ANSWERS TO QUESTIONS

1. Accounts receivable are amounts owed by customers on account. They result from the sale of goods and services. Notes receivable represent claims that are evidenced by formal instruments of credit.

2. Other receivables include nontrade receivables such as interest receivable, loans to company officers, advances to employees, and income taxes refundable.

3.

Accounts Receivable	40	
Interest Revenue		40

4. The essential features of the allowance method of accounting for bad debts are:
(1) Uncollectible accounts receivable are estimated and matched against revenue in the same accounting period in which the revenue occurred.
(2) Estimated uncollectibles are debited to Bad Debts Expense and credited to Allowance for Doubtful Accounts through an adjusting entry at the end of each period.
(3) Actual uncollectibles are debited to Allowance for Doubtful Accounts and credited to Accounts Receivable at the time the specific account is written off.

5. Roger Holloway should realize that the decrease in cash realizable value occurs when estimated uncollectibles are recognized in an adjusting entry. The write-off of an uncollectible account reduces both accounts receivable and the allowance for doubtful accounts by the same amount. Thus, cash realizable value does not change.

6. The two bases of estimating uncollectibles are: (1) percentage-of-sales and (2) percentage-of-receivables. The percentage-of-sales basis establishes a percentage relationship between the amount of credit sales and expected losses from uncollectible accounts. This method emphasizes the matching of expenses with revenues. Under the percentage-of-receivables basis, the balance in the allowance for doubtful accounts is derived from an analysis of individual customer accounts. This method emphasizes cash realizable value.

7. The adjusting entry under the percentage-of-sales basis is:

Bad Debt Expense	4,100	
Allowance for Doubtful Accounts		4,100

The adjusting entry under the percentage-of-receivables basis is:

Bad Debt Expense	2,800	

Allowance for Doubtful Accounts ($5,800 – $3,000)	2,800

8. Under the direct write-off method, bad debt losses are not estimated and no allowance account is used. When an account is determined to be uncollectible, the loss is debited to Bad Debt Expense. The direct write-off method makes no attempt to match bad debt expense to sales revenues or to show the cash realizable value of the receivables in the balance sheet.

9. From its own credit cards, the Freida Company may realize financing charges from customers who do not pay the balance due within a specified grace period. National credit cards offer the following advantages:
(1) The credit card issuer makes the credit investigation of the customer.
(2) The issuer maintains individual customer accounts.

(3) The issuer undertakes the collection process and absorbs any losses from uncollectible accounts.
(4) The retailer receives cash more quickly from the credit card issuer than it would from individual customers.

10. The reasons companies are selling their receivables are:
(1) Receivables may be sold because they may be the only reasonable source of cash.
(2) Billing and collection are often time-consuming and costly. It is often easier for a retailer to sell the receivables to another party with expertise in billing and collection matters.

11.

Cash	776,000	
Service Charge Expense (3% X $800,000)	24,000	
Accounts Receivable		800,000

12. A promissory note gives the holder a stronger legal claim than one on an accounts receivable. As a result, it is easier to sell to another party. Promissory notes are negotiable instruments, which means they can be transferred to another party by endorsement. The holder of a promissory note also can earn interest.

13. The maturity date of a promissory note may be stated in one of three ways: (1) on demand, (2) on a stated date, and (3) at the end of a stated period of time.

14. The maturity dates are: (a) March 13 of the next year, (b) August 4, (c) July 20, and (d) August 30.

15. The missing amounts are: (a) $15,000, (b) $9,000, (c) 6%, and (d) four months.

16. If a financial institution uses 360 days rather than 365 days, it will receive more interest revenue. The reason is that the denominator is smaller, which makes the fraction larger and, therefore, the interest revenue larger.

17. When Jana Company has dishonored a note, the ledger can set up a receivable equal to theface amount of the note plus the interest due. It will then try to collect the balance due, or as much as possible. If there is no hope of collection it will write-off the receivable.

18. Each of the major types of receivables should be identified in the balance sheet or in the notes to the financial statements. Both the gross amount of receivables and the allowance for doubtful accounts should be reported. If collectible within a year or the operating cycle, whichever is longer, these receivables are reported as current assets immediately below short-term investments.

19. Net credit sales for the period are 8.14 X $400,000 = $3,256,000.

20. Apple's 2011 allowance for doubtful accounts of $53 million represents 1% of its gross receivables of $5,422 million.

SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 8-1

(a) Accounts receivable.
(b) Notes receivable.
(c) Other receivables.

BRIEF EXERCISE 8-2

(a)	Accounts Receivable	17,200	
	Sales Revenue		17,200
(b)	Sales Returns and Allowances	3,800	
	Accounts Receivable		3,800
(c)	Cash ($13,400 – $268)	13,132	
	Sales Discounts ($13,400 X 2%)	268	
	Accounts Receivable ($17,200 – $3,800)		13,400

BRIEF EXERCISE 8-3

(a)	Bad Debt Expense	31,000	
	Allowance for Doubtful Accounts		31,000

(b) Current assets

Cash		$ 90,000
Accounts receivable	$600,000	
Less: Allowance for doubtful Accounts	31,000	569,000
Inventory		130,000
Prepaid insurance		7,500
Total current assets		$796,500

BRIEF EXERCISE 8-4

(a)	Allowance for Doubtful Accounts	6,200	
	Accounts Receivable—Gray		6,200

(b)

	(1) Before Write-Off	(2) After Write-Off
Accounts receivable	$700,000	$693,800
Allowance for doubtful accounts	54,000	47,800
Cash realizable value	$646,000	$646,000

BRIEF EXERCISE 8-5

Accounts Receivable—Gray	6,200	
Allowance for Doubtful Accounts		6,200
Cash	6,200	
Accounts Receivable—Gray		6,200

BRIEF EXERCISE 8-6

Bad Debt Expense [($800,000 – $40,000) X 2%]	15,200	
Allowance for Doubtful Accounts		15,200

