

**Accounting 212
CVP Project Data
For the Year Ended 12/31/16**

Noble Company is a small but growing manufacturer of telecommunications equipment. The company has no sales force of its own; rather, it relies completely on independent sales agents to market its products. These agents are paid a commission of 12% of selling price for all items sold.

Randy, Noble's controller just prepared the company's budgeted income statement for next year as following:

**NOBLE COMPANY
BUDGETED INCOME STATEMENT
FOR THE YEAR ENDED DECEMBER 31, 2016**

SALES		\$16,000,000
MANUFACTURING COSTS:		
VARIABLE	\$7,200,000	
FIXED	2,340,000	9,540,000
GROSS MARGIN		<u>6,460,000</u>
SELLING & ADMIN COSTS:		
COMMISSION TO AGENTS	1,920,000	
FIXED MARKETING COSTS	120,000*	
FIXED ADMIN COSTS	1,800,000	3,840,000
NET OPERATING INCOME		<u>2,620,000</u>

*primarily depreciation on storage facilities.

As Randy handed the statement to Mr. Noble, Noble Company's president, he commented "I used the agents' 12% commission rate in completing the Budgeted Income Statement. But we've just learned that they refuse to handle selling our product next year unless we increase the commission rate to 18%."

Mr. Noble replied "How can they possibly defend an 18% commission rate? I say it's time we fire those guys and get our own sales force."

Randy said "We can hire our own sales staff and pay them 8% commission, along with a small salary. Of course, we would have to handle all promotion costs too. We figure our fixed costs would increase by \$1,500,000 per year as follows:"

Sales manager	\$ 200,000
Salespersons	400,000
Travel and Entertainment	200,000
Advertising	700,000
Total	<u>\$1,500,000</u>

Required:

Using Excel worksheet, compute Noble's break-even point in sales dollars for next year assuming:

1. The agents' commission rate remains unchanged at 12%
2. The agents' commission rate is increased to 18%
3. The company employs its own sales force with 8% commission and \$1,500,000 additional fixed cost.

ALL CALCULATIONS, INCLUDING ANY FINANCIAL STATEMENTS, IN THE WRITTEN PORTION OF YOUR PROJECT MUST BE DONE ON A SPREADSHEET!!