SOLUTIONS MANUAL



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CHAPTER 2

Note: The letter A indicated for a question, exercise, or problem means that the question, exercise, or problem relates to a chapter appendix.

ANSWERS TO QUESTIONS

- 1. At the acquisition date, the information available (and through the end of the measurement period) is used to estimate the expected total consideration at fair value. If the subsequent stock issue valuation differs from this assessment, the *Exposure Draft (SFAS 1204-001)* expected to replace *FASB Statement No. 141R* specifies that equity should not be adjusted. The reason is that the valuation was determined at the date of the exchange, and thus the impact on the firm's equity was measured at that point based on the best information available then.
- 2. Pro forma financial statements (sometimes referred to as "as if" statements) are financial statements that are prepared to show the effect of planned or contemplated transactions.
- 3. For purposes of the goodwill impairment test, all goodwill must be assigned to a reporting unit. Goodwill impairment for each reporting unit should be tested in a two-step process. In the first step, the fair value of a reporting unit is compared to its carrying amount (goodwill included) at the date of the periodic review. The fair value of the unit may be based on quoted market prices, prices of comparable businesses, or a present value or other valuation technique. If the fair value at the review date is less than the carrying amount, then the second step is necessary. In the second step, the carrying value of the goodwill is compared to its implied fair value. (The calculation of the implied fair value of goodwill used in the impairment test is similar to the method illustrated throughout this chapter for valuing the goodwill at the date of the combination.)
- 4. The expected increase was due to the elimination of goodwill amortization expense. However, the impairment loss under the new rules was potentially larger than a periodic amortization charge, and this is in fact what materialized within the first year after adoption (a large impairment loss). If there was any initial stock price impact from elimination of goodwill amortization, it was only a short-term or momentum effect. Another issue is how the stock market responds to the goodwill impairment charge. Some users claim that this charge is a non-cash charge and should be disregarded by the market. However, others argue that the charge is an admission that the price paid was too high, and might result in a stock price decline (unless the market had already adjusted for this overpayment prior to the actual writedown).

ANSWERS TO BUSINESS ETHICS CASE

a and b. The board has responsibility to look into anything that might suggest malfeasance or inappropriate conduct. Such incidents might suggest broader problems with integrity, honesty, and judgment. In other words, can you trust any reports from the CEO? If the CEO is not fired, does this send a message to other employees that ethical lapses are okay? Employees might feel that top executives are treated differently.

ANSWERS TO EXERCISES

Exercise 2-1

Part A	Receivables	228,000	
	Inventory	396,000	
	Plant and Equipment	540,000	
	Land	660,000	
	Goodwill (\$2,154,000 - \$1,824,000)	330,000	
	Liabilities		594,000
	Cash		1,560,000
Part B	Receivables	228,000	
	Inventory	396,000	
	Plant and Equipment	540,000	
	Land	660,000	
	Liabilities		594,000
	Cash		990,000
	Gain on Business Combination (\$1,230,000 - \$990,000)		240,000

Exercise 2-2	
Cash	\$680,000
Receivables	720,000
Inventories	2,240,000
Plant and Equipment (net) (\$3,840,000 + \$720,000)	4,560,000
Goodwill	120,000
Total Assets	<u>\$8,320,000</u>
Liabilities	1,520,000
Common Stock, \$16 par (\$3,440,000 + (.50 × \$800,000))	3,840,000
Other Contributed Capital (\$400,000 + \$800,000)	1,200,000
Retained Earnings	1,760,000
Total Equities	<u>\$8,320,000</u>

Entries on Petrello Company's books would be:

Cash	200,000	
Receivables	240,000	
Inventory	240,000	
Plant and Equipment	720,000	
Goodwill *	120,000	
Liabilities		320,000
Common Stock (25,000 × \$16)		400,000
Other Contributed Capital ($$48 - 16) × 25,000		800,000

* $(\$48 \times 25,000) - [(\$1,480,000 - (\$800,000 - \$720,000) - \$320,000]$ = \$1,200,000 - [\$1,480,000 - \$80,000 - \$320,000] = \$1,200,000 - \$1,080,000 = \$120,000

