“These statements can’t be right” said Ben Yoder, president of Rayco, Inc. “Our sales in the second quarter were up by 25% over the first quarter, yet these income statements show a precipitous drop in net operating income for the second quarter. Those accounting people have fouled something up. “ Mr. Yoder was referring to the following statements (absorption costing basis):

Rayco Inc.

Income Statements

For the First Two Quarters

 First Quarter Second Quarter

Sales……………. 480,000 600,000

Cost of goods sold 240,000 372,000

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Gross Margin 240,000 228,000

Selling and administrative expenses 200,000 215,000

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Net Operating Income $40,000 $13,000

After studying the statements briefly, he called in the controller to see if the mistake in the 2nd quarter could be located before the figures were released to the press. The controller stated, I’m sorry to say that those figures are correct, Ben. I agree that sales went up during the 2nd quarter, but the problem is in the production. You see, we budgeted to produce 15,000 unites each quarter, but a strike on the west coast among some of our suppliers forced us to cut production in the second quarter back to only 9,000 units. That’s what caused the drop in net operating income.”

Mr. Yoder was confused by the controller’s explanation. He replied, “This doesn’t make sense. I ask you to explain why net operating income dropped when sales went up and you talk about production! So what if we had to cut back production? We still were able to increase sales by 25%. If sales go up, then net operating income should go up. If your statements can’t show a simple thing like that, then its time for some changes in your department!”

Budgeted production and sales for the year, along with actual production and sales for the first two quarters, are given below:

 Quarter

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 1st 2nd 3rd 4th

Budgeted sales (units) 12,000 15,000 15,000 15,000

Actual Sales (units) 12,000 15,000 - -

Budgeted Production (units) 15,000 15,000 15,000 15,000

Actual Production (units) 15,000 9,000 - -

The company’s plant is heavily automated, and fixed manufacturing overhead amounts to $180,000 each quarter. Variable manufacturing costs are $8 per unit. The fixed manufacturing overhead is applied to units of product at a rate of $12 per unit (based on budgeted production shown on the prior page. Any underappplied or over applied overhead is closed directly to cost of goods sold for the quarter. The company had 4,000 units in inventory to start the first quarter and uses the FIFO inventory flow assumption. Variable selling and administrative expenses are $5 per unit.

1. What characteristic of absorption costing caused the drop in net operating income for the second quarter and what could the controller have said to explain the problem?
2. Prepare a contribution format variable costing income statement for each quarter.
3. Reconcile the absorption costing and the variable costing net operating income figure for each quarter.
4. Identify and discuss the advantages and disadvantages of using the variable costing method for internal reporting purposes.
5. Assume that the company had introduce lean Production at the beginning of the second quarter, resulting in zero ending inventory. (Sales and production during the first quarter remain the same.)
6. How many units would have been produced during the second quarter under Lean Production?
7. Starting with the third quarter, would you expect any difference between the net operating income reported under absorption costing and under variable costing? Explain why there would or would not be any difference.