Capítulo 11 Master Budgeting

Exercise 8-2 (10 minutes)

	April	*May*	*June*	*Quarter*
Budgeted unit sales	50,000	75,000	90,000	215,000
Add desired units of ending finished goods inventory*	7,500	9,000	8,000	8,000
Total needs...	57,500	84,000	98,000	223,000
Less units of beginning finished goods inventory..	5,000	7,500	9,000	5,000
Required production in units..................	52,500	76,500	89,000	218,000

*10% of the following month's sales in units.

Exercise 8-4 (20 minutes)

1. Assuming that the direct labor workforce is adjusted each quarter, the direct labor budget is:

	1st Quarter	*2nd Quarter*	*3rd Quarter*	*4th Quarter*	*Year*
Required production in units	8,000	6,500	7,000	7,500	29,000
Direct labor time per unit (hours)	× 0.35	× 0.35	× 0.35	× 0.35	× 0.35
Total direct labor-hours needed	2,800	2,275	2,450	2,625	10,150
Direct labor cost per hour	× $12.00	× $12.00	× $12.00	× $12.00	× $12.00
Total direct labor cost	$ 33,600	$ 27,300	$ 29,400	$ 31,500	$121,800

2. Assuming that the direct labor workforce is not adjusted each quarter and that overtime wages are paid, the direct labor budget is:

	1st Quarter	*2nd Quarter*	*3rd Quarter*	*4th Quarter*	*Year*
Required production in units	8,000	6,500	7,000	7,500	
Direct labor time per unit (hours)	× 0.35	× 0.35	× 0.35	× 0.35	
Total direct labor-hours needed	2,800	2,275	2,450	2,625	
Regular hours paid	2,600	2,600	2,600	2,600	
Overtime hours paid	200	0	0	25	
Wages for regular hours (@ $12.00 per hour)	$31,200	$31,200	$31,200	$31,200	$124,800
Overtime wages (@ 1.5 × $12.00 per hour)	3,600	0	0	450	4,050
Total direct labor cost	$34,800	$31,200	$31,200	$31,650	$128,850

Exercise 8-5 (15 minutes)

1. Yuvwell Corporation

Manufacturing Overhead Budget

	1st Quarter	*2nd Quarter*	*3rd Quarter*	*4th Quarter*	*Year*
Budgeted direct labor-hours	8,000	8,200	8,500	7,800	32,500
Variable manufacturing overhead rate	× $3.25	× $3.25	× $3.25	× $3.25	× $3.25
Variable manufacturing overhead	$26,000	$26,650	$27,625	$25,350	$105,625
Fixed manufacturing overhead	48,000	48,000	48,000	48,000	192,000
Total manufacturing overhead	74,000	74,650	75,625	73,350	297,625
Less depreciation	16,000	16,000	16,000	16,000	64,000
Cash disbursements for manufacturing overhead	$58,000	$58,650	$59,625	$57,350	$233,625

2.

Total budgeted manufacturing overhead for the year (a)	$297,625
Budgeted direct labor-hours for the year (b)	32,500
Predetermined overhead rate for the year (a) ÷ (b)	$9.16

Exercise 8-6 (15 minutes)

Weller Company
Selling and Administrative Expense Budget

	1st Quarter	*2nd Quarter*	*3rd Quarter*	*4th Quarter*	*Year*
Budgeted unit sales	15,000	16,000	14,000	13,000	58,000
Variable selling and administrative expense per unit	× $2.50	× $2.50	× $2.50	× $2.50	× $2.50
Variable selling and administrative expense	$ 37,500	$ 40,000	$ 35,000	$ 32,500	$145,000
Fixed selling and administrative expenses:					
Advertising	8,000	8,000	8,000	8,000	32,000
Executive salaries	35,000	35,000	35,000	35,000	140,000
Insurance	5,000		5,000		10,000
Property taxes		8,000			8,000
Depreciation	20,000	20,000	20,000	20,000	80,000
Total fixed selling and administrative expenses	68,000	71,000	68,000	63,000	270,000
Total selling and administrative expenses	105,500	111,000	103,000	95,500	415,000
Less depreciation	20,000	20,000	20,000	20,000	80,000
Cash disbursements for selling and administrative expenses	$ 85,500	$ 91,000	$ 83,000	$ 75,500	$335,000

Exercise 8-8 (10 minutes)

Gig Harbor Boating
Budgeted Income Statement

Sales (460 units × $1,950 per unit)	$897,000
Cost of goods sold (460 units × $1,575 per unit)	724,500
Gross margin	172,500
Selling and administrative expenses*	139,500
Net operating income	33,000
Interest expense	14,000
Net income	$ 19,000

*(460 units × $75 per unit) + $105,000 = $139,500.

Exercise 8-10 (45 minutes)

1. Production budget:

	July	*August*	*Septem-ber*	*October*
Budgeted unit sales	35,000	40,000	50,000	30,000
Add desired units of ending finished goods inventory*	11,000	13,000	9,000	7,000
Total needs	46,000	53,000	59,000	37,000
Less units of beginning finished goods inventory	10,000	11,000	13,000	9,000
Required production in units	36,000	42,000	46,000	28,000

* October: 3,000 units + (20,000 units × 20%) = 7,000 units.

2. During July and August, the company is building inventories in anticipation of peak sales in September. Therefore, production exceeds sales during these months. In September and October, inventories are being reduced in anticipation of a forthcoming decrease in sales. Therefore, production is less than sales during these months.