Exercise 2-3

**

Accounts Receivable		231,000	
Land		550,000	
Buildings and Equipment		1 144 000	
Goodwill		848.000	
Allowance for Uncollectible Accounts (\$231.00	00 - \$198,000)	0.0,000	33,000
Current Liabilities	· · · · · · · · · · · · · · · · · · ·		275,000
Bonds Payable			450,000
Premium on Bonds Payable (\$495,000 - \$450,0	00)		45,000
Preferred Stock (15.000 \times \$100)	,		1,500,000
Common Stock $(30,000 \times \$10)$			300,000
Other Contributed Capital ($$25 - 10) × 30,000			450,000
Cash			50,000
Cost paid (\$1,500,000 \pm \$750,000 \pm \$50,000) $-$			\$2 300 000
Eair value of net assets $(198,000 + 330,000 + 550,000) =$	0 + 1 144 000 - 275 000 -	-495(000) =	1 452 000
Goodwill =	0 1 1,144,000 275,000	+)3,000) =	<u>\$848,000</u>
Exercise 2-4			
Cash		96,000	
Receivables		55,200	
Inventory		126,000	
Land		198,000	
Plant and Equipment		466,800	
Goodwill*		137,450	
Accounts Payable			44,400
Bonds Payable			480,000
Premium on Bonds Payable**			45,050
Cash			510,000
Present value of maturity value, 12 periods @ 4%:	0.6246 × \$480,000 =	\$299,8	808
Present value of interest annuity, 12 periods @ 4%:	9.38507 × \$24,000 =	<u>225,2</u>	242
Total present value		525,0)50
Par value		480,0	000

Premium on bonds payable	<u>\$ 45,050</u>
*Cash paid	\$510,000
Less: Book value of net assets acquired (\$897,600 - \$44,400 - \$480,000)	<u>(373,200</u>)
Excess of cash paid over book value	136,800
Increase in inventory to fair value (15,6	00)
Increase in land to fair value (28,8)	00)
Increase in bond to fair value $45,0$	<u>50</u>
Total increase in net assets to fair value	650
Goodwill	<u>\$137,450</u>

Exercise 2-5

	Current Assets Plant and Equipment Goodwill Liabilities Cash Liability for Contingent Consideration	960,000 1,440,000 336,000	216,000 2,160,000 360,000
Exercise	<u>e 2-6</u>		
The amo	ount of the contingency is \$500,000 (10,000 shares at \$50 per share)		
Part A	Goodwill Paid-in-Capital for Contingent Consideration	500,000	500,000
Part B	Paid-in-Capital for Contingent Consideration Common Stock (\$10 par) Paid-In-Capital in Excess of Par	500,000	100,000 400,000
<u>Platz Co</u>	mpany does not adjust the original amount recorded as equity.		
Exercise	e <u>2-7</u>		
1. (c) C F E	Cost (8,000 shares @ \$30) Fair value of net assets acquired Excess of cost over fair value (goodwill)	-	\$240,000 <u>228,800</u> <u>\$ 11,200</u>
2. (c) C F	Cost (8,000 shares @ \$30) Fair value of net assets acquired (\$90,000 + \$242,000 - \$56,000)		\$240,000 <u>276,000</u>

Exercise 2-8

Excess of fair value over cost (gain)

Comment A south	. 2(2,000	
Current Assets	362,000	
Long-term Assets $(\$1,890,000 + \$20,000) + (\$98,000 + \$5,000)$	2,013,000	
Goodwill *	395,000	
Liabilities		119,000
Long-term Debt		491,000
Common Stock $(144,000 \times \$5)$		720,000
Other Contributed Capital (144,000 \times (\$15 - \$5))		1,440,000

\$ 36,000

* $(144,000 \times \$15) - [\$362,000 + \$2,013,000 - (\$119,000 + \$491,000)] = \$395,000$

Total shares issued	(<u>\$700,000</u> \$5	$+\frac{\$20,000}{\$5}$	= 144,000
Fair value of stock i	ssued (144,0	000 × \$15)	= \$2,160,000

Exercise 2-9

Case A	
Cost (Purchase Price)	\$130,000
Less: Fair Value of Net Assets	120,000
Goodwill	\$ 10,000
Case B	
Cost (Purchase Price)	\$110,000
Less: Fair Value of Net Assets	90,000
Goodwill	\$ 20,000
<u>Case C</u>	
Cost (Purchase Price)	\$15,000
Less: Fair Value of Net Assets	20,000
Gain	(\$ 5,000)

	Assets		Liabilities	Patainad	
	Goodwill	Current Assets	Long-Lived Assets	Lidointies	Earnings (Gain)
Case A	\$10,000	\$20,000	\$130,000	\$30,000	0
Case B	20,000	30,000	80,000	20,000	0
Case C	0	20,000	40,000	40,000	5,000

