To provide this information for the bank, the president has directed that the following data be gathered from which a cash budget can be prepared:

a. Budgeted sales and merchandise purchases for Year 2, as well as actual sales and purchases for the last quarter of Year 1, are as follows:

	Sales	Merchandise Purchases
Year 1:		
Fourth quarter actual	$300,000	$180,000
Year 2:		
First quarter estimated	400,000	260,000
Second quarter estimated	500,000	310,000
Third quarter estimated	600,000	370,000
Fourth quarter estimated	480,000	240,000

b. The company typically collects 33% of a quarter's sales before the quarter ends and another 65% in the following quarter. The remainder is uncollectible. This pattern of collections is now being experienced in the actual data for the Year 1 fourth quarter.

c. Some 20% of a quarter's merchandise purchases are paid for within the quarter. The remainder is paid in the following quarter.

d. Operating expenses for Year 2 are budgeted quarterly at $90,000 plus 12% of sales. Of the fixed amount, $20,000 each quarter is depreciation.

e. The company will pay $10,000 in cash dividends each quarter.

f. Land purchases will be made as follows during the year: $80,000 in the second quarter and $48,500 in the third quarter.

g. The Cash account contained $20,000 at the end of Year 1. The company must maintain a minimum cash balance of at least $18,000.

h. Any borrowing will take place at the beginning of a quarter, and any repayments will be made at the end of a quarter at an annual interest rate of 10%. Interest is paid only when principal is repaid. All borrowings and all repayments of principal must be in round $1,000 amounts. Interest payments can be in any amount.

i. At present, the company has no loans outstanding.

Required:

1. Prepare the following, by quarter and in total, for Year 2:
   a. A schedule of expected cash collections on sales.
   b. A schedule of budgeted cash disbursements for merchandise purchases.
2. Compute the expected cash disbursements for operating expenses, by quarter and in total, for Year 2.
3. Using the data from (1) and (2) above and other data as needed, prepare a cash budget for Year 2, by quarter and in total for the year. Show clearly on your budget the quarter(s) in which borrowing will be needed and the quarter(s) in which repayments can be made, as requested by the company's bank.

PROBLEM 9–19 Completing a Master Budget [LO2, LO4, LO7, LO8, LO9, LO10]

Nordic Company, a merchandising company, prepares its master budget on a quarterly basis. The following data have been assembled to assist in preparation of the master budget for the second quarter.

a. As of March 31 (the end of the prior quarter), the company's balance sheet showed the following account balances:

Cash	$ 9,000	
Accounts Receivable	48,000	
Inventory	12,600	
Buildings and Equipment (net)	214,100	
Accounts Payable		$ 18,300
Capital Stock		190,000
Retained Earnings		75,400
	$283,700	$283,700

b. Actual sales for March and budgeted sales for April–July are as follows:

March (actual)	$60,000
April	70,000
May	85,000
June	90,000
July	50,000

c. Sales are 20% for cash and 80% on credit. All payments on credit sales are collected in the month following sale. The accounts receivable at March 31 are a result of March credit sales.
d. The company's gross profit rate is 40% of sales. (In other words, cost of goods sold is 60% of sales.)
e. Monthly expenses are budgeted as follows: salaries and wages, $7,500 per month; shipping, 6% of sales; advertising, $6,000 per month; other expenses, 4% of sales. Depreciation, including depreciation on new assets acquired during the quarter, will be $6,000 for the quarter.
f. At the end of each month, inventory is to be on hand equal to 30% of the following month's cost of goods sold.
g. Half of a month's inventory purchases are paid for in the month of purchase and half in the following month.
h. Equipment purchases during the quarter will be as follows: April, $11,500; and May, $3,000.
i. Dividends totaling $3,500 will be declared and paid in June.
j. The company must maintain a minimum cash balance of $8,000. An open line of credit is available at a local bank. All borrowing is done at the beginning of a month, and all repayments are made at the end of a month. Borrowings and repayments of principal must be in multiples of $1,000. Interest is paid only at the time of payment of principal. The annual interest rate is 12%. (Figure interest on whole months, e.g., $1/12$, $2/12$.)

