Ray (	k Figures for Problems and Case Garrison and Eric Noreen	<b>es</b> P3-22	(3) \$312.40 per unit (1) Research, \$35 per hr.; (3) Total cost, \$4,060
Mana	agerial Accounting, 10 <sup>th</sup>	P3-23	(2) Overhead applied in 2001: \$1,500
Edition	on	P3-24	(4) COGM, \$810,000;
	<b></b>	10 2.	(7) Overapplied, \$15,000
		P3-25	(2) Overhead applied, \$21,750
		P3-26	(2) COGM, \$635,000; (5) \$42 per unit
Chapter 1		P3-27	(3) COGM, \$590,000; (6) \$48.16 per
No check figures			unit
		C3-28	Overapplied, \$800
Chap	ter 2		No check figure
	Rent on warehouse: fixed, period		No check figure
P2-12	Plastic washers: variable, indirect		No check figure
P2-13	(1) Manufacturing overhead, \$60		
P2-14	(1) Total internal failure cost this year:	Chap	iter 4
	\$4,000,000		(2) 7/31 WIP, \$16,500
P2-15	Cost of shipping finished goods:	P4-15	Conversion, \$0.60 per EU;
	variable, selling		6/30 WIP, \$80,400
	No check figure	P4-16	Materials, 460,000 EU; 6/30 WIP,
P2-17	Answering device: fixed, period		\$81,000
P2-18	(1) Total variable cost, \$647,000	P4-17	(1) Conversion, 390,000 EU;
P2-19	(1) COGM, \$290,000		(3) 5/31 WIP, \$45,000
P2-20	(1) COGM, \$450,000	P4-18	(2) Materials, \$0.90 per EU;
P2-21	(1) Direct labor, \$65,000		(3) 7/31 WIP, \$70,000
P2-22	No check figure	P4-19	(2) Conversion, 32,000 EU
P2-23	No check figure	P4-20	(1) Materials, \$1.40 per EU;
P2-24	No check figure		5/31 WIP, \$84,000
P2-25	Case 1, Goods available for sale, \$24,000	P4-21	Materials, \$0.82 per EU; 7/31 WIP, \$28,240
P2-26	(1) COGM, \$450,000	P4-22	(1) Conversion, \$3.00 per EU
C2-27	(2) COGM, \$680,000	P4-23	(3) Materials, \$0.20 per EU;
C2-28	No check figure	1 4-23	3/31 WIP, \$12,600
	•	P4-24	(3) Labor, \$7.50 per EU; 5/31 WIP,
Chap	ter 3	1 1 2 1	\$42,500
P3-13	(3) Overapplied, \$3,000;	C4-25	No check figure
	(4) Net operating income, \$31,594	C4-26	(1) Materials, \$0.31 per EU;
P3-14	(3) Overapplied, \$3,000;		10/31 WIP, \$6,400
	(4) Net operating income, \$52,000	C4-27	(1) Transferred in, \$0.84 per EU;
P3-15	(3) Underapplied, \$4,000;		10/31 WIP, \$6,240
	(4) Net operating income, \$15,000		, , ,
P3-16	(3) Underapplied, £13,000;	Chap	ter 5
	(4) Net operating income, £82,000	P5-11	(2) $Y = £20,000 + £8.00X$
P3-17	(3) Overhead applied, \$32,000;	P5-12	(2) Net operating income, \$19,000
	(4) Total cost, \$60,700	P5-13	(3) Total cost, \$16,000
P3-18	(2) Underapplied, \$270,000	P5-14	No check figure
P3-19	(2) COGM, \$342,000;	P5-15	(4) Total cost \$182,100
	(5) Direct materials, \$20,000	P5-16	(3) Total cost, 283,500 pesos
P3-20	(3) Overapplied, \$3,000;	P5-17	(3) COGM, \$307,500
	(4) Net operating income, \$40,400	P5-18	(1) $Y = \$800 + \$40X$
P3-21	(2) Total overhead, \$3,980;		

- P5-20 No check figure
- P5-21 (2) Y = \$10,644 + \$2,100X
- P5-22 (1) Y = \$40,000 + \$7,500X
- C5-23 No check figure
- C5-24 No check figure
- C5-25 No check figure
- C5-26 (1) Y = \$28,352 + \$2.58X