<u>Exerci</u>	ise 2-10			
<u>Part A</u> 2011.	<u>.</u> Sten 1:	Fair value of the reporting unit		\$400.000
2011.	Step 1.	Carrying value of unit:		\$+00,000
		Carrying value of identifiable net assets	\$330,000	
		Carrying value of goodwill (\$450,000 - \$375,000)	75,000	
			<u>,</u>	405,000
		Excess of carrying value over fair value		\$ 5,000
	The exc	cess of carrying value over fair value means that step 2	2 is required.	
	Step 2:	Fair value of the reporting unit		\$400.000
	1	Fair value of identifiable net assets		340,000
		Implied value of goodwill		60,000
		Recorded value of goodwill (\$450,000 - \$375,000)		75,000
		Impairment loss		\$ 15,000
2012:	Step 1:	Fair value of the reporting unit		\$400,000
		Carrying value of unit:		
		Carrying value of identifiable net assets	\$320,000	
		Carrying value of goodwill (\$75,000 - \$15,000)	60,000	
				380,000
		Excess of fair value over carrying value		<u>\$ 20,000</u>
	The exc	cess of fair value over carrying value means that step 2	2 is not requir	ed.
2013:	Step 1:	Fair value of the reporting unit		\$350.000
	ж ар – 1	Carrying value of unit:		+
		Carrying value of identifiable net assets	\$300,000	
		Carrying value of goodwill (\$75,000 - \$15,000)	60,000	
				360,000
		Excess of carrying value over fair value		\$ 10,000
	The exc	cess of carrying value over fair value means that step 2	2 is required.	
	Step 2:	Fair value of the reporting unit		\$350.000
	I	Fair value of identifiable net assets		<u>325</u> ,000
		Implied value of goodwill		25,000
		Recorded value of goodwill (\$75,000 - \$15,000)		<u>60,00</u> 0
		Impairment loss		<u>\$35,000</u>

<u>Part B.</u> 2011:	Impairment Loss—Goodwill Goodwill	15,000	15,000
2012:	No entry		
2013:	Impairment Loss—Goodwill Goodwill	35,000	35,000
Part C.			

SFAS No. 142 specifies the presentation of goodwill in the balance sheet and income statement (if impairment occurs) as follows:

- The aggregate amount of goodwill should be a separate line item in the balance sheet.
- The aggregate amount of losses from goodwill impairment should be shown as a separate line item in the operating section of the income statement unless some of the impairment is associated with a discontinued operation (in which case it is shown net-of-tax in the discontinued operation section).

Part D.

In a period in which an impairment loss occurs, *SFAS No. 142* mandates the following disclosures in the notes:

(1) A description of the facts and circumstances leading to the impairment;

(2) The amount of the impairment loss and the method of determining the fair value of the reporting unit;

(3) The nature and amounts of any adjustments made to impairment estimates from earlier periods, if significant.

Exercise 2-11

a. Fair Value	of Identifiable Net Assets	
Book v	ralues $500,000 - 100,000 =$	\$400,000
Write	up of Inventory and Equipment:	
(\$20	0,000 + \$30,000) =	50,000
Purcha	se price above which goodwill would result	\$450,000

b. Equipment would not be written down, regardless of the purchase price, unless it was reviewed and determined to be overvalued originally.

- c. A gain would be shown if the purchase price was below \$450,000.
- d. Anything below \$450,000 is technically considered a bargain.
- e. Goodwill would be \$50,000 at a purchase price of \$500,000 or (\$450,000 + \$50,000).

Exercise 2-12A

Cash	20,000	
Accounts Receivable	112,000	
Inventory	134,000	
Land	55,000	
Plant Assets	463,000	
Discount on Bonds Payable	20,000	
Goodwill*	127,200	
Allowance for Uncollectible Accounts		10,000
Accounts Payable		54,000
Bonds Payable		200,000
Deferred Income Tax Liability		67,200
Cash		600,000
Cost of acquisition		\$600.000
Book value of net assets acquired ($\$80.000 + \$132.000 + \$160.000$)		372,000
Difference between cost and book value		228,000
Allocated to:		,
Increase inventory, land, and plant assets to fair value $($52,000 + $25,00$	+ \$71,000)	(148,000)
Decrease bonds payable to fair value		(20,000)
Establish deferred income tax liability ($$168,000 \times 40\%$)		67,200
Balance assigned to goodwill		\$127,200

ANSWERS TO PROBLEMS

Problem 2-1

Current Assets Plant and Equipment	85,000 150,000	
Goodwill*	100,000	25 000
Common Stock [(20,000 shares @ \$10/share)]		200,000
Other Contributed Capital $[(20,000 \times (\$15 - \$10))]$		100,000
Acquisition Costs Expense	20,000	
Cash		20,000
Other Contributed Capital	6,000	
Cash		6,000
To record the direct acquisition costs and stock issue costs		

* Goodwill = Excess of Consideration of \$335,000 (stock valued at \$300,000 plus debt assumed of \$35,000) over Fair Value of Identifiable Assets of \$235,000 (total assets of \$225,000 plus PPE fair value adjustment of \$10,000)

