# broadening your perspective

## DECISION MAKING ACROSS THE ORGANIZATION

**BYP18-1** Martinez Company has decided to introduce a new product. The new product can be manufactured by either a capital-intensive method or a labor-intensive method. The manufacturing method will not affect the quality of the product. The estimated manufacturing costs by the two methods are as follows.

| | Capital-Intensive | Labor-Intensive |
|---|---|---|
| Direct materials | $5 per unit | $5.50 per unit |
| Direct labor | $6 per unit | $8.00 per unit |
| Variable overhead | $3 per unit | $4.50 per unit |
| Fixed manufacturing costs | $2,508,000 | $1,538,000 |

Martinez's market research department has recommended an introductory unit sales price of $30. The incremental selling expenses are estimated to be $502,000 annually plus $2 for each unit sold, regardless of manufacturing method.

***Instructions***

With the class divided into groups, answer the following.

(a) Calculate the estimated break-even point in annual unit sales of the new product if Martinez Company uses the:
  (1) Capital-intensive manufacturing method.
  (2) Labor-intensive manufacturing method.

(b) Determine the annual unit sales volume at which Martinez Company would be indifferent between the two manufacturing methods.

(c) Explain the circumstance under which Martinez should employ each of the two manufacturing methods.

(CMA adapted)

## MANAGERIAL ANALYSIS

**BYP18-2** The condensed income statement for the Sally and Terry partnership for 2012 is as follows.

**SALLY AND TERRY COMPANY**
**Income Statement**
**For the Year Ended December 31, 2012**

| | | |
|---|---|---|
| Sales (200,000 units) | | $1,200,000 |
| Cost of goods sold | | 800,000 |
| Gross profit | | 400,000 |
| Operating expenses | | |
| Selling | $280,000 | |
| Administrative | 160,000 | 440,000 |
| Net loss | | ($40,000) |

A cost behavior analysis indicates that 75% of the cost of goods sold are variable, 50% of the selling expenses are variable, and 25% of the administrative expenses are variable.

***Instructions***

(Round to nearest unit, dollar, and percentage, where necessary. Use the CVP income statement format in computing profits.)

(a) Compute the break-even point in total sales dollars and in units for 2012.

(b) Sally has proposed a plan to get the partnership "out of the red" and improve its profitability. She feels that the quality of the product could be substantially improved by spending $0.25 more per unit on better raw materials. The selling price per unit could be increased to only $6.25 because of competitive pressures. Sally estimates that sales volume will increase by