BRIEF EXERCISE 8-7

(a)	Bad Debt Expense [($420,000 X 1%) – $1,500]	2,700	
	Allowance for Doubtful Accounts		2,700

(b) Bad Debt Expense [($420,000 X 1%) + $800] = $5,000

BRIEF EXERCISE 8-8

(a)	Cash ($175 – $7)	168	
	Service Charge Expense ($175 X 4%)	7	
	Sales Revenue		175
(b)	Cash ($60,000 – $1,800)	58,200	
	Service Charge Expense ($60,000 X 3%)	1,800	
	Accounts Receivable		60,000

BRIEF EXERCISE 8-9

	Interest	Maturity Date
(a)	$800	August 9
(b)	$1,120	October 12
(c)	$200	July 11

BRIEF EXERCISE 8-10

Maturity Date	Annual Interest Rate	Total Interest
(a) May 31	6%	$6,000
(b) August 1	8%	$ 600
(c) September 7	10%	$6,000

BRIEF EXERCISE 8-11

Jan. 10	Accounts Receivable	15,600	
	Sales Revenue		15,600
Feb. 9	Notes Receivable	15,600	
	Accounts Receivable		15,600

BRIEF EXERCISE 8-12

Accounts Receivable Turnover Ratio:

$$\frac{\$20B}{(\$2.7B + \$2.8B) \div 2} = \frac{\$20B}{\$2.75B} = 7.3 \text{ times}$$

Average Collection Period for Accounts Receivable:

$$\frac{365 \text{ days}}{\text{times}} = 50 \text{ days}$$

SOLUTIONS FOR DO IT! REVIEW EXERCISES

DO IT! 8-1

The following entry should be prepared to increase the balance in the Allowance for Doubtful Accounts from $6,100 credit to $15,500 credit (5% X $310,000):

Bad Debt Expense	9,400	
Allowance for Doubtful Accounts..................		9,400
(To record estimate of uncollectible accounts)		

DO IT! 8-2

Cash..	194,000	
Service Charge Expense ($200,000 X 3%)..............	6,000	
Accounts Receivable		200,000
(To record sale of receivables to factor)		

DO IT! 8-3

(a) The maturity date is September 30. When the life of a note is expressed in terms of months, you find the date it matures by counting the months from the date of issue. When a note is drawn on the last day of a month, it matures on the last day of a subsequent month.

(b) The interest to be received at maturity is $186:

Face X Rate X Time = Interest
$6,200 X 9% X 4/12 = $186

The entry recorded by Gentry Wholesalers at the maturity date is:

Cash	6,386	
Notes Receivable..		6,200
Interest Revenue..		186
(To record collection of Benton note)		

DO IT! 8-4

(a)

Net credit sales	÷	**Average net accounts receivable**	=	**Accounts receivable turnover**
$1,300,000	÷	$\frac{\$101,000 + \$107,000}{2}$	=	**12.5 times**

(b)

Days in year	÷	**Accounts receivable turnover**	=	**Average collection period in days**
365	÷	**12.5 times**	=	**29.2 days**

SOLUTIONS TO EXERCISES

EXERCISE 8-1

March 1	Accounts Receivable—Dodson Company..	5,000	
	Sales Revenue		5,000
3	Sales Returns and Allowances	500	
	Accounts Receivable—Dodson Company		500
9	Cash	4,410	
	Sales Discounts..	90	
	Accounts Receivable—Dodson Company		4,500
15	Accounts Receivable	400	
	Sales Revenue		400
31	Accounts Receivable	3	
	Interest Revenue..................................		3

EXERCISE 8-2

(a) Jan. 6	Accounts Receivable—Pryor	7,000	
	Sales Revenue		7,000
16	Cash ($7,000 – $140)	6,860	
	Sales Discounts (2% X $7,000)....................	140	
	Accounts Receivable—Pryor...............		7,000
(b) Jan. 10	Accounts Receivable—Farley	9,000	
	Sales Revenue		9,000
Feb. 12	Cash..	5,000	
	Accounts Receivable—Farley		5,000
Mar. 10	Accounts Receivable—Farley	40	
	Interest Revenue [1% X ($9,000 – $5,000)]		40

EXERCISE 8-5

(a)		Dec. 31	Bad Debt Expense	1,400	
			Accounts Receivable—L. Dole		1,400
(b)	(1)	Dec. 31	Bad Debt Expense		
			[($840,000 – $20,000) X 1%]............	8,200	
			Allowance for Doubtful Accounts..................................		8,200
	(2)	Dec. 31	Bad Debt Expense	8,900	
			Allowance for Doubtful Accounts [($110,000 X 10%) – $2,100]......		8,900
(c)	(1)	Dec. 31	Bad Debt Expense		
			[($840,000 – $20,000) X .75%]..........	6,150	
			Allowance for Doubtful Accounts..................................		6,150
	(2)	Dec. 31	Bad Debt Expense	6,800	
			Allowance for Doubtful Accounts [($110,000 X 6%) + $200]..........		6,800

EXERCISE 8-4

(a) Accounts Receivable	Amount	%	Estimated Uncollectible
1–30 days	$60,000	2.0	$1,200
31–60 days	17,600	5.0	880
61–90 days	8,500	20.0	1,700
Over 90 days	7,000	50.0	3,500
			$7,280

(b)	Mar. 31	Bad Debt Expense	6,080	
		Allowance for Doubtful Accounts ($7,280 – $1,200)...............................		6,080

EXERCISE 8-3

Allowance for Doubtful Accounts	11,000	
Accounts Receivable		11,000
Accounts Receivable	1,800	
Allowance for Doubtful Accounts		1,800
Cash	1,800	
Accounts Receivable		1,800
Bad Debt Expense	13,200	
Allowance for Doubtful Accounts [$19,000 – ($15,000 – $11,000 + $1,800)]		13,200

