EXERCISE 7-1 Variable and Absorption Costing Unit Product Costs [LO1]
Shastri Bicycle of Bombay, India, produces an inexpensive, yet rugged, bicycle for use on the city's crowded streets that it sells for 500 rupees. (Indian currency is denominated in rupees, denoted by R.) Selected data for the company's operations last year follow:

Units in beginning inventory	0
Units produced	10,000
Units sold	8,000
Units in ending inventory	2,000
Variable costs per unit:	
Direct materials	R120
Direct labor	R140
Variable manufacturing overhead	R50
Variable selling and administrative	R20
Fixed costs:	
Fixed manufacturing overhead	R600,000
Fixed selling and administrative	R400,000

Required:
1. Assume that the company uses absorption costing. Compute the unit product cost for one bicycle.
2. Assume that the company uses variable costing. Compute the unit product cost for one bicycle.

EXERCISE 7-3 Reconciliation of Absorption and Variable Costing Net Operating Incomes [LO3]
High Tension Transformers, Inc., manufactures heavy-duty transformers for electrical switching stations. The company uses variable costing for internal management reports and absorption costing for external reports to shareholders, creditors, and the government. The company has provided the following data:

	Year 1	Year 2	Year 3
Inventories:			
Beginning (units)	180	150	160
Ending (units)	150	160	200
Variable costing net operating income	$292,400	$269,200	$251,800

The company's fixed manufacturing overhead per unit was constant at $450 for all three years.

Required:
1. Determine each year's absorption costing net operating income. Present your answer in the form of a reconciliation report such as the one shown in Exhibit 7–6.
2. In Year 4, the company's variable costing net operating income was $240,200 and its absorption costing net operating income was $267,200. Did inventories increase or decrease during Year 4? How much fixed manufacturing overhead cost was deferred or released from inventory during Year 4?

EXERCISE 7-5 Variable Costing Unit Product Cost and Income Statement; Break-Even [LO1, LO2]
CompuDesk, Inc., makes an oak desk specially designed for personal computers. The desk sells for $200. Data for last year's operations follow:

Units in beginning inventory	0
Units produced	10,000
Units sold	9,000
Units in ending inventory	1,000
Variable costs per unit:	
Direct materials	$ 60
Direct labor	30
Variable manufacturing overhead	10
Variable selling and administrative	20
Total variable cost per unit	$ 120

Fixed costs:	
Fixed manufacturing overhead	$300,000
Fixed selling and administrative	450,000
Total fixed costs	$750,000

Required:

1. Assume that the company uses variable costing. Compute the unit product cost for one computer desk.
2. Assume that the company uses variable costing. Prepare a contribution format income statement for the year.
3. What is the company's break-even point in terms of units sold?

EXERCISE 7-6 Absorption Costing Unit Product Cost and Income Statement [LO1, LO2]
Refer to the data in Exercise 7-5 for CompuDesk. Assume in this exercise that the company uses absorption costing.

Required:

1. Compute the unit product cost for one computer desk.
2. Prepare an income statement for the year.

EXERCISE 7-7 Variable and Absorption Costing Unit Product Costs and Income Statements [LO1, LO2]
Maxwell Company manufactures and sells a single product. The following costs were incurred during the company's first year of operations:

Variable costs per unit:	
Manufacturing:	
Direct materials.	$18
Direct labor	$7
Variable manufacturing overhead	$2
Variable selling and administrative	$5
Fixed costs per year:	
Fixed manufacturing overhead	$160,000
Fixed selling and administrative expenses	$110,000

During the year, the company produced 20,000 units and sold 16,000 units. The selling price of the company's product is $50 per unit.

Required:

1. Assume that the company uses absorption costing:
   a. Compute the unit product cost.
   b. Prepare an income statement for the year.
2. Assume that the company uses variable costing:
   a. Compute the unit product cost.
   b. Prepare an income statement for the year.

EXERCISE 7-9 Variable Costing Income Statement; Reconciliation [LO2, LO3]
Morey Company has just completed its first year of operations. The company's absorption costing income statement for the year appears below:

Morey Company Income Statement		
Sales (40,000 units at $33.75 per unit)		$1,350,000
Cost of goods sold:		
Beginning inventory	$ 0	
Add cost of goods manufactured (50,000 units at $21 per unit)	1,050,000	
Goods available for sale	1,050,000	
Less ending inventory (10,000 units at $21 per unit)	210,000	840,000
Gross margin		510,000
Selling and administrative expenses		420,000
Net operating income.		$ 90,000

The company's selling and administrative expenses consist of $300,000 per year in fixed expenses and $3 per unit sold in variable expenses. The company's $21 per unit product cost given above is computed as follows:

Direct materials	$10
Direct labor	4
Variable manufacturing overhead	2
Fixed manufacturing overhead ($250,000 ÷ 50,000 units)	5
Unit product cost	$21

Required:

1. Redo the company's income statement in the contribution format using variable costing.
2. Reconcile any difference between the net operating income on your variable costing income statement and the net operating income on the absorption costing income statement above.

PROBLEM 7-11 Variable and Absorption Costing Unit Product Costs and Income Statements; Explanation of Difference in Net Operating Income [LO1, LO2, LO3]

Wiengot Antennas, Inc., produces and sells a unique type of TV antenna. The company has just opened a new plant to manufacture the antenna, and the following cost and revenue data have been provided for the first month of the plant's operation in the form of a worksheet.

1	Beginning inventory	0
2	Units produced	40,000
3	Units sold	35,000
4	Selling price per unit	$60
5		
6	Selling and administrative expenses:	
7	Variable per unit	$2
8	Fixed (total)	$560,000
9	Manufacturing costs:	
10	Direct materials cost per unit	$15
11	Direct labor cost per unit	$7
12	Variable manufacturing overhead cost per unit	$2
13	Fixed manufacturing overhead cost (total)	$640,000

Since the new antenna is unique in design, management is anxious to see how profitable it will be and has asked that an income statement be prepared for the month.

Required:

1. Assume that the company uses absorption costing.
   a. Determine the unit product cost.
   b. Prepare an income statement for the month.
2. Assume that the company uses variable costing.
   a. Determine the unit product cost.
   b. Prepare a contribution format income statement for the month.
3. Explain the reason for any difference in the ending inventory balances under the two costing methods and the impact of this difference on reported net operating income.