

**Problem 21-6B**

Analysis of price, cost,  
and volume changes for  
contribution margin and  
net income

A1 P2

This year Best Company earned a disappointing 5.6% after-tax return on sales (net income/sales) from marketing 100,000 units of its only product. The company buys its product in bulk and repackages it for resale at the price of \$20 per unit. Best incurred the following costs this year.

|                                          |           |
|------------------------------------------|-----------|
| Total variable unit costs . . . . .      | \$800,000 |
| Total variable packaging costs . . . . . | \$100,000 |
| Fixed costs . . . . .                    | \$950,000 |
| Income tax rate . . . . .                | 25%       |

The marketing manager claims that next year's results will be the same as this year's unless some changes are made. The manager predicts the company can increase the number of units sold by 80% if it reduces the selling price by 20% and upgrades the packaging. This change would increase variable packaging costs by 20%. Increased sales would allow the company to take advantage of a 25% quantity purchase discount on the cost of the bulk product. Neither the packaging change nor the volume discount would affect fixed costs, which provide an annual output capacity of 200,000 units.

**Required**

**Check** (1b) Break-even  
sales for new strategy,  
\$1,727,273 (rounded)

(2) Net income:  
Existing strategy, \$112,500;  
new strategy, \$475,500

1. Compute the break-even point in dollar sales under the (a) existing business strategy and (b) new strategy that alters both unit selling price and variable costs. (Round answers to the next whole dollar.)
2. Prepare a forecasted contribution margin income statement with two columns showing the expected results of (a) the existing strategy and (b) changing to the new strategy. The statements should report sales, total variable costs (unit and packaging), contribution margin, fixed costs, income before taxes, income taxes, and net income. Also determine the after-tax return on sales for these two strategies.