EXERCISE 8-6

December 31, 2015		
Bad Debt Expense (2% X $450,000)	9,000	
Allowance for Doubtful Accounts		9,000
May 11, 2016		
Allowance for Doubtful Accounts	1,100	
Accounts Receivable—Shoemaker		1,100
June 12, 2016		
Accounts Receivable—Shoemaker	1,100	
Allowance for Doubtful Accounts		1,100
Cash	1,100	
Accounts Receivable—Shoemaker		1,100

EXERCISE 8-7

(a)	Mar. 3	Cash ($650,000 – $19,500)	630,500	
		Service Charge Expense (3% X $650,000)	19,500	
		Accounts Receivable		650,000
(b)	May 10	Cash ($3,000 – $120)	2,880	
		Service Charge Expense (4% X $3,000)	120	
		Sales Revenue		3,000

EXERCISE 8-8

(a)	Apr.	2	Accounts Receivable—J. Elston	1,500	
			Sales Revenue..................................		1,500
	May	3	Cash	500	
			Accounts Receivable—		
			J. Elston		500
	June	1	Accounts Receivable—J. Elston	10	
			Interest Revenue		
			[($1,500 – $500) X 1%]..................		10
(b)	July	4	Cash	196	
			Service Charge Expense		
			(2% X $200)...	4	
			Sales Revenue..................................		200

EXERCISE 8-9

(a)	Jan.	15	Accounts Receivable...............................	18,000	
			Sales Revenue..................................		18,000
		20	Cash ($4,500 – $90)..................................	4,410	
			Service Charge Expense		
			($4,500 X 2%).......................................	90	
			Sales Revenue..................................		4,500
	Feb.	10	Cash	10,000	
			Accounts Receivable		10,000
		15	Accounts Receivable ($8,000 X 1.5%).....	120	
			Interest Revenue		120

(b) Interest Revenue is reported under other revenues and gains. Service Charge Expense is a selling expense.

EXERCISE 8-10

(a)

			2015		
Nov.	1	Notes Receivable		30,000	
			Cash		30,000
Dec.	11	Notes Receivable		6,750	
			Sales Revenue		6,750
	16	Notes Receivable		4,000	
			Accounts Receivable—Fernetti		4,000
	31	Interest Receivable		545	
			Interest Revenue*		545

*Calculation of interest revenue:

Lopez's note:	$30,000 X 10% X 2/12 =	$500
Kremer's note:	6,750 X 8% X 20/360 =	30
Fernetti's note:	4,000 X 9% X 15/360 =	15
Total accrued interest		$545

(b)

			2016		
Nov.	1	Cash		33,000	
			Interest Receivable		500
			Interest Revenue*		2,500
			Notes Receivable		30,000

*($30,000 X 10% X 10/12)

EXERCISE 8-11

			2015		
May	1	Notes Receivable		9,000	
			Accounts Receivable—Chamber		9,000
Dec.	31	Interest Receivable		600	
			Interest Revenue ($9,000 X 10% X 8/12)		600
	31	Interest Revenue		600	
			Income Summary		600

EXERCISE 8-11 (Continued)

	2016		
May 1	Cash	9,900	
	Notes Receivable		9,000
	Interest Receivable		600
	Interest Revenue		
	($9,000 X 10% X 4/12)		300

EXERCISE 8-12

4/1/15	Notes Receivable	30,000	
	Accounts Receivable—Goodwin		30,000
7/1/15	Notes Receivable	25,000	
	Cash		25,000
12/31/15	Interest Receivable	2,700	
	Interest Revenue		
	($30,000 X 12% X 9/12)		2,700
	Interest Receivable	1,250	
	Interest Revenue		
	($25,000 X 10% X 6/12)		1,250
4/1/16	Cash	33,600	
	Notes Receivable		30,000
	Interest Receivable		2,700
	Interest Revenue		
	($30,000 X 12% X 3/12)		900
	Accounts Receivable	26,875	
	Notes Receivable		25,000
	Interest Receivable		1,250
	Interest Revenue		
	($25,000 X 10% X 3/12)		625

EXERCISE 8-13

(a)	May 2	Notes Receivable	9,000	
		Cash..		9,000
(b)	Nov. 2	Accounts Receivable—Chang Inc..	9,405	
		Notes Receivable		9,000
		Interest Revenue ($9,000 X 9% X 1/2)..........................		405
		(To record the dishonor of Chang Inc. note with expectation of collection)		
(c)	Nov. 2	Allowance for Doubtful Accounts	9,000	
		Notes Receivable		9,000
		(To record the dishonor of Chang Inc. note with no expectation of collection)		

EXERCISE 8-14

(a)

Beginning accounts receivable.......................................	$ 100,000
Net credit sales	1,000,000
Cash collections	(920,000)
Accounts written off	(30,000)
Ending accounts receivable	$ 150,000

(b) $1,000,000/[($100,000 + $150,000)/2] = 8

(c) 365/8 = 45.6 days

SOLUTIONS TO PROBLEMS

PROBLEM 8-1A

(a)

		Debit	Credit
1.	Accounts Receivable	3,700,000	
	Sales Revenue		3,700,000
2.	Sales Returns and Allowances	50,000	
	Accounts Receivable		50,000
3.	Cash	2,810,000	
	Accounts Receivable		2,810,000
4.	Allowance for Doubtful Accounts	90,000	
	Accounts Receivable		90,000
5.	Accounts Receivable	29,000	
	Allowance for Doubtful Accounts		29,000
	Cash	29,000	
	Accounts Receivable		29,000

(b)

Accounts Receivable

Bal.	960,000	(2)	50,000
(1)	3,700,000	(3)	2,810,000
(5)	29,000	(4)	90,000
		(5)	29,000
Bal.	1,710,000		

Allowance for Doubtful Accounts

(4)	90,000	Bal.	80,000
		(5)	29,000
		Bal.	19,000

PROBLEM 8-1A (Continued)

(c)

Balance before adjustment [see (b)]...................................	$ 19,000
Balance needed	115,000
Adjustment required...	$ 96,000

The journal entry would therefore be as follows:

Bad Debt Expense..	96,000	
Allowance for Doubtful Accounts..........		96,000

(d) $$\frac{\$3{,}700{,}000 - \$50{,}000}{(\$880{,}000+\$1{,}595{,}000) \div 2} = \frac{\$3{,}650{,}000}{\$1{,}237{,}500} = 2.95 \text{ times}$$

PROBLEM 8-2A

(a) $33,000.

