	180,000	
Buildings	300,000	
Value of assets acquired		560,000
Excess of total cost over fair value of assets		$ 665,000

**Cash accounts in this entry may be shown as a net amount.

Exercise 1-3, Concluded

In a purchase, assets acquired and liabilities assumed are recorded at fair value. Direct acquisition costs are added to the total purchase price of the acquisition. As an end result, the direct acquisition costs are assigned to Goodwill or to the value of the separable assets in a bargain purchase.

General Expense	30,000	
Cash		30,000
Indirect acquisition costs are expensed.		
Paid-In Capital in Excess of Par	10,000	
Cash		10,000

In a purchase, the costs to register and issue stock are treated as a reduction of the amount received for the stock.

EXERCISE 1-4

Pro Forma Income Statement
Year Ended December 31, 20X2

Sales	$700,000
Less:	
Cost of goods sold ($340,000 + $25,000)	365,000
Operating expenses ($185,000 + $5,250*)	190,250
Other expenses	50,000
Net income	$ 94,750

*Operating expenses had the following adjustments:	
Depreciation expense:	
Equipment ($30,000 ÷ 20 years)	$ 1,500
Buildings ($75,000 ÷ 20 years)	3,750
Total adjustments	$ 5,250

EXERCISE 1-5

Purchase Price:

Cash	$180,000
Direct acquisition costs incurred	10,000
Total purchase price	$190,000

Exercise 1-5, Concluded

Zone Analysis	Group Total	Cumulative Group Total
Priority accounts	$140,000	$140,000
Nonpriority accounts	55,000	195,000
Price paid	$190,000	
Assign to priority	140,000	
Assign to nonpriority	50,000	
Goodwill	—	
Extraordinary gain	—	

Journal Entry:

Accounts Receivable*	200,000	
Inventory*	270,000	
Equipment [(40 ÷ 55) × $50,000]	36,364	
Brand-Name Copyright [(15 ÷ 55) × $50,000]	13,636	
Cash		190,000
Current Liabilities*		80,000
Mortgage Payable*		250,000

*Fair value

Dr = Cr check amounts	520,000	520,000

Acquisition Expense**	15,000	
Cash		15,000

**Indirect acquisition costs

EXERCISE 1-6

Purchase Price:

Cash	$125,000
Direct acquisition costs incurred	10,000
Total purchase price	$135,000

Zone Analysis	Group Total	Cumulative Group Total
Priority accounts	$140,000	$140,000
Nonpriority accounts	55,000	195,000
Price paid	$135,000	
Assign to priority	140,000	
Assign to nonpriority	—	
Goodwill	—	
Extraordinary gain	5,000	

Exercise 1-6, Concluded

Journal Entry:

Accounts Receivable*	200,000	
Inventory*	270,000	
Cash		135,000
Current Liabilities*		80,000
Mortgage Payable*		250,000
Extraordinary Gain		5,000

*Fair value

Dr = Cr check amounts	470,000	470,000

Note: There is no amount available to allocate to the nonpriority assets (equipment and brand-name copyrights).

Acquisition Expense**	15,000	
Cash		15,000

**Indirect acquisition costs

EXERCISE 1-7

Purchase Price:

Cash	$400,000
Direct acquisition costs incurred	18,000
Total purchase price	$418,000

Zone Analysis	Group Total	Cumulative Group Total
Priority accounts	$ 28,000*	$ 28,000
Nonpriority accounts	500,000	528,000
Price paid	$418,000	
Assign to priority	28,000	
Assign to nonpriority	390,000	
Goodwill	—	
Extraordinary gain	—	

*$120,000 current assets – $92,000 liabilities

Assignment and Allocation Schedule

Nonpriority Accounts	Fair Value	Percentage	Amount to Allocate	Allocated or Assigned Amount
Land	$ 80,000	16%	$390,000	$ 62,400
Buildings (net)	250,000	50%	390,000	195,000
Equipment (net)	150,000	30%	390,000	117,000
Patents	20,000	4%	390,000	15,600
Total nonpriority accounts	$500,000	100%		$390,000

Exercise 1-7, Concluded

Journal Entry:

Currents Assets*	120,000	
Land (from schedule)	62,400	
Buildings (net) (from schedule)	195,000	
Equipment (net) (from schedule)	117,000	
Patents (from schedule)	15,600	
Cash		418,000
Liabilities*		92,000

