

3. The Stanley Company produces and markets two product lines: Racquets and Gloves. The following data were gathered on activities during the third quarter:

	<u>Racquets</u>	<u>Gloves</u>
Sales in units	1,000	5,000
Sales price per unit	\$100	\$40
Variable production costs per unit	\$20	\$8
Traceable fixed production costs	\$20,000	\$37,000
Variable selling expenses per unit	\$11	\$2
Traceable fixed selling expenses	\$10,000	\$23,000
Allocated portion of corporate expenses	\$6,000	\$120,000

Required (10 points):

- Prepare a segmented income statement for last quarter, showing both "Amount" and "Percent" columns for the division as a whole and for each product line.
- Discuss the differences between traceable costs and common costs.

6. Mikell supplies acetylene and other compressed gases to industry. Data regarding the store's operations follow:

Sales are budgeted at \$360,000 for November, \$380,000 for December, and \$350,000 for January. Collections are expected to be 75% in the month of sale and 25% in the month following the sale. The cost of goods sold is 65% of sales. The company maintains a targeted ending inventory of 60% of the following month's sales. Payment for merchandise is made in the month following the purchase. Other monthly expenses to be paid in cash are \$21,900. Monthly depreciation is \$20,000.

Statement of Financial Position	
October 31	
Assets	
Cash	\$ 16,000
Accounts receivable (net of allowance for uncollectible accounts)	74,000
Inventory	140,400
Property, plant and equipment (net of \$500,000 accumulated depreciation)	1,066,000
Total assets	<u>\$1,296,400</u>
Liabilities and Stockholders' Equity	
Accounts payable	\$ 240,000
Common stock	640,000
Retained earnings	416,400
Total liabilities and stockholders' equity	<u>\$1,296,400</u>

Required (20 points):

- Prepare a Schedule of Expected Cash Collections for November and December.
- Prepare a Merchandise Purchases Budget for November and December.
- Prepare Cash Budgets for November and December.
- Prepare a Budgeted Income Statement for the two month period of November and December.

7. The Charlotte Company produces a single product. The company had the following results for its first two years of operation:

	<u>Year 1</u>	<u>Year 2</u>
Sales	\$1,200,000	\$1,200,000
Cost of goods sold	800,000	680,000
Gross margin	400,000	520,000
Selling and administrative expenses	300,000	300,000
Net operating income (loss)	\$100,000	\$220,000

Additional information about the company is as follows:

In Year 1, the company produced and sold 40,000 units of its only product. In Year 2, the company again sold 40,000 units, but increased production to 50,000 units. The company's variable production cost is \$5 per unit and its fixed manufacturing overhead cost is \$600,000 per year. Fixed manufacturing overhead costs are applied to the product on the basis of each year's unit production (i.e. a new fixed overhead rate is computed each year). Variable selling and administrative expenses are \$2 per units sold.

Required (15 points):

- Compute the unit product cost for each year under absorption costing and under variable costing.
 - Prepare an income statement for each year, using the contribution approach with variable costing.
 - Reconcile the variable costing and absorption costing income figures for each year.
 - Explain why the net operating income for Year 2 under absorption costing was higher than the net operating income for Year 1, although the same number of units were sold in each year.
8. Vaughn Corporation had net operating income of \$380,000 and average operating assets of \$2,000,000. The corporation requires a return on investment of 18%. Show all calculations supporting your responses!

Required (10 points):

- Calculate the company's return on investment (ROI) and residual income (RI).
- Vaughn Corporation is considering an investment of \$70,000 in a project that will generate annual net operating income of \$12,950. Would it be in the best interests of the company to make this investment?

- c. Vaughn Corporation is considering an investment of \$70,000 in a project that will generate annual net operating income of \$12,950. If the division planning to make the investment currently has a return on investment of 20% and its manager is evaluated based on the division's ROI, will the division manager be inclined to request funds to make this investment?
- d. Vaughn Corporation is considering an investment of \$70,000 in a project that will generate annual net operating income of \$12,950. If the division planning to make the investment currently has a residual income of \$50,000 and its manager is evaluated based on the division's residual income, will the division manager be inclined to request funds to make this investment?