(b) $50,000 ($2,500,000 X 2%).

(c) $49,500 [($875,000 X 6%) – $3,000].

(d) $55,500 [($875,000 X 6%) + $3,000].

(e) The weakness of the direct write-off method is two-fold. First, it does not match expenses with revenues. Second, the accounts receivable are not stated at cash realizable value at the balance sheet date.

PROBLEM 8-

(a)	Dec. 31	Bad Debt Expense....................................	26,610	
		Allowance for Doubtful Accounts ($38,610 – $12,000)		26,610

(a) & (b)

Bad Debt Expense

Date	Explanation	Ref.	Debit	Credit	Balance
2015					
Dec. 31	Adjusting		26,610		26,610

Allowance for Doubtful Accounts

Date	Explanation	Ref.	Debit	Credit	Balance
2015					
Dec. 31	Balance				12,000
31	Adjusting			26,610	38,610
2016					
Mar. 31			1,000		37,610
May 31				1,000	38,610

(b)

2016

(1)

Mar. 31	Allowance for Doubtful Accounts	1,000	
	Accounts Receivable		1,000

(2)

May 31	Accounts Receivable	1,000	
	Allowance for Doubtful Accounts.....		1,000
31	Cash	1,000	
	Accounts Receivable		1,000

(c)

2016

Dec. 31	Bad Debt Expense....................................	32,400	
	Allowance for Doubtful Accounts ($31,600 + $800)		32,400

PROBLEM 8-

(a) Total estimated bad debts

		Number of Days Outstanding				
	Total	0–30	31–60	61–90	91–120	Over 120
Accounts receivable	$200,000	$77,000	$46,000	$39,000	$23,000	$15,000
% uncollectible		1%	4%	5%	8%	20%
Estimated Bad debts	$ 9,400	$ 770	$ 1,840	$ 1,950	$ 1,840	$ 3,000

(b)	Bad Debt Expense	17,400	
	Allowance for Doubtful Accounts [$9,400 + $8,000]		17,400
(c)	Allowance for Doubtful Accounts	5,000	
	Accounts Receivable		5,000
(d)	Accounts Receivable	5,000	
	Allowance for Doubtful Accounts		5,000
	Cash	5,000	
	Accounts Receivable		5,000

(e) If Rigney Inc. used 4% of total accounts receivable rather than aging the individual accounts the bad debt expense adjustment would be $16,000 [($200,000 X 4%) + $8,000]. The rest of the entries would be the same as they were when aging the accounts receivable.

Aging the individual accounts rather than applying a percentage to the total accounts receivable should produce a more accurate allowance account and bad debts expense.

PROBLEM 8-

(a) The allowance method. Since the balance in the allowance for doubtful accounts is given, they must be using this method because the account would not exist if they were using the direct write-off method.

(b)	(1)	Dec. 31	Bad Debt Expense ($11,750 – $1,000)	10,750	
			Allowance for Doubtful Accounts		10,750
	(2)	Dec. 31	Bad Debt Expense ($970,000 X 1%)	9,700	
			Allowance for Doubtful Accounts		9,700
(c)	(1)	Dec. 31	Bad Debt Expense ($11,750 + $1,000)	12,750	
			Allowance for Doubtful Accounts		12,750
	(2)	Dec. 31	Bad Debt Expense	9,700	
			Allowance for Doubtful Accounts		9,700

(d)	Allowance for Doubtful Accounts	3,000	
	Accounts Receivable		3,000

<u>Note</u>: The entry is the same whether the amount of bad debt expense at the end of 2015 was estimated using the percentage of receivables or the percentage of sales method.

(e)	Bad Debt Expense	3,000	
	Accounts Receivable		3,000

(f) Allowance for Doubtful Accounts is a contra-asset account. It is subtracted from the gross amount of accounts receivable so that accountsreceivable is reported at its cash realizable value.

PROBLEM 8-

(a)

Oct.	7	Accounts Receivable	6,900	
		Sales Revenue		6,900
	12	Cash ($900 – $27)	873	
		Service Charge Expense ($900 X 3%)	27	
		Sales Revenue		900
	15	Accounts Receivable	460	
		Interest Revenue		460
	15	Cash	12,160	
		Notes Receivable		12,000
		Interest Receivable ($12,000 X 8% X 45/360)		120
		Interest Revenue ($12,000 X 8% X 15/360)		40
	24	Accounts Receivable—Holt	9,105	
		Notes Receivable		9,000
		Interest Receivable ($9,000 X 7% X 36/360)		63
		Interest Revenue ($9,000 X 7% X 24/360)		42
	31	Interest Receivable ($16,000 X 9% X 1/12)	120	
		Interest Revenue		120

(b)

Notes Receivable

Date		Explanation	Ref.	Debit	Credit	Balance
Oct.	1	Balance	✓			37,000
	15				12,000	25,000
	24				9,000	16,000

PROBLEM 8-6A (Continued)

Accounts Receivable

Date		Explanation	Ref.	Debit	Credit	Balance
Oct.	7			6,900		6,900
	15			460		7,360
	24			9,105		16,465

Interest Receivable

Date		Explanation	Ref.	Debit	Credit	Balance
Oct.	1	Balance	✓			183
	15				120	63
	24				63	0
	31			120		120

(c) Current assets

Notes receivable..	$16,000
Accounts receivable	16,465
Interest receivable..	120
Total receivables	$32,585