Problem 2-2	Acme Company	7	
	Balance Sheet		
	October 1, 2011		
	(000)		
Part A.	× ,		
Assets (except goo	dwill) (\$3,900 + \$9,000 + \$1,300)		\$14.200
Goodwill (1)) (+-)		1.160
Total Assets			\$15,360
Liabilities (\$2,030	+ \$2,200 + \$260)		\$4,490
Common Stock (18	$80 \times \$20) + \$2,000$		5,600
Other Contributed	Capital $(180 \times (\$50 - \$20))$		5,400
Retained Earnings			(130)
Total Liabilitie	es and Equity		<u>\$15,360</u>
(1) Cost $(180 \times \$50)$			\$9,000
Fair value of net as	sets acquired:		
Fair value of a	ssets of Baltic and Colt	\$10,300	
Less liabilities	assumed	2,460	7,840
Goodwill		<u> </u>	\$1 160

Problem 2-2 (continued)

<u>Part B.</u>

<u>Baltic</u> 2012:	Step1: Fair value of the reporting unit <u>Carrying value of unit</u> : Carrying value of identifiable net assets Carrying value of goodwill Total carrying value *[(140,000 x \$50) - (\$9,000,000 - \$2,200,000)] The excess of carrying value over fair value means to	6,340,000 <u>200,000*</u> that step 2 is re	\$6,500,000 6,540,000 quired.
	Step 2: Fair value of the reporting unit Fair value of identifiable net assets Implied value of goodwill Recorded value of goodwill Impairment loss		\$6,500,000 <u>6,350,000</u> 150,000 <u>200,000</u> \$ 50,000
(becaus	se \$150,000 < \$200,000)		
<u>Colt</u> 2012:	Step1: Fair value of the reporting unit <u>Carrying value of unit</u> : Carrying value of identifiable net assets Carrying value of goodwill Total carrying value *[(40,000 x \$50) - (\$1,300,000 - \$260,000)] The excess of carrying value over fair value means to	\$1,200,000 <u>960,000*</u> that step 2 is re	\$1,900,000 2,160,000 quired.
	Step 2: Fair value of the reporting unit Fair value of identifiable net assets Implied value of goodwill Recorded value of goodwill Impairment loss		\$1,900,000 <u>1,000,000</u> 900,000 <u>960,000</u> \$ 60,000
(becaus	se \$900,000 < \$960,000)		
Total in	mpairment loss is \$110,000.		
Journal Impairi	l entry: ment Loss Goodwill	\$110,0)00 \$110,000

Problem 2-3	
Present value of maturity value, 20 periods @ 6%: $0.3118 \times \$600,000 =$	\$187,080
Present value of interest annuity, 20 periods (a) 6%: $11.46992 \times $30,000 =$	344,098
Total Present value	531,178
Par value	600,000
Discount on bonds payable	\$68,822
Cash 114,000	
Accounts Receivable 135,000	
Inventory 310,000	
Land 315,000	
Buildings 54,900	
Equipment 39,450	
Bond Discount (\$40,000 + \$68,822) 108,822	
Current Liabilities	95,300
Bonds Payable (\$300,000 + \$600,000)	900,000
Gain on Purchase of Business	81,872
Computation of Excess of Net Assets Received Over Cost	
Cost (Purchase Price) (\$531,178 plus liabilities assumed of \$95,300 and \$260,000)	\$886,478
Less: Total fair value of assets received	<u>\$968,350</u>
Excess of fair value of net assets over cost	<u>(\$ 81,872</u>)