*Fair value

Dr = Cr check amounts	510,000	510,000

Acquisition Expense**	5,000	
Cash		5,000

**Indirect acquisition costs

EXERCISE 1-8

Purchase Price:

Cash	$ 5,000
Direct acquisition costs incurred	18,000
Total purchase price	$23,000

Zone Analysis	Group Total	Cumulative Group Total
Priority accounts	$ 28,000	$ 28,000
Nonpriority accounts	500,000	528,000
Price paid	$ 23,000	
Assign to priority	28,000	
Assign to nonpriority	—	
Goodwill	—	
Extraordinary gain	5,000	

Journal Entry:

Currents Assets*	120,000	
Cash		23,000
Liabilities*		92,000
Extraordinary Gain		5,000

*Fair value

Dr = Cr check amounts	120,000	120,000

Note: There is no amount available to allocate to the nonpriority assets (land, buildings, equipment, and patents).

Acquisition Expense**	5,000	
Cash		5,000

**Indirect acquisition costs

EXERCISE 1-9

(1)	Purchase price	$600,000
	Fair value of net assets other than goodwill	400,000
	Goodwill	$200,000

The estimated value of the unit exceeds $600,000, confirming goodwill.

(2)	(a)	Estimated fair value of business units	$520,000
		Book value of Anton net assets, including goodwill	$500,000

No impairment exists.

(b)	Estimated fair value of business units	$400,000
	Book value of Anton net assets, including goodwill	$450,000
	Estimated fair value of business units	$400,000
	Fair value of net assets, excluding goodwill	340,000
	Re-measured amount of goodwill	$ 60,000
	Existing goodwill	200,000
	Impairment loss	$140,000

EXERCISE 1-10

Machine = $200,000

Because goodwill (excess of total cost over the fair value of the net assets acquired) resulted from the purchase, the purchase asset may be recorded at its appraised value.

Deferred tax liability = $16,800

In this tax-free exchange, depreciation on $56,000 ($200,000 appraised value) – ($144,000 net book value) of the machine's value is not deductible on future tax returns. The additional tax to be paid as a result of Lewison's inability to deduct the excess value assigned to the machine is $16,800 ($56,000 × 30%).

Goodwill = $116,800 (net of deferred tax liability)

$800,000 – ($700,000 – $16,800)

Recorded as:

Goodwill ($116,800 ÷ 70%)	$166,857
Deferred tax liability (30% × $166,857)	(50,057)
Net of tax goodwill	$116,800

APPENDIX

EXERCISE 1A-1

(1) Calculation of Earnings in Excess of Normal:

Average operating income:

20X1	$ 90,000	
20X2	110,000	
20X3	120,000	
20X4 (subtract $40,000)	100,000	
20X5	130,000	
	$550,000 ÷ 5 years =	
		$110,000

Less normal return on assets:

Accounts receivable	$100,000	
Inventory	125,000	
Land	100,000	
Buildings	300,000	
Equipment	250,000	
Fair value of total assets	$875,000	
Industry normal rate of return	× 12%	
Normal return on assets		105,000
Expected annual earnings in excess of normal		$ 5,000

(a) 5 × $5,000 = $25,000 Goodwill

(b) Capitalize the perpetual yearly earnings at 12%:

$$\text{Goodwill} = \frac{\text{Yearly excess earnings}}{\text{Capitalization rate}}$$

$$= \frac{\$5,000}{0.12}$$

$$= \underline{\underline{\$41,667}}$$

(c) Present value of a $5,000 annuity capitalized at 16%. The correct present value factor is found in the “present value of an annuity of $1” table, at 16% for 5 periods. This factor multiplied by the $5,000 yearly excess earnings will result in the present value:

$$3.2743 \times \$5,000 = \underline{\underline{\$16,372}}$$

(2) The goodwill recorded would be $25,000. The journal entry would be:

Accounts Receivable	100,000	
Inventory	125,000	
Land	100,000	
Buildings	300,000	
Equipment	250,000	
Goodwill	25,000	
Cash		900,000

PROBLEMS

PROBLEM 1-1

(a) Purchase price $500,000

Zone Analysis	Group Total	Cumulative Total
Priority accounts	$ 9,000	$ 9,000
Nonpriority accounts	348,000	357,000