PROBLEM 8-7A

Jan.	5	Accounts Receivable—Sheldon Company	20,000	
		Sales Revenue...		20,000
	20	Notes Receivable	20,000	
		Accounts Receivable—Sheldon Company		20,000
Feb.	18	Notes Receivable	8,000	
		Sales Revenue		8,000
Apr.	20	Cash ($20,000 + $400)..	20,400	
		Notes Receivable..		20,000
		Interest Revenue ($20,000 X 8% X 3/12)		400
	30	Cash ($25,000 + $ 750).......................................	25,750	
		Notes Receivable..		25,000
		Interest Revenue ($25,000 X 9% X 4/12)		750
May	25	Notes Receivable	6,000	
		Accounts Receivable—Potter Inc.		6,000
Aug.	18	Cash ($8,000 + $360)..	8,360	
		Notes Receivable..		8,000
		Interest Revenue ($8,000 X 9% X 6/12)		360
	25	Accounts Receivable—Potter Inc. ($6,000 + $105)..	6,105	
		Notes Receivable..		6,000
		Interest Revenue ($6,000 X 7% X 3/12)		105
Sept.	1	Notes Receivable	12,000	
		Sales Revenue...		12,000

PROBLEM 8-1B

(a)

1.	Accounts Receivable	2,600,000	
	Sales Revenue		2,600,000
2.	Sales Returns and Allowances	45,000	
	Accounts Receivable		45,000
3.	Cash	2,250,000	
	Accounts Receivable		2,250,000
4.	Allowance for Doubtful Accounts	10,000	
	Accounts Receivable		10,000
5.	Accounts Receivable	3,000	
	Allowance for Doubtful Accounts		3,000
	Cash	3,000	
	Accounts Receivable		3,000

(b)

Accounts Receivable

Bal.	250,000	(2)	45,000
(1)	2,600,000	(3)	2,250,000
(5)	3,000	(4)	10,000
		(5)	3,000
Bal.	545,000		

Allowance for Doubtful Accounts

(4)	10,000	Bal.	15,000
		(5)	3,000
		Bal.	8,000

(c)

Balance before adjustment [see (b)]	$ 8,000
Balance needed	22,000
Adjustment required	$14,000

The journal entry would therefore be as follows:

Bad Debt Expense	14,000	
Allowance for Doubtful Accounts		14,000

(d) $$\frac{\$2{,}600{,}000 - \$45{,}000}{(\$523{,}000 + \$235{,}000) \div 2} = \frac{\$2{,}555{,}000}{\$379{,}000} = 6.74 \text{ times}$$

PROBLEM 8-2B

(a) $22,150.

(b) $20,000 ($1,000,000 X 2%).

(c) $14,450 [($369,000 X 5%) – $4,000].

(d) $20,450 [($369,000 X 5%) + $2,000].

(e) There are two major weaknesses with the direct write-off method. First, it does not match expenses with the associated revenues. Second, the accounts receivable are not stated at cash realizable value at the balance sheet date.

PROBLEM 8-3B

(a)	Dec. 31	Bad Debt Expense..................................	31,970	
		Allowance for Doubtful Accounts		
		($47,970 – $16,000)		31,970

(a) & (b)

Bad Debt Expense

Date	Explanation	Ref.	Debit	Credit	Balance
2015					
Dec. 31	Adjusting		31,970		31,970

Allowance for Doubtful Accounts

Date	Explanation	Ref.	Debit	Credit	Balance
2015					
Dec. 31	Balance				16,000
31	Adjusting			31,970	47,970
2016					
Mar. 1			1,900		46,070
May 1				1,900	47,970

(b)

2016

(1)

Mar.	1	Allowance for Doubtful Accounts	1,900	
		Accounts Receivable		1,900

(2)

May	1	Accounts Receivable	1,900	
		Allowance for Doubtful Accounts.......		1,900
	1	Cash	1,900	
		Accounts Receivable		1,900

(c)

2016

Dec. 31	Bad Debt Expense.....................................	40,300	
	Allowance for Doubtful Accounts		
	($38,300 + $2,000)..........................		40,300

PROBLEM 8-4B

(a) Total estimated bad debts

		Number of Days Outstanding				
	Total	0–30	31–60	61–90	91–120	Over 120
Accounts receivable	$375,000	$220,000	$90,000	$40,000	$10,000	$15,000
% uncollectible		1%	4%	5%	8%	20%
Estimated Bad debts	$ 11,600	$ 2,200	$ 3,600	$ 2,000	$ 800	$ 3,000

(b)	Bad Debt Expense	8,600	
	Allowance for Doubtful Accounts ($11,600 – $3,000)		8,600
(c)	Allowance for Doubtful Accounts	1,600	
	Accounts Receivable		1,600
(d)	Accounts Receivable	700	
	Allowance for Doubtful Accounts		700
	Cash	700	
	Accounts Receivable		700

(e) When an allowance account is used, an adjusting journal entry is made at the end of each accounting period. This entry satisfies the expense recognition principle by recording the bad debt expense in the period in which the sales occur.

PROBLEM 8-5B

(a)	(1)	Dec. 31	Bad Debt Expense		
			($13,500 – $1,100)	12,400	
			Allowance for Doubtful Accounts		12,400
	(2)	Dec. 31	Bad Debt Expense		
			($650,000 X 2%)	13,000	
			Allowance for Doubtful Accounts		13,000
(b)		Dec. 31	Bad Debt Expense		
			($13,500 + $1,100)	14,600	
			Allowance for Doubtful Accounts		14,600

(c)	Allowance for Doubtful Accounts	3,200	
	Accounts Receivable		3,200

<u>Note</u>: The entry is the same whether the amount of bad debt expense at the end of 2015 was estimated using the percentage of receivables or the percentage of sales method.

(d)	Bad Debt Expense	3,200	
	Accounts Receivable		3,200

(e) The advantages of the allowance method over the direct write-off method are:

(1) It attempts to match bad debt expense related to uncollectible accounts receivable with sales revenues on the income statement.

(2) It attempts to show the cash realizable value of the accounts receivable on the balance sheet.