#### **Chapter 6**

- P6-9 (1) Break-even, 15,000 units; (4) 17,500 units
- P6-10 (1) 20,000 shirts; (3) \$15,000 loss
- P6-11 (1) Loss, \$8,600
- P6-12 (2) Break-even, \$300,000
- P6-13 (2) Break-even, 28,000 units
- P6-14 (1) Break-even, 50,000 units
- P6-15 No check figure
- P6-16 (1) \$24,000 total sales
- P6-17 (1b) Margin of safety, 8,000 pesetas
- P6-18 (2) Break-even, 40,000 skateboards; (6a) 43,000 skateboards
- P6-19 (1) Break-even, \$100,000; (3) 57,500 pairs
- P6-20 (2c) Present margin of safety, \$160,000
- P6-21 (1) April net operating income, \$62,000
- C6-22 (1) Net operating loss, \$46,200
- C6-23 No check figure
- C6-24 (2) 14,320 patient-days
- C6-25 (2c) Break-even, \$26,875,000
- C6-26 (1b) Breakeven, 56,250 units; (3) 112,500 units

## Chapter 7

- P7-8 (1) Year 2 net operating income, \$210,000
- P7-9 (1b) Net operating income, \$70,000; (2b) Net operating loss, \$10,000
- P7-10 (2) Net operating income, \$40,000
- P7-11 (2) June net operating income, \$90,000
- P7-12 (1b) Net operating income, \$10,000; (3a) Net operating income, \$40,000
- P7-13 (1) Year 3 net operating income, \$30,000
- P7-14 No check figure
- P7-15 (2) Year 1 net operating income: \$60,000
- C7-16 (1) 210,000 units
- C7-17 (1) May net operating income, \$10,000; (2) Breakeven, 64,000 units
- C7-18 (2) Second Quarter net operating

income, \$270,000

#### Chapter 8

- P8-13 (2b) XR7 unit product cost, \$69.40
- P8-14 (3a) \$1,816.50 per thousand square feet
- P8-15 (2) Margin for local commercial work, \$(25,200)
- P8-16 (2) Yellow margin, \$158,800
- P8-17 (3b) Deluxe model unit product cost, \$335.60
- P8-18 (2) Cost of customer service, € 20,125 per customer
- P8-19 (3) Total cost of serving the Lazy Bee ranch, \$161.50
- P8-20 (4) Yellow margin, \$(11.30)
- P8-21 (3a) Mono-circuit overhead cost, \$30.75
- C8-22 (2) Standard model unit product cost, \$20.48
- C8-23 (2d) Yellow margin for Lynx Builders, \$3,439
- C8-24 (3b) Overhead cost per pound of Malaysian, \$3.65
- C8-25 (2) B-10, \$120 per unit; (3) C-20, \$304.80 per unit

## Chapter 9

- P9-8 No check figure
- P9-9 (3) Ending cash balance, \$5,000
- P9-10 (1) August, 56,000 units; (3) July, 148,500 lbs.
- P9-11 (1) Total cash disbursements for materials, \$195,250
- P9-12 (2) Cash disbursements for manufacturing overhead, \$344,000
- P9-13 (1) June ending cash balance, \$7,500
- P9-14 (1) May, \$217,200; (2) May ending cash balance, \$20,200
- P9-15 No check figure
- P9-16 (1) August collections, \$290,000; (3) August payments, \$31,740
- P9-17 (1) August collections, \$47,760; (3) July ending cash balance, \$8,410
- P9-18 (1a) Third quarter cash collections, \$523,000; (3) Third quarter ending cash balance, \$18,500
- P9-19 (2a) May purchases, \$51,900; (5) Net income, \$26,700
- P9-20 (2) March purchases, \$55,300; (5) Net income, \$7,690
- P9-21 (1) May production, 38,000 units;

- (3) Direct labor, \$1,947,000
- P9-22 (2) Excess cash, \$18,650
- C9-23 No check figure
- C9-24 Excess of cash available over disbursements in May, \$15,000
- C9-25 (2) June ending cash balance, \$10,732; (3) Net income, \$151,882