Required:

Using the data above, complete the following statements and schedules for the second quarter:

1. Schedule of expected cash collections:

	April	May	June	Total
Cash sales	$14,000			
Credit sales	48,000			
Total collections	$62,000			

2. *a.* Inventory purchases budget:

	April	May	June	Total
Budgeted cost of goods sold	$42,000*	$51,000		
Add desired ending inventory	15,300†			
Total needs	57,300			
Less beginning inventory	12,600			
Required purchases	$44,700			

*$70,000 sales × 60% = $42,000.
†$51,000 × 30% = $15,300.

b. Schedule of cash disbursements for purchases:

	April	May	June	Total
For March purchases	$18,300			$18,300
For April purchases	22,350	$22,350		44,700
For May purchases				
For June purchases				
Total cash disbursements for purchases	$40,650			

3. Schedule of cash disbursements for operating expenses:

	April	May	June	Total
Salaries and wages	$7,500			
Shipping	4,200			
Advertising	6,000			
Other expenses	2,800			
Total cash disbursements for operating expenses	$20,500			

4. Cash budget:

	April	May	June	Total
Cash balance, beginning	$ 9,000			
Add cash collections	62,000			
Total cash available	71,000			
Less disbursements:				
For inventory purchases	40,650			
For operating expenses	20,500			
For equipment purchases	11,500			
For dividends	—			
Total disbursements	72,650			
Excess (deficiency) of cash	(1,650)			
Financing				
Etc.				

5. Prepare an income statement for the quarter ending June 30 as shown in Schedule 9 in the chapter.
6. Prepare a balance sheet as of June 30.

PROBLEM 9–20 Completing a Master Budget [LO2, LO4, LO7, LO8, LO9, LO10]
The following data relate to the operations of Picanuy Corporation, a wholesale distributor of consumer goods:

Current assets as of December 31:	
Cash	$ 6,000
Accounts receivable	36,000
Inventory	9,800
Buildings and equipment, net	110,885
Accounts payable	32,550
Capital stock	100,000
Retained earnings	30,135

a. Gross profit is 30% of sales. (In other words, cost of goods sold is 70% of sales.)
b. Actual and budgeted sales data:

December (actual)	$60,000
January	70,000
February	80,000
March	85,000
April	55,000

c. Sales are 40% for cash and 60% on credit. Credit sales are collected in the month following sale. The accounts receivable at December 31 are the result of December credit sales.
d. At the end of each month, inventory is to be on hand equal to 20% of the following month's budgeted cost of goods sold.
e. One-quarter of a month's inventory purchases is paid for in the month of purchase; the other three-quarters is paid for in the following month. The accounts payable at December 31 are the result of December purchases of inventory.

The Budgeted Balance Sheet

The budgeted balance sheet is developed by beginning with the current balance sheet and adjusting it for the data contained in the other budgets. Hampton Freeze's budgeted balance sheet is presented in Schedule 10. Some of the data on the budgeted balance sheet have been taken from the company's previous end-of-year balance sheet for 2002 which appears below:

LEARNING OBJECTIVE 10
Prepare a budgeted balance sheet.

HAMPTON FREEZE, INC.
Balance Sheet
December 31, 2002

Assets		
Current assets:		
Cash	$ 42,500	
Accounts receivable	90,000	
Raw materials inventory (21,000 pounds)	4,200	
Finished goods inventory (2,000 cases)	26,000	
Total current assets		$162,700
Plant and equipment:		
Land	80,000	
Buildings and equipment	700,000	
Accumulated depreciation	(292,000)	
Plant and equipment, net		488,000
Total assets		$650,700
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable (raw materials)		$ 25,800
Stockholders' equity:		
Common stock, no par	$175,000	
Retained earnings	449,900	
Total stockholders' equity		624,900
Total liabilities and stockholders' equity		$650,700