PROBLEM 8-6B

(a)

July	5	Accounts Receivable................................	7,200	
		Sales Revenue..................................		7,200
	14	Cash ($1,000 – $30)...................................	970	
		Service Charge Expense		
		($1,000 X 3%)...	30	
		Sales Revenue..................................		1,000
	14	Accounts Receivable................................	510	
		Interest Revenue		510
	15	Cash	12,140	
		Notes Receivable		12,000
		Interest Receivable		
		($12,000 X 7% X 45/360).................		105
		Interest Revenue		
		($12,000 X 7% X 15/360).................		35
	24	Accounts Receivable—Masasi	20,300	
		Notes Receivable		20,000
		Interest Receivable		
		($20,000 X 9% X 36/360).................		180
		Interest Revenue		
		($20,000 X 9% X 24/360).................		120
	31	Interest Receivable		
		($15,000 X 8% X 1/12)	100	
		Interest Revenue		100

(b)

Notes Receivable

Date		Explanation	Ref.	Debit	Credit	Balance
July	1	Balance	✓			47,000
	15				12,000	35,000
	24				20,000	15,000

PROBLEM 8-6B (Continued)

Accounts Receivable

Date		Explanation	Ref.	Debit	Credit	Balance
July	5			7,200		7,200
	14			510		7,710
	24			20,300		28,010

Interest Receivable

Date		Explanation	Ref.	Debit	Credit	Balance
July	1	Balance	✓			285
	15				105	180
	24				180	0
	31	Adjusting		100		100

(c) Current assets

Notes receivable...	$15,000
Accounts receivable	28,010
Interest receivable..	100
Total receivables	$43,110

PROBLEM 8-7B

Date		Account	Debit	Credit
Jan.	5	Accounts Receivable—Motte Company	10,800	
		Sales Revenue		10,800
Feb.	2	Notes Receivable	10,800	
		Accounts Receivable—Motte Company		10,800
	12	Notes Receivable	13,500	
		Sales Revenue		13,500
	26	Accounts Receivable—Benedict Co.	9,000	
		Sales Revenue		9,000
Apr.	5	Notes Receivable	9,000	
		Accounts Receivable—Benedict Co.		9,000
	12	Cash ($13,500 + $180)	13,680	
		Notes Receivable		13,500
		Interest Revenue ($13,500 X 8% X 2/12)		180
June	2	Cash ($10,800 + $324)	11,124	
		Notes Receivable		10,800
		Interest Revenue ($10,800 X 9% X 4/12)		324
July	5	Accounts Receivable—Benedict Co. ($9,000 + $180)	9,180	
		Notes Receivable		9,000
		Interest Revenue ($9,000 X 8% X 3/12)		180
	15	Notes Receivable	12,000	
		Sales Revenue		12,000
Oct.	15	Allowance for Doubtful Accounts	12,000	
		Notes Receivable		12,000

COMPREHENSIVE PROBLEM SOLUTION

(a)

Date	Account	Debit	Credit
Jan. 1	Notes Receivable	1,200	
	Accounts Receivable— Merando Company		1,200
3	Allowance for Doubtful Accounts	730	
	Accounts Receivable		730
8	Inventory	17,200	
	Accounts Payable		17,200
11	Accounts Receivable	28,000	
	Sales Revenue		28,000
	Cost of Goods Sold	19,600	
	Inventory		19,600
15	Cash	970	
	Service Charge Expense	30	
	Sales Revenue		1,000
	Cost of Goods Sold	700	
	Inventory		700
17	Cash	22,900	
	Accounts Receivable		22,900
21	Accounts Payable	14,300	
	Cash		14,300
24	Accounts Receivable	280	
	Allowance for Doubtful Accounts		280
	Cash	280	
	Accounts Receivable		280
27	Supplies	1,400	
	Cash		1,400
31	Other Operating Expenses	3,718	
	Cash		3,718

Adjusting Entries

Date	Account	Debit	Credit
Jan. 31	Interest Receivable	8	
	Interest Revenue ($1,200 X 8% X 1/12)		8
31	Bad Debt Expense [($22,950 X 6%) – ($800 – $730 + $280)]	1,027	
	Allowance for Doubtful Accounts		1,027
31	Supplies Expense	840	
	Supplies ($1,400 – $560)		840

(b)

WINTER COMPANY
Adjusted Trial Balance
January 31, 2015

	Debit	Credit
Cash	$17,832	
Notes Receivable	1,200	
Accounts Receivable	22,950	
Allowance for Doubtful Accounts		1,377
Interest Receivable	8	
Inventory	6,300	
Supplies	560	
Accounts Payable		11,650
Common Stock		20,000
Retained Earnings		12,730
Sales Revenue		29,000
Cost of Goods Sold	20,300	
Supplies Expense	840	
Bad Debt Expense	1,027	
Service Charge Expense	30	
Other Operating Expenses	3,718	
Interest Revenue		8
	$74,765	$74,765

(b) Optional T accounts for accounts with multiple transactions

Cash

1/1 Bal.	13,100	1/21	14,300
1/15	970	1/27	1,400
1/17	22,900	1/31	3,718
1/24	280		
1/31 Bal.	17,832		

Supplies

1/27	1,400	1/31	840
1/31 Bal.	560		

Accounts Payable

1/21	14,300	1/1 Bal.	8,750
		1/8	17,200
		1/31 Bal.	11,650

Accounts Receivable

1/1 Bal.	19,780	1/1	1,200
1/11	28,000	1/3	730
1/24	280	1/17	22,900
		1/24	280
1/31 Bal.	22,950		

Sales Revenue

		1/11	28,000
		1/15	1,000
		1/31 Bal.	29,000

Allowance for Doubtful Accounts

1/3	730	1/1 Bal.	800
		1/24	280
		1/31	1,027
		1/31 Bal.	1,377

Cost of Goods Sold

1/11	19,600		
1/15	700		
1/31 Bal.	20,300		

Inventory

1/1 Bal.	9,400	1/11	19,600
1/8	17,200	1/15	700
1/31 Bal.	6,300		

(c)