Problem 2-4

Accounts Receivable $72,000$ Inventory $99,000$ Land $162,000$ Buildings $450,000$ Equipment $288,000$ Goodwill* $54,000$ Allowance for Uncollectible Accounts $7,00$ Accounts Payable $83,00$ Note Payable $180,00$ Cash $720,00$ Liability for Contingent Consideration $135,000$ *Computation of GoodwillCash paid (\$720,000 + \$135,000)Total fair value of net assets acquired (\$1,064,000 - \$263,000) $801,000$ Goodwill $$54,000$	Part A	<u>January 1, 2011</u>	
Inventory $99,000$ Land $162,000$ Buildings $450,000$ Equipment $288,000$ Goodwill* $54,000$ Allowance for Uncollectible Accounts $7,00$ Accounts Payable $83,00$ Note Payable $180,00$ Cash $720,00$ Liability for Contingent Consideration $135,00$ *Computation of GoodwillCash paid (\$720,000 + \$135,000)Total fair value of net assets acquired (\$1,064,000 - \$263,000) $801,000$ Goodwill $$54,000$		Accounts Receivable	72,000
Land162,000Buildings450,000Equipment288,000Goodwill*54,000Allowance for Uncollectible Accounts7,00Accounts Payable83,00Note Payable180,00Cash720,00Liability for Contingent Consideration135,00*Computation of Goodwill\$855,000Cash paid (\$720,000 + \$135,000)\$855,000Total fair value of net assets acquired (\$1,064,000 - \$263,000)801,000§ 54,000\$54,000		Inventory	99,000
Buildings $450,000$ Equipment $288,000$ Goodwill* $54,000$ Allowance for Uncollectible Accounts $7,00$ Accounts Payable $83,00$ Note Payable $83,00$ Cash $720,00$ Liability for Contingent Consideration $135,000$ *Computation of GoodwillCash paid (\$720,000 + \$135,000)Total fair value of net assets acquired (\$1,064,000 - \$263,000) $801,000$ §801,000 $$54,000$		Land	162,000
Equipment $288,000$ Goodwill* $54,000$ Allowance for Uncollectible Accounts $7,00$ Accounts Payable $83,00$ Note Payable $180,00$ Cash $720,00$ Liability for Contingent Consideration $135,00$ *Computation of GoodwillCash paid (\$720,000 + \$135,000)Total fair value of net assets acquired (\$1,064,000 - \$263,000) $801,000$ §801,000 $$54,000$		Buildings	450,000
Goodwill* $54,000$ Allowance for Uncollectible Accounts $7,00$ Accounts Payable $83,00$ Note Payable $180,00$ Cash $720,00$ Liability for Contingent Consideration $135,00$ *Computation of Goodwill $$855,000$ Cash paid (\$720,000 + \$135,000) $$855,000$ Total fair value of net assets acquired (\$1,064,000 - \$263,000) $801,000$ Goodwill $$54,000$		Equipment	288,000
Allowance for Uncollectible Accounts7,00Accounts Payable $83,00$ Note Payable $180,00$ Cash $720,00$ Liability for Contingent Consideration $135,00$ *Computation of GoodwillCash paid (\$720,000 + \$135,000)Total fair value of net assets acquired (\$1,064,000 - \$263,000) $801,000$ Goodwill $$54,000$		Goodwill*	54,000
Accounts Payable $83,00$ Note Payable $180,00$ Cash $720,00$ Liability for Contingent Consideration $135,00$ *Computation of GoodwillCash paid (\$720,000 + \$135,000)Total fair value of net assets acquired (\$1,064,000 - \$263,000) $801,000$ Goodwill $$54,000$		Allowance for Uncollectible Accounts	7,000
Note Payable 180,00 Cash 720,00 Liability for Contingent Consideration 135,00 *Computation of Goodwill 135,000 Cash paid (\$720,000 + \$135,000) \$855,000 Total fair value of net assets acquired (\$1,064,000 - \$263,000) 801,000 Goodwill \$54,000		Accounts Payable	83,000
Cash 720,00 Liability for Contingent Consideration 135,00 *Computation of Goodwill 8855,000 Cash paid (\$720,000 + \$135,000) \$855,000 Total fair value of net assets acquired (\$1,064,000 - \$263,000) 801,000 Goodwill \$54,000		Note Payable	180,000
Liability for Contingent Consideration 135,00 *Computation of Goodwill 8855,000 Cash paid (\$720,000 + \$135,000) \$855,000 Total fair value of net assets acquired (\$1,064,000 - \$263,000) 801,000 Goodwill \$54,000		Cash	720,000
* <u>Computation of Goodwill</u> Cash paid (\$720,000 + \$135,000) Total fair value of net assets acquired (\$1,064,000 - \$263,000) Goodwill		Liability for Contingent Consideration	135,000
Cash paid (\$720,000 + \$135,000) \$855,000 Total fair value of net assets acquired (\$1,064,000 - \$263,000) <u>801,000</u> Goodwill \$54,000		*Computation of Goodwill	
Total fair value of net assets acquired (\$1,064,000 - \$263,000) 801,000 Goodwill \$54,000		Cash paid (\$720,000 + \$135,000)	\$855,000
Goodwill <u>\$ 54,000</u>		Total fair value of net assets acquired (\$1,064,000 - \$263,000)	801,000
		Goodwill	\$ 54,000

Problem 2-4 (continued)

Part B	January 2, 2013		
	Liability for Contingent Consideration Cash	135,000	135,000
Part C	January 2, 2013		
	Liability for Contingent Consideration Income from Change in Estimate	135,000	135,000

Problem 2-5

Pepper Company Pro Forma Balance Sheet Giving Effect to Proposed Issue of Common Stock and Note Payable for All of the Common Stock of Salt Company under Purchase Accounting December 31, 2010

	Audited		Pro Forma
	Balance Sheet	<u>Adjustments</u>	Balance Sheet
Cash	\$180,000	405,000	\$585,000
Receivables	230,000	(60,000)	287,000
		117,000 ∫	
Inventories	231,400	134,000	365,400
Plant Assets	1,236,500	905,000 (1)	2,141,500
Goodwill		181,500	181,500
Total Assets	<u>\$1,877,900</u>		<u>\$3,560,400</u>
		2	
Accounts Payable	\$255,900	(60,000)	\$375,900
		ل 180,000	
Notes Payable, 8%	0	300,000	300,000
Mortgage Payable	180,000	152,500	332,500
Common Stock, \$20 par	900,000	600,000	1,500,000
Additional Paid-in Capital	270,000	510,000 (2)	780,000
Retained Earnings	272,000		272,000
Total Liabilities and Equity	<u>\$1,877,900</u>		<u>\$3,560,400</u>