Price Analysis	
Price paid	$500,000
Assign to priority accounts	9,000
Assign to nonpriority accounts	348,000
Goodwill	143,000
Extraordinary gain	0

Journal Entry:

Accounts Receivable	79,000	
Inventory	120,000	
Other Current Assets	55,000	
Equipment	307,000	
Trademark	27,000	
R&D Expense	14,000	
Goodwill	143,000	
Cash		500,000
Current Liabilities		145,000
Bonds Payable		100,000
Dr = Cr check amounts	745,000	745,000

(b) Purchase price $250,000

Zone Analysis	Group Total	Cumulative Total
Priority accounts	$ 9,000	$ 9,000
Nonpriority accounts	348,000	357,000

Problem 1-1, Continued

Price Analysis	
Price paid	$250,000
Assign to priority accounts	9,000
Assign to nonpriority accounts	241,000
Goodwill	0
Extraordinary gain	0

Journal Entry:

Accounts Receivable	79,000	
Inventory	120,000	
Other Current Assets	55,000	
Equipment	212,606	
Trademark	18,698	
R&D Expense	9,696*	
Cash		250,000
Current Liabilities		145,000
Bonds Payable		100,000
Dr = Cr check amounts	495,000	495,000

*R&D Expense was adjusted for rounding difference.

Allocation Tables

Allocation:	Asset	Percent	To Allocate	Amount
Equipment	$307,000	88.2184%	$241,000	$212,606
Trademark	27,000	7.7586%	241,000	18,698
R&D	14,000	4.0230%	241,000	9,696*
Total	$348,000	100%		$241,000

*R&D Expense was adjusted for rounding difference.

(c) Purchase price $5,000

Zone Analysis	Group Total	Cumulative Total
Priority accounts	$ 9,000	$ 9,000
Nonpriority accounts	348,000	357,000

Price Analysis	
Price paid	$5,000
Assign to priority accounts	9,000
Assign to nonpriority accounts	0
Goodwill	0
Extraordinary gain	4,000

Problem 1-1, Concluded

Journal Entry:

Accounts Receivable	79,000	
Inventory	120,000	
Other Current Assets	55,000	
Cash		5,000
Current Liabilities		145,000
Bonds Payable		100,000
Extraordinary Gain		4,000
Dr = Cr check amounts	254,000	254,000

PROBLEM 1-2

Purchase Price:	Verk	Kent
Number of shares exchanged	30,000	15,000
Par value of a share of stock	$10	$10
Market value of a share of stock	$40	$40
Market value of stock exchanged	$1,200,000	$600,000
Direct acquisition costs incurred	5,000	4,000
Total purchase price	$1,205,000	$604,000

	Verk Company		Kent Company	
Zone Analysis	Group Total	Cumulative Group Total	Group Total	Cumulative Group Total
Priority accounts	$ 150,000	$150,000	$ 30,000	$ 30,000
Nonpriority accounts	750,000	900,000	480,000	510,000
Price paid	$1,205,000		$604,000	
Assign to priority	150,000		30,000	
Assign to nonpriority	750,000		480,000	
Goodwill	305,000		94,000	
Extraordinary gain	—		—	

Problem 1-2, Concluded

Barker entry to record the purchase of Verk:

Accounts Receivable	200,000	
Inventory	200,000	
Land	300,000	
Buildings	450,000	
Discount on Bonds Payable	10,000	
Goodwill	305,000	
Current Liabilities		160,000
Bonds Payable		100,000
Common Stock (30,000 shares × $10 par)		300,000
Paid-In Capital in Excess of Par		900,000
Cash		5,000

Barker entry to record the purchase of Kent:

Accounts Receivable	80,000	
Inventory	100,000	
Land	80,000	
Buildings	400,000	
Discount on Bonds Payable	5,000	
Goodwill	94,000	
Current Liabilities		55,000
Bonds Payable		100,000
Common Stock		150,000
Paid-In Capital in Excess of Par		450,000
Cash		4,000

Acquisition Expense	13,000	
Cash		13,000

Paid-In Capital in Excess of Par	15,000	
Cash		15,000
To record issue and acquisition costs.		

