

Calculate The Bottled Water Company's net income for the new product in the coming year by completing the operating budgets and budgeted income statement that follow.

1. Sales budget:

The Bottled Water Company Sales Budget For the Year Ended December 31					
	Quarter				Year
	1	2	3	4	
Sales in units	40,000	30,000	50,000	55,000	175,000
× Selling price per unit	× \$1	× ?	× ?	× ?	× ?
Total sales	<u>\$40,000</u>	<u>?</u>	<u>?</u>	<u>?</u>	<u>?</u>

2. Production budget:

The Bottled Water Company Production Budget For the Year Ended December 31					
	Quarter				Year
	1	2	3	4	
Sales in units	40,000	?	?	?	?
Plus desired units of ending finished goods inventory*	<u>3,000</u>	<u>?</u>	<u>?</u>	<u>6,000</u>	<u>6,000</u>
Desired total units	43,000				
Less desired units of beginning finished goods inventory†	<u>4,000</u>	<u>?</u>	<u>?</u>	<u>?</u>	<u>4,000</u>
Total production units	<u>39,000</u>	<u>?</u>	<u>?</u>	<u>?</u>	<u>?</u>

*Desired units of ending finished goods inventory = 10% of next quarter's budgeted sales.

†Desired units of beginning finished goods inventory = 10% of current quarter's budgeted sales.

3. Direct materials purchases budget:

The Bottled Water Company Direct Materials Purchases Budget For the Year Ended December 31					
	Quarter				Year
	1	2	3	4	
Total production units	39,000	32,000	50,500	55,500	?
× 20 ounces per unit	× 20	× ?	× ?	× ?	× ?
Total production needs in ounces	780,000	?	?	?	?
Plus desired ounces of ending direct materials inventory*	128,000	?	?	240,000	240,000
	908,000	?	?	?	?
Less desired ounces of beginning direct materials inventory†	156,000	?	?	?	156,000
Total ounces of direct materials to be purchased	752,000	?	?	?	?
× Cost per ounce	× \$.01	× ?	× ?	× ?	× ?
Total cost of direct materials purchases	\$ 7,520	?	?	?	?

*Desired ounces of ending direct materials inventory = 20% of next quarter's budgeted production needs in ounces.

†Desired ounces of beginning direct materials inventory = 20% of current quarter's budgeted production needs in ounces.

4. Direct labor budget:

The Bottled Water Company Direct Labor Budget For the Year Ended December 31					
	Quarter				Year
	1	2	3	4	
Total production units	39,000	?	?	?	?
× Direct labor hours per unit	× .001	× ?	× ?	× ?	× ?
Total direct labor hours	39	?	?	?	?
× Direct labor cost per hour	× \$8	× ?	× ?	× ?	× ?
Total direct labor cost	\$312	?	?	?	?

5. Overhead budget:

The Bottled Water Company Overhead Budget For the Year Ended December 31					
	Quarter				Year
	1	2	3	4	
Variable overhead costs					
Factory supplies (\$.01)	\$ 390	?	?	?	?
Employee benefits (\$.05)	1,950	?	?	?	?
Inspection (\$.01)	390	?	?	?	?
Maintenance and repair (\$.02)	780	?	?	?	?
Utilities (\$.01)	390	?	?	?	?
Total variable overhead costs	\$3,900	?	?	?	?
Total fixed overhead costs	1,500	?	?	?	?
Total overhead costs	<u>\$5,400</u>	<u>?</u>	<u>?</u>	<u>?</u>	<u>?</u>

Note: The figures in parentheses are variable costs per unit.

6. Selling and administrative expense budget:

The Bottled Water Company Selling and Administrative Expense Budget For the Year Ended December 31					
	Quarter				Year
	1	2	3	4	
Variable selling and administrative expenses					
Delivery expenses (\$.01)	\$ 400	?	?	?	?
Sales commissions (\$.02)	800	?	?	?	?
Accounting (\$.01)	400	?	?	?	?
Other administrative expenses (\$.01)	400	?	?	?	?
Total variable selling and administrative expenses	\$2,000	?	?	?	?
Total fixed selling and administrative expenses	5,000	?	?	?	?
Total selling and administrative expenses	<u>\$7,000</u>	<u>?</u>	<u>?</u>	<u>?</u>	<u>?</u>

Note: The figures in parentheses are variable costs per unit.

7. Cost of goods manufactured budget:

The Bottled Water Company Cost of Goods Manufactured Budget For the Year Ended December 31			
Direct materials used			
Direct materials inventory, beginning	?		
Purchases	<u>?</u>		
Cost of direct materials available for use	<u>?</u>		
Less direct materials inventory, ending		<u>?</u>	
Cost of direct materials used		<u>?</u>	
Direct labor costs		?	
Overhead costs		<u>?</u>	
Total manufacturing costs		<u>?</u>	
Work in process inventory, beginning*		0	
Less work in process inventory, ending*		<u>0</u>	
Cost of goods manufactured		<u>?</u>	
Manufactured Cost per Unit = Cost of Goods		<u>?</u>	
Manufactured ÷ Units Produced			

*It is the company's policy to have no units in process at the end of the year.

8. Budgeted income statement:

The Bottled Water Company Budgeted Income Statement For the Year Ended December 31			
Sales		?	
Cost of goods sold			
Finished goods inventory, beginning	?		
Cost of goods manufactured	<u>?</u>		
Cost of finished goods available for sale	<u>?</u>		
Less finished goods inventory, ending	<u>?</u>		
Cost of goods sold		<u>?</u>	
Gross margin		<u>?</u>	
Selling and administrative expenses		<u>?</u>	
Income from operations		<u>?</u>	
Income taxes expense (30%)*		<u>?</u>	
Net income		<u>?</u>	

*The figure in parentheses is the company's income tax rate.