Problem 2-5 (continued)

Change in Cash	
Cash from stock issue ($$37 \times 30,000$)	\$1,110,000
Less: Cash paid for acquisition	(800,000)
Plus: Cash acquired in acquisition	95,000
Total change in cash	\$ 405,000
Goodwill:	
Cost of acquisition	\$1,100,000
Net assets acquired (\$340,000 + \$179,500 + \$184,000)	703,500
Excess cost over net assets acquired	\$396,500
Assigned to plant assets	215,000
Goodwill	\$ 181,500

(1) \$690,000 + \$215,000 (2) (\$37 - \$20) × 30,000

Problem 2-6	Ping Company	
	Pro Forma Income Statement for the Year 2011	
	Assuming a Merger of Ping Company and Spalding Company	

Sales (1) Cost of goods sold:		\$6,345,972
Fixed Costs (2)	\$824,706	
Variable Costs (3)	2,464,095	3,288,801
Gross Margin		3,057,171
Selling Expenses (4)	\$785,910	
Other Expenses (5)	319,310	1,105,220
Net Income		<u>\$1,951,951</u>
$\frac{\$1,951,951 - (\$952,640 + \$499,900)}{0.20} =$	<u>\$499,411</u> 0.20	= \$2,497,055
Since \$2,497,055 is greater than \$1,800,000	Ping should buy Sp	oalding.
(1) \$3,510,100 + \$2,365,800 = \$5,875,900 >	< 1.2 × .9 =	\$6,345,972
(2) (\$1,752,360 × .30) + (\$1,423,800 × .30 >	< .70) =	\$824,706
(3) $1,752,360 \times .70 \times \frac{5,875,900 \times 1.2}{3,510,100}$	=	\$2,464,095
(4) (\$632,500 + \$292,100) × .85 =		\$785,910
(5) \$172,600 × 1.85 =		\$319,310

Problem 2-7A

Part A	Receivables	125,000
	Inventory	195,000
	Land	120,000
	Plant Assets	567,000
	Patents	200,000
	Deferred Tax Asset (\$60,000 x 35%)	21,000
	Goodwill*	154,775
	Current Liabilities	89,500
	Bonds Payable	300,000
	Part A Receivables Inventory Land Plant Assets Patents Deferred Tax Asset (\$60,000 x 35%) Goodwill* Current Liabilities Bonds Payable Premium on Bonds Payable Deferred Tax Liability Common Stock (30,000 × \$2) Other Contributed Capital (30,000 × \$26)	60,000
		93,275 60,000
	Common Stock $(30,000 \times \$2)$	
	Other Contributed Capital $(30,000 \times \$26)$	780,000
	Cost of acquisition $(30,000 \times \$28)$	\$840.000

$(50,000 \times 920)$	φ0 1 0,000
Book value of net assets acquired (\$120,000 + \$164,000 + \$267,000)	551,000
Difference between cost and book value	289,000
Allocated to:	
Increase inventory, land, plant assets, and patents to fair value	(266,500)
Deferred income tax liability $(35\% \times \$266,500)$	93,275
Increase bonds payable to fair value	60,000
Deferred income tax asset $(35\% \times \$60,000)$	(21,000)
Balance assigned to goodwill	<u>\$154,775</u>

Part B	Income Tax Expense (Balancing amount) Deferred Tax Liability (\$51,125 × 35%)* Deferred Tax Asset (\$6,000 × 35%)		148,006	
			17,894 2,100	
Income Ta	Income Tax Payable	(\$468,000 × 35%)	163,800	
*	Inventory:	\$28,000		

mventory.	φ 2 0,000
Plant Assets, $\frac{\$100,000}{10}$	10,000
Patents, $\frac{\$105,000}{8}$	<u>13,125</u>
Total	<u>\$51,125</u>

CHAPTER TWO – ACCOUNTING FOR BUSINESS COMBINATIONS

I. METHOD OF ACCOUNTING FOR NET ASSET ACQUISITIONS: PURCHASE OR ACQUISITION ACCOUNTING

- A. Accounting standards now mandate the use of the acquisition (purchase) method for accounting for mergers & acquisitions. Until 2001, companies had a choice, albeit strictly regulated, between these two methods:
 - 1. Pooling of interests previous standards clearly defined the criteria necessary to qualify for this accounting treatment, and the SEC was involved in its enforcement.
 - 2. Acquisition (Purchase) all other combinations (i.e, those not qualifying for pooling treatment) were always accounted for by the purchase method, as all combinations are currently.