WINTER COMPANY
Income Statement
For the Month Ending January 31, 2015

Sales revenue		$29,000
Cost of goods sold		20,300
Gross profit		8,700
Operating expenses		
Other operating expenses	$3,718	
Bad debt expense	1,027	
Supplies expense	840	
Service charge expense	30	
Total operating expenses		5,615
Income from operations		3,085
Other revenues and gains		
Interest revenue		8
Net Income		$ 3,093

WINTER COMPANY
Retained Earnings Statement
For the Month Ending January 31, 2015

Retained Earnings, January 1	$12,730
Add: Net income	3,093
Retained Earnings, January 31	$15,823

WINTER COMPANY
Balance Sheet
January 31, 2015

Assets

Current assets		
Cash		$17,832
Notes receivable		1,200
Accounts receivable	$22,950	
Less: Allowance for doubtful accounts	1,377	21,573
Interest receivable		8
Inventory		6,300
Supplies		560
Total assets		$47,473

Liabilities and Stockholders' Equity

Current liabilities		
Accounts payable		$11,650
Stockholders' equity		
Common stock	$20,000	
Retained earnings	15,823	35,823
Total liabilities and stockholders' equity		$47,473

BYP 8-1 FINANCIAL REPORTING PROBLEM

(a)

RLF COMPANY
Accounts Receivable Aging Schedule
May 31, 2015

	Proportion of Total	Amount in Category	Probability of Non-Collection	Estimated Uncollectible Amount
Not yet due	.600	$ 840,000	.02	$16,800
Less than 30 days past due	.220	308,000	.04	12,320
30 to 60 days past due	.090	126,000	.06	7,560
61 to 120 days past due	.050	70,000	.09	6,300
121 to 180 days past due	.025	35,000	.25	8,750
Over 180 days past due	.015	21,000	.70	14,700
	1.000	$1,400,000		$66,430

(b)

RLF COMPANY
Analysis of Allowance for Doubtful Accounts
May 31, 2015

June 1, 2014 balance	$ 29,500
Bad debt expense accrual ($2,900,000 X .045)	130,500
Balance before write-offs of bad accounts.................	160,000
Write-offs of bad accounts	102,000
Balance before year-end adjustment	58,000
Estimated uncollectible amount	66,430
Additional allowance needed	$ 8,430

Bad Debt Expense	8,430	
Allowance for Doubtful Accounts.........................		8,430

BYP 8-1 (Continued)

(c)

1. Steps to Improve the Accounts Receivable Situation	2. Risks and Costs Involved
Establish more selective credit-granting policies, such as more restrictive credit requirements or more thorough credit investigations.	This policy could result in lost sales and increased costs of credit evaluation. The company may be all but forced to adhere to the prevailing credit-granting policies of the office equipment and supplies industry.
Establish a more rigorous collection policy either through external collection agencies or by its own personnel.	This policy may offend current customers and thus risk future sales. Increased collection costs could result from this policy.
Charge interest on overdue accounts. Insist on cash on delivery (cod) or cash on order (coo) for new customers or poor credit risks.	This policy could result in lost sales and increased administrative costs.

BYP 8-2 COMPARATIVE ANALYSIS PROBLEM

(a) (1) Accounts receivable turnover

PepsiCo	Coca-Cola
$\dfrac{\$66,504}{(\$6,323 + \$6,912) \div 2}$	$\dfrac{\$46,542}{(\$4,430 + \$4,920) \div 2}$
$\dfrac{\$66,504}{\$6,618}$ = 10.0 times	$\dfrac{\$46,542}{\$4,675}$ = 10.0 times

(2) Average collection period

PepsiCo	Coca-Cola
$\dfrac{365}{10.0}$ = 36.5 days	$\dfrac{365}{10.0}$ = 36.5 days

(b) Both companies have reasonable accounts receivable turnovers and collection periods of approximately 37 days. This collection period probably approximates their credit terms that they provide to customers.

BYP 8-3 COMPARATIVE ANALYSIS PROBLEM

(a) (1) Accounts receivable turnover

Amazon	Wal-Mart
$\dfrac{\$48,077}{(\$2,571 + \$1,587) \div 2}$	$\dfrac{\$443,854}{(\$5,937 + \$5,089) \div 2}$
$\dfrac{\$48,077}{\$2,079} = 23.1$ times	$\dfrac{\$443,854}{\$5,513} = 80.5$ times

(2) Average collection period

Amazon	Wal-Mart
$\dfrac{365}{23.1} = 15.8$ days	$\dfrac{365}{80.5} = 4.5$ days

(b) Both companies have outstanding accounts receivable turnovers and collection periods of less than 16 days. These collection periods are significantly shorter than the credit terms that they provide to customers.

BYP 8-4 REAL-WORLD FOCUS

(a) Factoring invoices enhances cash flow and allows a company to meet business expenses and take on new opportunities. The benefits of factoring include:

- **Predictable cash flow and elimination of slowpayments**
- **Flexible financing, as factoring line is tied to sales. It's the ideal tool for growth.**
- **Factoring is easy to obtain. Works well with startups and established companies**
- **Factoring financing lines can be setup in a fewdays.**

(b) Factoring rates range between 1.5% and 3.5% per month. The two major variables considered when determining the rate are: (1) the size of the transaction, and (2) the credit quality of the company's clients.

(c) The first installment is paid within a couple of days and is typically 90% of the invoice amount. After customers pay the invoice amount to the factor, the second installment (10%) is paid, less a fee for the transaction.

BYP 8-5 DECISION MAKING ACROSS THE ORGANIZATION

(a)

	2016	2015	2014
Net credit sales	$500,000	$550,000	$400,000
Credit and collection expenses			
Collection agency fees	$ 2,450	$ 2,500	$ 2,300
Salary of accounts receivable clerk	4,100	4,100	4,100
Uncollectible accounts	8,000	8,800	6,400
Billing and mailing costs	2,500	2,750	2,000
Credit investigation fees	750	825	600
Total	$ 17,800	$ 18,975	$ 15,400
Total expenses as a percentage of net credit sales	3.56%	3.45%	3.85%

(b)

	2016	2015	2014
Average accounts receivable (5%)	$ 25,000	$ 27,500	$ 20,000
Investment earnings (8%)	$ 2,000	$ 2,200	$ 1,600
Total credit and collection expenses per above	$ 17,800	$ 18,975	$ 15,400
Add: Investment earnings*	2,000	2,200	1,600
Net credit and collection expenses	$ 19,800	$ 21,175	$ 17,000
Net expenses as a percentage of net credit sales	3.96%	3.85%	4.25%

*The investment earnings on the cash tied up in accounts receivable is an additional expense of continuing the existing credit policies.