PROBLEM 1-3

Purchase Price:

Cash	$730,000
Direct acquisition costs incurred	20,000
Total purchase price	$750,000

Zone Analysis	Group Total	Cumulative Group Total
Priority accounts	$ 95,000	$ 95,000
Nonpriority accounts	400,000	495,000

Price paid	$750,000
Assign to priority	95,000
Assign to nonpriority	400,000
Goodwill	255,000
Extraordinary gain	—

(1) Purchase entry:

Cash Equivalents	100,000	
Accounts Receivable	120,000	
Inventory	70,000	
Property, Plant, and Equipment	400,000	
Goodwill	255,000	
Current Liabilities		30,000
Long-Term Liabilities		165,000
Cash		750,000

(2) Pro Forma Income:

	Combined Income
Sales	$ 200,000
Less:	
Cost of goods sold ($120,000 + $20,000)	(140,000)
Other expenses	(25,000)
Depreciation (1/20 of $400,000 market value)	(20,000)
Net income	$ 15,000

PROBLEM 1-4

Purchase Price:	Part 1	Part 2
Cash		$385,000
Number of shares exchanged	20,000	
Par value of a share of stock	$10	
Market value of a share of stock	$25	
Market value of stock exchanged	$500,000	
Direct acquisition costs incurred	0	
Total purchase price	$500,000	$385,000

Zone Analysis	Group Total	Cumulative Group Total
Priority accounts	$260,000	$260,000
Nonpriority accounts	160,000	420,000
(1) Price paid	$500,000	
Assign to priority	260,000	
Assign to nonpriority	160,000	
Goodwill	80,000	
Extraordinary gain	0	
(2) Price paid	$385,000	
Assign to priority	260,000	
Assign to nonpriority	125,000	
Goodwill	0	
Extraordinary gain	0	

Kent Corporation journal entries:

(1) Accounts Receivable	50,000	
Inventory	250,000	
Land	40,000	
Building	120,000	
Goodwill	80,000	
Accounts Payable		40,000
Common Stock		200,000
Paid-In Capital in Excess of Par		300,000

Problem 1-4, Concluded

(2) Accounts Receivable	50,000	
Inventory	250,000	
Land	31,250*	
Building	93,750*	
Accounts Payable		40,000
Cash		385,000

*Allocation

Land	$ 40,000	25% × $125,000 =	$ 31,250
Building	120,000	75% × $125,000 =	93,750
	$160,000	100%	$125,000

PROBLEM 1-5

Purchase Price:

Number of shares exchanged	16,000
Par value of a share of stock	$10
Market value of a share of stock	$265
Market value of stock exchanged	$4,240,000
Direct acquisition costs incurred	12,000
Total purchase price	$4,252,000

Zone Analysis	Group Total	Cumulative Group Total
Priority accounts	$1,056,000*	$1,056,000
Nonpriority accounts	1,911,875**	2,967,875

Price paid	$4,252,000
Assign to priority	1,056,000
Assign to nonpriority	1,911,875
Goodwill	1,284,125
Extraordinary gain	0

*Investments	$ 400,500
Accounts receivable (net)	912,500
Inventory	1,200,000
Prepaid insurance	18,000
Current liabilities	(1,475,000)
Total net priority assets	$1,056,000
**Land	$ 70,000
Buildings (1.25 × $1,473,500)	1,841,875
Total nonpriority accounts	$1,911,875

Problem 1-5, Concluded

Journal Entry:

Investments	400,500	
Accounts Receivable	1,250,000	
Inventory	1,200,000	
Prepaid Insurance	18,000	
Land (fair value)	70,000	
Machinery and Equipment (125%)	1,841,875	
Goodwill*	1,284,125	
Allowance for Doubtful Accounts		337,500
Current Liabilities		1,475,000
Common Stock (16,000 × $10)		160,000
Paid-In Capital in Excess of Par [(16,000 × $265) – $160,000]		4,080,000
Cash (direct acquisition costs)		12,000

*Excess of consideration over separate fair values.