II. PRO FORMA STATEMENTS AND DISCLOSURE REQUIREMENT

- A. Pro forma statements have historically served two functions in relation to business combinations:
 - 1. To provide information in the *planning* stages of the combination, and
 - 2. To *disclose* relevant information subsequent to the combination. Note: This aspect was particularly important prior to the elimination of the pooling method, as a means of enabling users to compare mergers despite the dissimilarity on the face of the principal statements between those accounted for under purchase and pooling.
- B. The term "pro forma" is also frequently used, aside from mergers, to indicate any calculations which are computed "as if" alternative rules or standards had been applied. For example, a firm may disclose in its press releases that earnings excluding certain one-time charges reflect a more positive trend than the GAAP-reported EPS. However, the SEC has recently cracked down on the extent to which these types of pro forma calculations may be presented, and the details that should be included in such announcements.
- C. The notes to the statements contain useful information to facilitate comparison between periods.

III. EXPLANATION AND ILLUSTRATION OF ACQUISITION ACCOUNTING

- A. If cash is used, payment equals cost; if debt securities are used, present value of future payments represents cost.
- B. Assets acquired via issued shares are recorded at fair values of the stock given or the assets received whichever is more clearly evident.
- C. If stock is actively traded, market price is a better estimate of fair value than appraisal values.
- D. Goodwill (GW) is recorded as any excess of total cost over the sum of amounts assigned to identifiable assets and liabilities and, under *SFAS No.* 142 [ASC 350] is no longer amortized.
- E. Goodwill must be tested for impairment at a level referred to as a reporting unit generally a level lower than that of the entire entity. If the implied fair value of the reporting unit's goodwill is less than its carrying amount, goodwill is considered impaired.
- F. Goodwill impairment losses should be aggregated and presented as a separate line item in the operating section of the income statement.
- G. Bargain acquisition—when the net amount of fair values of identifiable assets less liabilities *exceeds* the total cost of the acquired company—a gain is recognized in the period of the acquisition under current GAAP.
- H. When S Company acquires P Company with stock, common stock is credited for the par value of the shares issued, with the remainder credited to other contributed capital. Individual assets acquired and liabilities assumed are recorded at their fair values. Plant assets and other long-lived assets are recorded at their fair values unless a bargain has occurred, in which case their values are reduced below fair value to the extent of the bargain. When the cost exceeds the fair value of identifiable net assets, any excess of cost over the fair value is recorded as goodwill.
- I. Income Tax Consequences of Acquisition Method Business Combinations: deferred tax assets and/or liabilities must be recognized for differences between the assigned values and tax bases of the assets and liabilities acquired. Such differences are likely when the combination is tax-free to the sellers.

IV. CONTINGENT CONSIDERATION IN A PURCHASE

- A. Contingency—transfer of assets subsequent to acquisition from parent to subsidiary, generally dependent of some measure of performance.
- B. Contingency based on earnings is probably the most common, but it may create conflicts upon implementation because of measures which are out of the control of certain managers after the merger, as well as creating possible incentives for manipulation of earnings numbers (and may lead to decisions which are short-term rather than long-term focused).
- C. Contingency based on security prices serves to correct some of the shortcomings of contingency calculations based on earnings (manipulation of numbers, for example), but leads to its own set of problems; for example, market prices fluctuate in response to many economy-wide factors that are almost completely outside the managers' control.

V. LEVERAGED BUYOUTS

- A. Group of employees/management creates a new company to acquire all the outstanding shares of employer/original company.
- B. Consensus position is that only portion of the net assets acquired with borrowed funds have actually been purchased and therefore recorded at cost.

APPENDIX A: Deferred Taxes in Business Combinations

- A. Motivation for selling firm: structure the deal so that any gain resulting is tax-free at the time of the combination.
- B. Deferred tax liability (or asset) needs to be recognized by purchaser when the book value of the assets is used (inherited) for tax purposes, but the fair value is recognized in the accounting books under purchase accounting rules.

APPENDIX B: Did Firms Prefer Pooling; And, If So, Why?

