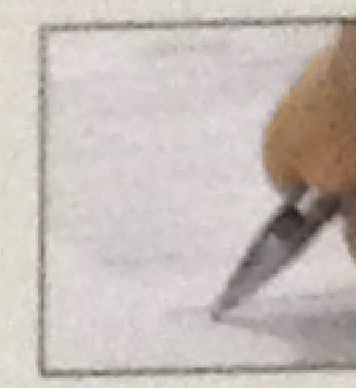
PROBLEM 3–22 Sales Mix; Multiproduct Break-Even Analysis [LO 3–9]

Marlin Company, a wholesale distributor, has been operating for only a few months. The company sells three products—sinks, mirrors, and vanities. Budgeted sales by product and in total for the coming month are shown below:

	Product							
	Sinks		Mirrors		Vanities		Total	
Percentage of total sales	48%		20%		32%		100%	
Sales	$240,000	100%	$100,000	100%	$160,000	100%	$500,000	100%
Variable expenses	72,000	30%	80,000	80%	88,000	55%	240,000	48%
Contribution margin	$168,000	70%	$ 20,000	20%	$ 72,000	45%	260,000	52%
Fixed expenses							223,600	
Net operating income							$ 36,400	

$$\text{Dollar sales to break-even} = \frac{\text{Fixed expenses}}{\text{CM ratio}} = \frac{\$223{,}600}{0.52} = \$430{,}000$$

As shown by these data, net operating income is budgeted at $36,400 for the month, and break-even sales at $430,000.

Assume that actual sales for the month total $500,000 as planned. Actual sales by product are: sinks, $160,000; mirrors, $200,000; and vanities, $140,000.

Required:

1. Prepare a contribution format income statement for the month based on actual sales data. Present the income statement in the format shown above.
2. Compute the break-even point in sales dollars for the month, based on your actual data.
3. Considering the fact that the company met its $500,000 sales budget for the month, the president is shocked at the results shown on your income statement in (1) above. Prepare a brief memo for the president explaining why both the operating results and the break-even point in sales dollars are different from what was budgeted.