Chapter 9: Inventory Costing and Capacity Analysis

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1) (CMA) Osawa, Inc., planned and actually manufactured 200,000 units of its single product in 2014, its first year of operation. Variable manufacturing cost was $20 per unit produced. Variable operating (nonmanufacturing) cost was $10 per unit sold. Planned and actual fixed manufacturing costs were $600,000. Planned and actual fixed operating (nonmanufacturing) costs totaled $400,000. Osawa sold 120,000 units of product at $40 per unit.

Required:

1. Osawa's 2014 operating income using absorption costing is (a) $440,000, (b) $200,000, (c) $600,000, (d) $840,000, or (e) none of these. Show supporting calculations.

2. Osawa's 2014 operating income using variable costing is (a) $800,000, (b) $440,000, (c) $200,000, (d) $600,000, or (e) none of these. Show supporting calculations.2

2) Regina Company manufacturers a professional-grade vacuum cleaner and began operations in 2014. For 2014, Regina budgeted to produce and sell 18,000 units. Actual data for 2014 are given as follows:

	A	B
1	Units produced	18,000
2	Units sold	17,500
3	Selling price	$ 450
4	Variable costs:	
5	Manufacturing cost per unit produced	
6	Direct materials	$ 30
7	Direct manufacturing labor	25
8	Manufacturing overhead	60
9	Marketing cost per unit sold	45
10	Fixed costs:	
11	Manufacturing costs	$1,200,000
12	Administrative costs	965,450
13	Marketing	1,366,400

1. Prepare a 2014 income statement for Regina Company using variable costing.

2. Prepare a 2014 income statement for Regina Company using absorption costing.

3) Aspen Popular Company prepared the following absorption-costing income statement for the year ended May 31, 2015.

Sales (8,000 units)	$160,000
Cost of goods sold	108,000
Gross margin	$52,000
Selling and administrative expenses	18,000
Operating income	$ 29,000

Additional information follows:

Selling and administrative expenses include $1.50 of variable cost per unit sold. There was no beginning inventory, and 8,750 units were produced. Variable manufacturing costs were $11 per unit. Actual fixed costs were equal to budgeted fixed costs

Required: Prepare a variable-costing income statement for the same period.

4) The following data are available for Brennan Soft Toys Company for the year ended September 30, 2015.

Sales:	24,000 units at $50 each
Expected and actual production:	30,000 units
Manufacturing costs incurred:	
Variable:	$525,000
Fixed:	$372,000

Nonmanufacturing costs incurred:	
Variable:	$144,800
Fixed:	$77,400
Beginning inventories:	none

Required:

a. Determine operating income using the variable-costing approach.
b. Determine operating income using the absorption-costing approach.
c. Explain why operating income is not the same under the two approaches.

5) Crystal Clear Corporation manufactures and sells 50-inch television sets and uses standard costing. Actual data relating to January, February, and March 2014 are as follows:

	January	February	March
Unit data			
Beginning inventory	0	100	100
Production	1,400	1,375	1,430
Sales	1,300	1,375	1,455
Variable costs			
Manufacturing cost per unit produced	$ 950	$ 950	$ 950
Operating (marketing) cost per unit sold	$ 725	$ 725	$ 725
Fixed costs			
Manufacturing costs	$490,000	$490,000	$490,000
Operating (marketing) costs	$120,000	$120,000	$120,000

The selling price per unit is $3,500. The budgeted level of production used to calculate the budgeted fixed manufacturing cost per unit is 1,400 units.

1. Prepare income statements for Crystal Clear in January, February, 2014 under (a) variable costing and (b) absorption costing.
2. Explain the difference in operating income for January, February, and March under variable costing and absorption costing.

Final Exam (Jan. 2016)

Minestrone Ltd produces one product and its manufacturing cost is determined using absorption costing. Minestrone produced and sold 1,000 units. The selling price is L.E. 96 per unit. The total marketing costs (variable and fixed) in December were L.E. 27,000. There was no beginning or ending inventory in December 2015.

The monthly costs in December were as follows:

	Variable costs Per unit	Fixed costs per unit
Manufacturing costs	L.E. 40	L.E. 20
Marketing costs	L.E. 6	L.E. 12

The fixed costs per unit in December were based on monthly fixed costs with production and sales level at 1,500 units. Minestrone Ltd has a maximum capacity to produce 2,000 units per month.

The following information is related to January 2016:

1- Minestrone plans to produce 90% of the theoretical capacity and to sell 80% of the production.
2- The selling price per unit will increase to be L.E. 100.
3- Variable manufacturing cost will increase by 10%, while variable marketing cost will be the same.
4- Minestrone will purchase new factory equipment on January 1st, 2016 for L.E. 72,000 and the annual depreciation is 10% using a straight-line method.
5- Minestrone will rent a new showroom for its product for a monthly rent of L.E. 2000.

Required:

1- Prepare an income statement for January 2016 using Absorption Costing.
2- Prepare an income statement for January 2016 using Variable Costing.
3- Reconcile and explain any difference in operating income resulting from using absorption costing and variable costing.