I. A. Some facts about pooling

- 1. Majority of US mergers did not meet pooling criteria. Therefore the purchase method was more widely used, but firms (especially in large mergers) sometimes went to great lengths to qualify for pooling treatment. Furthermore, when the elimination of the pooling method was proposed, it meant with vehement protests from a number of fronts.
- 2. Why did firms care? The two methods resulted in a substantial difference in the way the combined financial statements appeared.
- 3. Pooling—neither of the two firms was considered dominant. The acquiring firm was termed the "issuer" and the other firm was the "non-issuer." Assets, liabilities, and retained earnings were taken forward at their previous carrying amounts. Operating results of the two companies were combined for the entire period being presented, regardless of the date of acquisition. Previously issued statements (when presented) were restated as if the companies had always been combined.
- 4. Pooling--income statements subsequent to the transaction did not include goodwill amortization, excess depreciation, or other charges due to asset revaluing.
- 5. Purchase accounting yields a generally lower net income divided by a larger base of assets, and therefore a substantially decreased return on assets (ROA) in most cases relative to pooling. However, this effect has been lessened by another FASB change which essentially eliminates the amortization of goodwill.
- 6. Pooling required review of prior year statements which facilitated trend analysis.
- 7. See Illustration 2-1 for comparison of the two methods
- 8. Balance sheet differences—Purchase accounting reflects more current values for the combining firm's assets and liabilites. Pooling combined retained earnings of the two firms (in most cases), leading to generally greater retained earnings balances for the combined entity relative to purhase. Purchase, on the other hand, does not reflect any retained earnings from the acquired entity.

- B. Treatment of Acquisition Expenses Contrasted
 - 1. Pooling—all types of expenses (direct, indirect, and security issue costs) were expensed in the period incurred.
 - 2. Purchase—each category of expenses is treated differently, as shown below.

	Pooling	Purchase
Direct Expenses	Expense (IS)	Capitalize (GW or PPE)
Indirect Expense	Expense (IS)	Expense
Security Issue Costs	Expense (IS)	Adjust additional PIC

C. PURCHASE VERSUS POOLING -- AUTHORITATIVE POSITION (AND HISTORICAL PERSPECTIVE)

1. The Financial Accounting Standards Board (FASB) has recently eliminated the pooling method. As a result, all acquisitions are now accounted for by the purchase method.

2. Prior to the issuance of APB *Opinion No. 16*, "Business Combinations," the pooling method was widely used and abused. This opinion delineated the specific conditions under which pooling was required; all other combinations had to be accounted for as purchases.

- a. Paragraphs 45--48 of *Opinion No. 16* spelled out the specific conditions under which pooling was required.
- b. Twelve conditions in *Opinion No. 16* were specified to meet requirements for pooling.
- c. *Opinion No. 16* attempted to define criteria clearly, remove any choice of method (other than that provided by judicious planning of a combination's terms), and prohibit partial pooling.
- 3. Advantages and disadvantages, both theoretical and practical, were noted for both methods.
- 4. *Opinion No. 16*, issued in 1970, significantly reduced the proportion of business combinations accounted for as poolings of interests and improved business combination accounting and reporting to a large extent. However, pooling remained a popular and controversial method for very large mergers until FASB eliminated it in 2001.

II. A LOOK BACK: EXPLANATION AND ILLUSTRATION OF POOLING OF INTERESTS

- A. Business combination process in which two or more groups of stockholders united their ownership interests by an exchange of common stock.
- B. Owners retained proprietary rights
- C. Fair value of assets and liabilities were ignored except in the determination of an equitable exchange ratio of common stock. Assets and liabilities were carried forward at book value.
- D. Equity allocation to common stock, to other contributed capital and to retained earnings:
 - 1. If par value of shares issued equals par value of existing shares on books of the combining firm—show addition of all other contributed capital and retained earnings.
 - 2. If par value of shares issued exceeds par value of existing shares equity transfer rule—when the par (or stated) value of the shares issued by the issuing firm exceeds the total par or stated value of the combining company" stock, the excess should be deducted first from the combined other contributed capital and then from combined retained earnings (RE).
 - 3. If par value of shares issued is less than par value of existing shares on books of the combining firm—show addition of other contributed capital and retained earnings plus additional "other contributed capital" for the difference between par values.
 - 4. Results of operations for that period were the sum of the results of:
 - (1) Operations of the separate companies as if they had been combined from the beginning of the fiscal period to the date the combination is consummated.
 - (2) The combined operations from that date to the end of the period.

III. FINANCIAL STATEMENT DIFFERENCES BETWEEN ACCOUNTING METHODS

A. Purchase and pooling of interest methods were not intended to be considered as alternatives in accounting for a specific business combination. Nonetheless business managers often regarded them as such in the planning stages of an acquisition. Furthermore, those acquisitions that were initially recorded under the pooling rules remain on the books under those rules; i.e. the elimination was not retroactive. Thus, it is

important to realize that so long as those companies do not unwind or spin off such prior acquisitions, the "old" pooling rules will continue to affect the appearance of financial statements for years to come.

- B. Purchase accounting tends to report higher asset values but lower earnings (due to excess depreciation and amortization) versus pooling of interest.
- C. Bargain purchases—purchase price below fair value of identifiable net assets—will yield ordinary gain under acquisition (purchase) rules. (In the past, extraordinary gains were sometimes recorded.)