PROBLEM 1-6

Purchase Price:

Cash	$580,000
Direct acquisition costs incurred	20,000
Total purchase price	$600,000

Zone Analysis	Group Total	Cumulative Group Total
Priority accounts	$(283,500)	$(283,500)
Nonpriority accounts	791,000	507,500
Price paid	$ 600,000	
Assign to priority	(283,500)	
Assign to nonpriority	791,000	
Goodwill	92,500	
Extraordinary gain	0	

Problem 1-6, Concluded

Journal Entry:

Notes Receivable	24,000	
Accounts Receivable	56,000	
Inventory	30,000	
Other Current Assets	15,000	
Investments	63,000	
Land	55,000	
Building	275,000	
Equipment	426,000	
Patents	20,000	
Trade Names	15,000	
Goodwill	92,500	
Accounts Payable		45,000
Payroll and Benefit-Related Liabilities		12,500
Debt Maturing in One Year		10,000
Long-Term Debt		248,000
Payroll and Benefit-Related Liabilities		156,000
Cash		600,000

PROBLEM 1-7

Purchase Price:

Cash	$290,000
Number of shares exchanged	10,000
Par value of a share of stock	$2
Market value of a share of stock	$20
Market value of stock exchange	$200,000
Direct acquisition costs incurred	—
Total purchase price	$490,000

Zone Analysis	Group Total	Cumulative Group Total
Priority accounts	$(118,000)	$(118,000)
Nonpriority accounts	605,000	487,000

Price paid	$ 490,000
Assign to priority	(118,000)
Assign to nonpriority	605,000
Goodwill	3,000
Extraordinary gain	0

Problem 1-7, Concluded

Journal Entry:

Notes Receivable	33,000	
Inventory	80,000	
Prepaid Expenses	15,000	
Investments	55,000	
Discount on Bonds Payable	30,000	
Land	90,000	
Buildings	170,000	
Equipment	250,000	
Vehicles	25,000	
Franchise	70,000	
Goodwill	3,000	
Accounts Payable		63,000
Taxes Payable		15,000
Interest Payable		3,000
Bonds Payable		250,000
Cash		290,000
Common Stock		20,000
Paid-In Capital in Excess of Par		180,000

PROBLEM 1-8

(1)

Purchase Price:

Cash	$23,000
Direct acquisition costs incurred	0
Total purchase price	$23,000

Zone Analysis	Group Total	Cumulative Group Total
Priority accounts	$ 25,000	$ 25,000
Nonpriority accounts	151,000	176,000

Price paid	$ 23,000
Assign to priority	25,000
Assign to nonpriority	0
Goodwill	0
Extraordinary gain	2,000

Problem 1-8, Concluded

Journal Entry:

Accounts Receivable	87,000	
Inventory	30,000	
Other Current Assets	8,000	
Accounts Payable		56,000
Accrued Liabilities		14,000
Notes Payable		30,000
Extraordinary Gain		2,000
Cash		23,000

(2)

Purchase Price:

Cash	$45,000
Direct acquisition costs incurred	0
Total purchase price	$45,000

Zone Analysis	Group Total	Cumulative Group Total
Priority accounts	$ 25,000	$ 25,000
Nonpriority accounts	151,000	176,000

Price paid	$ 45,000
Assign to priority	25,000
Assign to nonpriority	20,000
Goodwill	0
Extraordinary gain	0

Journal Entry:

Accounts Receivable	87,000	
Inventory	30,000	
Other Current Assets	8,000	
Equipment [($80,000/$151,000) × $20,000]	10,596	
Vehicles [($71,000/$151,000) × $20,000]	9,404	
Accounts Payable		56,000
Accrued Liabilities		14,000
Notes Payable		30,000
Cash		45,000

PROBLEM 1-9

Name of Acquiring Company: Arthur Enterprises
Name of Acquired Company: Ann's Tool Company
Pro Forma Income Statement
For the Year Ending December 31, 20X1

Tax rate expressed as 0.3 for 30%:

