

## Instructions

Classify the preceding costs as either fixed, variable, or mixed. Use the following tabular headings and place an "X" in the appropriate column. Identify each cost by letter in the cost column.

<u>Cost</u>	<u>Fixed Cost</u>	<u>Variable Cost</u>	<u>Mixed Cost</u>
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### P11-2 Break-even sales under present and proposed conditions

Kearney Company, operating at full capacity, sold 400,000 units at a price of \$246.60 per unit during 20Y5. Its income statement for 20Y5 is as follows:

Sales			\$98,640,000
Cost of goods sold			<u>44,500,000</u>
Gross profit			\$54,140,000
Expenses:			
Selling expenses	\$8,000,000		
Administrative expenses	<u>3,000,000</u>		
Total expenses			<u>11,000,000</u>
Income from operations			<u><u>\$43,140,000</u></u>

The division of costs between fixed and variable is as follows:

	<u>Fixed</u>	<u>Variable</u>
Cost of goods sold	28%	72%
Selling expenses	25%	75%
Administrative expenses	80%	20%

Management is considering a plant expansion program that will permit an increase of \$8,631,000 (35,000 units at \$246.60) in yearly sales. The expansion will increase fixed costs by \$3,600,000, but will not affect the relationship between sales and variable costs.

## Instructions

1. Determine for 20Y5 the total fixed costs and the total variable costs.
2. Determine for 20Y5 (a) the unit variable cost and (b) the unit contribution margin.
3. Compute the break-even sales (units) for 20Y5.
4. Compute the break-even sales (units) under the proposed program.
5. Determine the amount of sales (units) that would be necessary under the proposed program to realize the \$43,140,000 of income from operations that was earned in 20Y5.
6. Determine the maximum income from operations possible with the expanded plant.
7. If the proposal is accepted and sales remain at the 20Y5 level, what will the income or loss from operations be for 20Y6?
8. Based on the data given, would you recommend accepting the proposal? Explain.

Obj | 2, 3

✓ 2. a. \$96.60