

## PROBLEM # 1

The Harper Corporation operates a wholesale business. The company sells various types of merchandise to retailers allowing customers to pay within 30 days. All sales are made on this credit basis. The 2000 and 1999 balance sheets (after all adjusting entries) reported the following information:

	<b>2000</b>	<b>1999</b>
Accounts receivable, net of allowance for uncollectible accounts of \$70,000 in 2000 and \$40,000 in 1999	\$1,030,000	\$920,000

The company estimates bad debt expense during the year using the income statement approach by multiplying 1% times the amount of sales. Sales for 2000 totaled \$5,000,000. At the end of the year, however, the company applies the balance sheet approach employing an aging of accounts receivable to adjust the allowance account to the desired amount.

You also determine that accounts receivable actually written off during 2000 totaled \$36,000 and that no previously written off receivables were collected.

### REQUIRED:

1. What is the amount of bad debt expense that would appear on the 2000 income statement?
2. What is the amount of cash collected from customers during 2000?
3. Compute the receivables turnover ratio for 2000 (use gross accounts receivable).

**PROBLEM # 1 (ANSWERS)**

1. Beginning allowance	40,000
+ 1% x \$5,000,000	50,000 bad debt expense
less write offs	(36,000)
less ending balance	<u>(70,000)</u>
= additional bad debt expense	16,000

bad debt expense for the year = \$50,000 + 16,000 = **\$66,000**

2. Beginning A/R	\$960,000
+ sales	5,000,000
less write offs	(36,000)
less ending balance	<u>(1,100,000)</u>
= collections	<b>\$4,824,000</b>

3.  $\$5,000,000 / ((960,000 + 1,100,000) / 2) = 4.85$

## **PROBLEM # 2**

Bell Corporation had income from continuing operations of \$500,000 (this is before tax) in 2000. In addition, the following items have not been considered:

1. In 2000, Bell adopted the double-declining balance method of depreciating equipment. Prior to 2000, Bell had used the straight-line method. In fact, the \$500,000 income figure mistakenly includes depreciation using the old straight-line method. The change results in depreciation expense being \$15,000 higher under double-declining than straight-line for 2000. The cumulative effect of the change on prior years' income was a \$125,000 decrease (pre-tax).
2. A machine is sold for \$62,000 in cash during 2000 at a time when its book value was \$52,000. The company often sells machinery of this type.
3. Bell decided to discontinue its stereo division. The sale of the stereo division, which qualified as a separate line of business, was completed during the year. Operating income from the beginning of the year through the measurement date totaled \$40,000. There was an operating loss from the measurement date to the disposal date (November 2000) of \$30,000 and the segment's assets were sold for a loss of \$60,000. All of these amounts are before tax. None of the operations of this segment is included in the \$500,000 income figure above.
4. During the year, the company wrote off \$80,000 in inventory due to obsolescence.

### **REQUIRED:**

Prepare Bell's year 2000 income statement, beginning with income from continuing operations before taxes. Assume an income tax rate of 30%. Bell is a publicly traded corporation so do not forget the required EPS disclosures. The company had 1 million shares of common stock outstanding throughout the year. Use the following page for your answer.

**PROBLEM # 2 (ANSWERS)**

Income from continuing operations before tax*		\$415,000
Income tax expense		<u>124,500</u>
Income from continuing operations		290,500
Discontinued operations:		
Income from operations, net of \$12,000		
tax expense	\$28,000	
Loss on disposal, net of \$27,000 tax benefit	<u>(63,000)</u>	<u>(35,000)</u>
Income before cumulative effect		255,000
Cumulative effect of change in depreciation method, net of \$37,500 tax benefit		<u>(87,500)</u>
Net income		<u>\$168,000</u>

Earnings per share:		
Income from continuing operations		\$.29
Discontinued operations		(.03)
Cumulative effect		<u>(.09)</u>
Net income		<u>\$.17</u>

\* \$500,000  
    (15,000)  
      10,000  
    (80,000)  
    \$415,000

### PROBLEM # 3

Pribuss Construction Company contracted to build a plant for \$10,000,000. Construction started in January of 1999 and was completed in April of 2001. Data relating to the contract for 1999 and 2000 are summarized below:

	<u>1999</u>	<u>2000</u>
Costs incurred during the year	\$3,000,000	\$5,000,000
Estimated additional costs to complete	6,000,000	2,600,000
Billings during the year	3,400,000	5,200,000

#### REQUIRED:

1. Assuming the company uses the percentage-of-completion method, compute the amount of income or loss (gross profit or loss) that would be recognized in both 1999 and 2000 from this contract.
2. Repeat requirement 1. assuming that the completed contract method is used.
3. What amount of revenue would the company report on its 1999 income statement if the completed contract method were used?
4. What amount of revenue would the company report on its 1999 income statement if the percentage-of-completion method were used?