(c) The analysis shows that the credit card fee of 4% of net credit sales will be higher than the percentage cost of credit and collection expenses in each year before considering the effect of earnings from other investment opportunities. However, after considering investment earnings, the credit card fee of 4% will be less than the company's percentage cost if annual net credit sales are less than $500,000.

BYP 8-5 (Continued)

Finally, the decision hinges on: (1) the accuracy of the estimate of investment earnings, (2) the expected trend in credit sales, and (3) the effect the new policy will have on sales. Nonfinancial factors include the effects on customer relationships of the alternative credit policies and whether the Foyles want to continue with the problem of handling their own accounts receivable.

BYP 8-6 COMMUNICATION ACTIVITY

Of course, this solution will differ from student to student. Important factors to look for would be definitions of the methods, how they are similar and how they differ. Also, look for use of good sentence structure, correct spelling, etc.

Example:

Dear Jill,

The three methods you asked about are methods of dealing with uncollectible accounts receivable. Two of them, percentage-of-sales and percentage-of-receivables, are "allowance" methods used to estimate the amount uncollectible. Under the percentage-of-sales basis, management establishes a percentage relationship between the amount of credit sales and expected losses from uncollectible accounts. This is based on past experience and anticipated credit policy. The percentage is then applied to either total credit sales or net credit sales of the current year. This basis of estimating emphasizes the matching of expenses with revenues.

Under the percentage-of-receivables basis, management establishes a percentage relationship between the amount of receivables and expected losses from uncollectible accounts. Customer accounts are classified by the length of time they have been unpaid. This basis emphasizes cash realizable value of receivables and is therefore deemed a "balance sheet" approach.

The direct write-off method does not estimate losses and an allowance account is not used. Instead, when an account is determined to be uncollectible, it is written off directly to Bad Debt Expense. Unless bad debt losses are insignificant, this method is not acceptable for financial reporting purposes.

Sincerely,

BYP 8-7 ETHICS CASE

(a) The stakeholders in this situation are:

- **The president of Diaz Co.**
- **The controller of Diaz Co.**
- **The stockholders.**

(b) Yes. The controller is posed with an ethical dilemma—should he/she follow the president's "suggestion" and prepare misleading financial statements (understated net income) or should he/she attempt to stand up to and possibly anger the president by preparing a fair (realistic) income statement.

(c) Diaz Co.'s growth rate should be a product of fair and accurate financial statements, not vice versa. That is, one should not prepare financial statements with the objective of achieving or sustaining a predetermined growth rate. The growth rate should be a product of management and operating results, not of creative accounting.

BYP 8-8	ALL ABOUT YOU

(a) There are a number of sources that compare features of credit cards. Here are three: www.creditcards.com/, www.federalreserve.gov/pubs/shop/, and www.creditorweb.com/.

(b) Here are some of the features you should consider: annual percentage rate, credit limit, annual fees, billing and due dates, minimum payment, penalties and fees, premiums received (airlines miles, hotel discounts etc.), and cash rebates.

(c) Answer depends on present credit card and your personal situation.

BYP 8-9 FASB CODIFICATION ACTIVITY

(a) **Receivables represent contractual rights to receive money on fixed or determinable dates, whether or not there is any stated provision for interest. Receivables may arise from credit sales, loans, or other transactions. Receivables may be in the form of loans, notes, and other types of financial instruments and may be originated by an entity or purchased from another entity. (Codification reference 310-10-05-4).**

(b) **The conditions under which receivables exist usually involve some degree of uncertainty about their collectibility, in which case a contingency exists.**

Subtopic 450-20 requires recognition of a loss when both of the following conditions are met:

a. Information available prior to issuance of the financial statements indicates that it is probable that an asset has been impaired at the date of the financial statements.

b. The amount of the loss can be reasonably estimated.

Losses from uncollectible receivables shall be accrued when both the preceding conditions are met. Those conditions may be considered in relation to individual receivables or in relation to groups of similar types of receivables. If the conditions are met, accrual shall be made even though the particular receivables that are uncollectible may not be identifiable. (Codification reference 310-10-35-7, 35-8-35-9).

IFRS8-1 IFRS EXERCISES

FASB and IASB have both worked toward reporting financial instruments at fair value. Both require disclosure of fair value information in notes to financial statements and both permit (but do not require) companies to record some types of financial instruments at fair value.

IFRS requires that specific loans and receivables be reviewed for impairment and then all loans and receivables as a group be reviewed. This "two- tiered" approach is not used by the FASB. IFRS and GAAP also differ in thecriteria used to derecognize receivables. IFRS considers risks and rewards as well as loss of control over the receivables sold or factored. GAAP uses only the loss of control as its criteria. In addition, IFRS allows partial derecognition but GAAP does not.

IFRS8-2 INTERNATIONAL FINANCIAL REPORTING PROBLEM

(a) Zetar indicated (Note 18) that a later Easter contributed to a £5.9m increase in receivables due from customers compared to the previous year.

(b) Note 3.14 states that loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market.

(c) Note 18 reports that £35 of trade receivables were written off (utilised) during 2011.

(d) Note 18 indicates that the provision for impairment of receivables was £65 or 0.3% of trade receivables for 2011. In 2010, the provision was £95 or 0.6% of trade receivables. This decrease signals that Zetar is having less difficulty collecting its receivables. It is also interesting to note that trade receivables increased 32% from £16,790 in 2010 to £22,145 in 2011.