Income Statement Accounts	Arthur Enterprises	Ann's Tool Co.	Adjustments Debit	Adjustments Credit	Pro Forma Combined Income Statement	
Sales revenue	(550,000)	(140,000)				(690,000)
Cost of goods sold	200,000	50,000		(1) 2,000		248,000
Gross profit	(350,000)	(90,000)				(442,000)
Selling expenses	125,000	30,000			155,000	
Administrative expenses	150,000	45,000			195,000	
Depreciation expense—Arthur	13,800				13,800	
Depreciation expense—Ann's Tool		7,500		(2) 7,500	13,500	
Depreciation—buildings			(3) 5,000			
Depreciation—equipment			(4) 7,000			
Depreciation—truck			(5) 1,500			
Amortization expense—Arthur	5,600				5,600	
Amortization expense—Ann's Tool		2,000		(6) 2,000	10,000	
Amortization of patent			(7) 3,000			
Amortization of computer software			(8) 5,000			
Amortization of copyright			(9) 2,000			
Total operating expenses	294,400	84,500				392,900
Net operating income	(55,600)	(5,500)				(49,100)
Nonoperating revenues and expenses						
Interest expense		4,000			4,000	
Interest income	(7,000)				(7,000)	
Dividend income	(4,000)				(4,000)	
Total nonoperating revenues and expenses						(7,000)
Income before taxes	(66,600)	(1,500)	23,500	11,500		(56,100)
Provision for income taxes	19,980	450				16,830
Net income	(46,620)	(1,050)				(39,270)

1. Reduce inventory to fair value.
2. Remove Ann's depreciation based on book values.
3–5. Depreciation of Ann's assets based on fair value.
6. Remove Ann's amortization based on book value.
7. Patent amortization based on fair value.
8. Amortization of computer software.
9. Amortization of copyright.

PROBLEM 1-10

(a)

Purchase Price:

Number of shares exchanged	10,000
Par value of a share of stock	$5
Market value of a share of stock	$27
Market value of stock exchanged	$270,000
Direct acquisition costs incurred	10,000
Total purchase price	$280,000

Zone Analysis	Group Total	Cumulative Group Total
Priority accounts	$ 36,000	$ 36,000
Nonpriority accounts	213,000	249,000

Price paid	$280,000
Assign to priority	36,000
Assign to nonpriority	213,000
Goodwill	31,000
Extraordinary gain	0

Journal Entry:

Accounts Receivable	15,000	
Inventory	40,000	
Prepaid Expenses	12,000	
Investments	33,000	
Land	40,000	
Building	85,000	
Equipment	50,000	
Patent	12,000	
Copyright	26,000	
Goodwill	31,000	
Accounts Payable		22,000
Interest Payable		2,000
Notes Payable		40,000
Cash		10,000
Common Stock		50,000
Paid-In Capital in Excess of Par		220,000

Problem 1-10, Concluded

(b)

Name of Acquiring Company: Garden International
Name of Acquired Company: Iris Company
Pro Forma Income Statement
For the Year Ending December 31, 20X1

Tax rate expressed as 0.4 for 40%:

Income Statement Accounts	Garden International	Iris Company	Adjustments Debit	Adjustments Credit	Pro Forma Combined Income Statement	
Sales revenue	(350,000)	(125,000)				(475,000)
Cost of goods sold	147,000	55,000	(3) 2,000			204,000
Gross profit	(203,000)	(70,000)				(271,000)
Selling expenses	100,000	20,000			120,000	
Administrative expenses	50,000	30,000			80,000	
Depreciation expense—Garden	12,500				12,500	
Depreciation expense—Iris		8,600		(1) 8,600	9,000	
Depreciation—buildings			(4) 4,000			
Depreciation—equipment			(5) 5,000			
Amortization expense—Garden	1,000				1,000	
Amortization expense—Iris		3,900		(2) 3,900	3,800	
Amortization of patent			(6) 1,200			
Amortization of copyright			(7) 2,600			
Total operating expenses	163,500	62,500				226,300
Operating income	(39,500)	(7,500)				(44,700)
Nonoperating revenues and expenses						
Interest expense		3,000			3,000	
Investment income	(12,000)	(4,500)			(16,500)	
Total nonoperating revenues and expenses						(13,500)
Income before taxes	(51,500)	(9,000)	14,800	12,500		(58,200)
Provision for income taxes	20,600	3,600				23,280
Net income	(30,900)	(5,400)				(34,920)

1. Remove depreciation based on book value.
2. Remove amortization based on book value.
3. Increase cost of goods sold to reflect fair value of beginning inventory.
4–5. Depreciation based on fair value.
6. Patent amortization.
7. Copyright amortization.