**PROBLEM # 3 (ANSWERS)**

1. 1999       $3,000,000/9,000,000 = 1/3 \times \$1,000,000 = \mathbf{\$333,333}$   
2000       $10,000,000 - 10,600,000 = (600,000) - 333,333 = \mathbf{(933,333)}$
  
2. 1999      **- 0 -**  
2000      **(600,000) loss**
  
3. **- 0 -**
4.  $1/3 \times \$10,000,000 = \mathbf{3,333,333}$

**PROBLEM # 4**

On June 30, 2000, Hobson Company sold a tract of land to another company. In exchange for the land, Hobson accepted a down payment of \$100,000 and a note receivable with an 8% interest rate. The note requires four annual installments of \$75,000 plus interest on the unpaid balance to be made on each June 30, beginning June 30, 2001. The sale of the land was recorded as follows:

Dr. Cash	100,000	
Dr. Note receivable	300,000	
Cr. Land		250,000
Cr. Gain		150,000

The company's fiscal year end is December 31 and adjusting entries are recorded only at year-end. At year-end the company controller determined that the sale of the land should have been recorded using the **installment sales method**.

**REQUIRED:**

If an adjusting entry is not made to convert to the installment sales method, by how much would income before taxes be overstated?

Solution:

$100,000/400,000 = 25\%$  of cash has been collected

$25\% \times \$150,000$  total gain = \$37,500 gain can be recognized to date  
 $\$150,000 - 37,500 = \mathbf{\$112,500}$

## PROBLEM # 5

The Rice Corporation is negotiating a loan for expansion purposes and the bank requires financial statements. Before closing the accounting records for the year ended December 31, 2000, Rice's controller prepared the following balance sheet:

### RICE CORPORATION

#### Balance Sheet

At December 31, 2000

#### Assets

	(\$ in 000s)
Cash	\$ 275
Marketable securities	78
Accounts receivable	487
Inventories	425
Allowance for uncollectible accounts	(50)
Property and equipment, net	<u>160</u>
Total assets	<u>\$1,375</u>

#### Liabilities and Shareholders' Equity

Accounts payable and accrued liabilities	\$ 420
Notes payable	200
Common stock	260
Retained earnings	<u>495</u>
Total liabilities and shareholders' equity	<u>\$1,375</u>

#### Additional information:

1. The company's common stock is traded on an organized stock exchange. There are 250,000 shares of no par value stock authorized, 50,000 shares issued and outstanding.
2. The investment portfolio consists of short-term investments valued at \$57,000. The remaining investments will not be sold until the year 2003.
3. Notes payable consist of two notes:
  - Note 1: \$80,000 face value dated September 30, 2000. Principal and interest at 10% are due on September 30, 2001.
  - Note 2: \$120,000 face value dated April 30, 2000. Principal is due in two equal installments of \$60,000 plus interest on the unpaid balance. The two payments are scheduled for April 30, 2001, and April 30, 2002.Interest on both loans has been correctly accrued and is included in accrued liabilities in the balance sheet.

#### REQUIRED:

Identify and briefly explain the deficiencies in the presentation of the balance sheet prepared by the company's controller. Do not prepare a corrected statement. Do not worry about required additional disclosures.

## **PROBLEM # 5 (ANSWERS)**

1. The asset section of the balance sheet should be classified. Cash, short-term investments, accounts receivable, and inventories should be included as current assets.
2. Accounts receivable should be shown net of the allowance for uncollectible accounts.
3. Marketable securities - \$21,000 of investments (\$78,000 - 57,000) should be classified in a noncurrent investments category.
4. Property and Equipment - should be classified in a separate category. Original cost should be disclosed along with the accumulated depreciation to arrive at the net amount.
5. The liability and shareholders' equity section of the balance sheet should be classified into (1) current liabilities, (2) long-term liabilities, and (3) shareholders' equity
6. Current liabilities should include accounts payable and accruals, notes payable - the \$80,000, note due in 1998 and the \$60,000 installment on note # 2 due in 1998. The latter should be classified as current maturities of long-term debt.
7. Long-term liabilities should include the \$60,000 second installment on note #2.
8. Common stock - the par value, if any, and the number of shares authorized, issued and outstanding should be disclosed.