**Problem 20-5A**

**Preparation of a complete master budget**

Near the end of 2011, the management of Simid Sports Co., a merchandising company, prepared the following estimated balance sheet for December 31, 2011.



To prepare a master budget for January, February, and March of 2012, management gathers the following information.

1. Simid Sports' single product is purchased for $30 per unit and resold for $55 per unit. The expected inventory level of 2,500 units on December 31, 2011, is more than management's desired level for 2012, which is 20% of the next month's expected sales (in units). Expected sales are: January, 3,500 units; February, 4,500 units; March, 5,500 units; and April, 5,000 units.
2. Cash sales and credit sales represent 25% and 75%, respectively, of total sales. Of the credit sales, 60% is collected in the first month after the month of sale and 40% in the second month after the month of sale. For the December 31, 2011, accounts receivable balance, $62,500 is collected in January and the remaining $200,000 is collected in February.
3. Merchandise purchases are paid for as follows: 20% in the first month after the month of purchase and 80% in the second month after the month of purchase. For the December 31, 2011, accounts payable balance, $40,000 is paid in January and the remaining $140,000 is paid in February.
4. Sales commissions equal to 20% of sales are paid each month. Sales salaries (excluding commissions) are $30,000 per year.
5. General and administrative salaries are $72,000 per year. Maintenance expense equals $1,000 per month and is paid in cash.
6. Equipment reported in the December 31, 2011, balance sheet was purchased in January 2011. It is being depreciated over eight years under the straight-line method with no salvage value. The following amounts for new equipment purchases are planned in the coming quarter: January, $18,000; February, $48,000; and March, $14,400. This equipment will be depreciated under the straight-line method over eight years with no salvage value. A full month's depreciation is taken for the month in which equipment is purchased.
7. The company plans to acquire land at the end of March at a cost of $75,000, which will be paid with cash on the last day of the month.
8. Simid Sports has a working arrangement with its bank to obtain additional loans as needed. The interest rate is 12% per year, and interest is paid at each month-end based on the beginning balance. Partial or full payments on these loans can be made on the last day of the month. The company has agreed to maintain a minimum ending cash balance of $12,500 in each month.
9. The income tax rate for the company is 40%. Income taxes on the first quarter's income will not be paid until April 15.

***Required***

Prepare a master budget for each of the first three months of 2012; include the following component budgets (show supporting calculations as needed, and round amounts to the nearest dollar):

1. Monthly sales budgets (showing both budgeted unit sales and dollar sales).
2. Monthly merchandise purchases budgets.

**Check**
(2) Budgeted purchases: January, $57,000; February, $141,000 (3) Budgeted selling expenses: January, $41,000; February, $52,000

1. Monthly selling expense budgets.
2. Monthly general and administrative expense budgets.
3. Monthly capital expenditures budgets.

(6) Ending cash bal.: January, $15,050; February, $105,150

1. Monthly cash budgets.
2. Budgeted income statement for the entire first quarter (not for each month).

(8) Budgeted total assets at March 31, $784,325

1. Budgeted balance sheet as of March 31, 2012.

#### Problem 21-6AA

**Materials, labor, and overhead variances; and overhead variance report**

Kudos Company has set the following standard costs per unit for the product it manufactures.



The predetermined overhead rate is based on a planned operating volume of 80% of the productive capacity of 10,000 units per month. The following flexible budget information is available.



During May, the company operated at 90% of capacity and produced 9,000 units, incurring the following actual costs.



***Required***

**Check**
(1) Materials variances: Price, $ 4,600 F; Quantity, $ 6,000 U (2) Labor variances: Rate, $ 1,880 U; Efficiency, $ 9,600 U

1. Compute the direct materials variance, including its price and quantity variances.
2. Compute the direct labor variance, including its rate and efficiency variances.
3. Compute these variances: (a) variable overhead spending and efficiency, (b) fixed overhead spending and volume, and (c) total overhead controllable.
4. Prepare a detailed overhead variance report that shows the variances for individual items of overhead.