PROBLEM 1-11

Current Assets	150,000	
Equipment ($100,000 increase)	300,000	
Land and Buildings	250,000	
Goodwill*	200,000	
Bonds Payable		200,000
Deferred Tax Liability ($30,000 + $60,000)		90,000
Common Stock ($10 par)		100,000
Paid-In Capital in Excess of Par		500,000
Cash (direct acquisition costs)		10,000

*Price paid (10,000 shares × $60 fair value + $10,000 direct acquisition costs)		$610,000
Fair value of net assets:		
Current assets	$ 150,000	
Equipment	300,000	
Deferred tax liability [30% × ($300,000 – $200,000)]	(30,000)	
Land and buildings	250,000	
Bonds payable	(200,000)	470,000
Excess attributable to goodwill (net of deferred tax liability)		$140,000

Recorded as:	
Goodwill ($140,000 ÷ 70%)	$ 200,000
Deferred tax liability (30% × $200,000)	(60,000)
Net of tax goodwill	$ 140,000

Paid-In Capital in Excess of Par	3,000	
Cash		3,000

PROBLEM 1A-1

(1) Bonds

Present value of interest payments for 5 years at 8%, $27,000 × 3.9927	$107,803
Present value of principal due in 5 years at 8%, $300,000 × 0.6806	204,180
Present value of bonds	$311,983

Goodwill

Expected return ($120,000 + $140,000 + $150,000 + $160,000 + $180,000) ÷ 5	$150,000
Normal return on assets ($150,000 + $200,000 + $700,000) × 10%	105,000
Profit in excess of normal return	$ 45,000
Present value of excess of normal return for 5 years at 16%, $45,000 × 3.2743	$147,344

(2)	Cash and Receivables	150,000	
	Inventory	200,000	
	Land	100,000	
	Building	600,000	
	Goodwill	147,344	
	Current Liabilities		120,000
	9% Bonds Payable		300,000
	Premium on Bonds Payable		11,983
	Cash		765,361

CASES

CASE 1-1

(a)	Price paid ($55 × 264,662,707 shares)	$14,556,448,885
	Book value of net assets	3,945,000,000
	Excess	$10,611,448,885
(b)	40-year amortization period for goodwill:	
	Net income	$ 357,000,000
	Less: [($10,611 million ÷ 40 years) × 62%]	164,470,500
		$ 192,529,500
	There is no amortization of goodwill:	
	Net income	$ 357,000,000

CASE 1-2

(1) Confirmation:

Building	
pmt	80,000
n	20
rate	0.14
PV	529,850
Land	(200,000)
Balance, building	329,850
Patent	
pmt	40,000
n	4
rate	0.2
PV	103,550
Mortgage payable	
pmt	50,000
n	5
rate	0.07
PV	205,010

Case 1-2, Continued

(2) Discounted cash flows:

Period	Operating Capital	Salvage	Total
1	150,000		150,000
2	165,000		165,000
3	181,500		181,500
4	199,650		199,650
5	219,615	(100,000)	119,615
6	219,615		219,615
7	219,615		219,615
8	219,615		219,615
9	219,615		219,615
10	219,615	(120,000)	99,615
11	219,615		219,615
12	219,615		219,615
13	219,615		219,615
14	219,615		219,615
15	219,615	(130,000)	89,615
16	219,615		219,615
17	219,615		219,615
18	219,615		219,615
19	219,615		219,615
20	219,615	300,000	519,615

Rate.......................................	0.12
NPV.......................................	1,406,859

(3) Fair value comparison:

NPV of cash flows...................	$1,406,859
Total paid price for net assets. .	1,300,000
Excess of fair value.................	$ 106,859

(4) Entry to record purchase:

Cash Equivalents..	80,000	
Inventory..	150,000	
Accounts Payable..	180,000	
Land..	200,000	
Building...	329,850	
Equipment..	220,000	
Patent..	103,550	
Goodwill...	361,610	
Current Liabilities..		120,000
Mortgage Payable..		205,010
Cash...		1,300,000
Dr = Cr check amounts..	1,625,010	1,625,010

Case 1-2, Concluded

(5) Impairment test:

Implied fair value of Frontier	$1,200,000
Book value, including goodwill	1,300,000

Book value exceeds implied fair value, goodwill is impaired.

Impairment adjustment:

Implied fair value of Frontier	$1,200,000
Fair value of net identifiable assets (without goodwill)	1,020,000
Implied remaining goodwill	180,000
Recorded goodwill	(361,610)
Required adjustment	(181,610)

Goodwill Impairment Loss	181,610	
Goodwill		181,610