#### Chapter 10

- P10-10 (1a) Materials quantity variance, \$9,000 U; (2a) Labor rate variance, \$800 U
- P10-11 (1) Materials price variance, \$1,600 F; (2a) Labor efficiency variance, \$5,400 U
- P10-12 (1a) Materials price variance, \$5,280 F; (2a) Labor efficiency variance, \$4,320 F
- P10-13 (1a) Materials quantity variance, \$500 F;
  - (1b) Labor rate variance, \$1,080 F
- P10-14 (1a) MCE month 1, 11.1%; (3a) MCE month 5, 33.3%
- P10-15 (3) Standard cost of Lanolin, €1,940.40 per batch
- P10-16 (1) Materials price variance, \$4,750 U; (3) Labor rate variance, \$990 U
- P10-17 (1a) Standard price, \$3; (2b) Labor rate variance, \$1,500 U
- P10-18 (1) Standard cost, \$11,400; (5) Labor rate variance, \$450 U
- P10-19 (1a) Materials price variance \$3,000 F; (2a) Labor rate variance, \$1,300 F
- P10-20 (1) Materials price variance, \$29,000 U; (3) Variable manufacturing overhead spending variance, \$22,000 F
- P10-21 No check figure
- P10-22 (1) MCE month 1, 7.8%; (3a) MCE month 5, 21.4%
- P10-23 No check figure
- P10-24 (1) Standard cost of direct material, €6.10 per jar
- P10-25 (1) Materials price variance, \$3,000 F;
  - (3) Variable manufacturing overhead spending variance, \$1,520 U
- C10-26 No check figure
- C10-27 No check figure
- C10-28 (2c) Actual cost, \$3,520; (4c) Labor rate variance, \$115 F
- C10-29 No check figure

### Chapter 11

P11-12 (3) Total variance, \$7,050 U

- P11-13 (2) Materials price variance, \$3,000 F; (3) Volume variance, \$4,200 F
- P11-14 (1) Flexible budget total cost at 780 liters: \$38,779
- P11-15 (3a) Variable overhead spending variance, \$3,250 U; (3b) Budget variance, \$2,000 F
- P11-16 (2) Overhead applied, £92,000; (3) Volume variance, £8,000 U
- P11-17 (3) Variable overhead spending variance, \$430 F
- P11-18 (2) Variable overhead spending variance, \$3,000 U
- P11-19 (2) Total variance, \$800 U
- P11-20 (3a) Applied overhead, \$360,000; (3b) Volume variance, \$30,000 U
- P11-21 Total efficiency variance, \$550 F
- P11-22 (4a) 46,250 standard hours; (4c) Volume variance, \$50,000 F
- P11-23 (3a) 33,000 standard DLHs; (4) Budget variance, \$1,000 U
- P11-24 (2) Standard cost, \$92.50; (4a) Budget variance, \$2,400 U
- P11-25 (2) Flexible budget total cost at the actual activity level, \$340,640
- C11-26 No check figure
- C11-27 (5) \$5.14 per DLH
- C11-28 Shipping expense variance, \$16,000 F
- C11-29 No check figure

#### Chapter 12

- P12-14 (1) Central segment margin, \$32,000
- P12-15 (1) Flour segment margin, \$42,000
- P12-16 (3) Middle Europe segment margin, €184,000
- P12-17 (2) Company A margin, 14%
- P12-18 (1) Total ROI, 28%
- P12-19 (1) ROI, 33%
- P12-20 (2a) \$36 to \$39; (3a) \$35 to \$57
- P12-21 (2) Profits would drop by \$60,000
- P12-22 (1) Garments segment margin, R40,000
- P12-23 (1) District C segment margin, \$19,500
- P12-24 (1b) Residual income, \$700,000
- P12-25 (3) ROI, 20%; (6) ROI, 25%
- P12-26 (1a) Margin, 5%
- P12-27 (3) Net loss per player, \$20
- P12-28 (1) Lowest acceptable transfer price, \$450
- C12-29 (1) Journal segment margin, \$95,000
- C12-30 (3) \$12.50 to \$19.25
- C12-31 (1) Line C segment margin, \$132,000

#### Chapter 13

P13-11 (1) Decrease in profits, \$450

P13-12 (1) Decrease in profits, \$410,000

P13-13 (1) \$0.35 profit from further processing

P13-14 (1) \$140,000 disadvantage to close

P13-15 (2) Maximum price, \$0.43

P13-16 (1) Increased net operating income, 90,000 mk

P13-17 (1) Decrease in profits, \$20,000

P13-18 (1) \$18,000 advantage to buy

P13-19 (2) Breakeven price, \$24.50

P13-20 (1) Decrease in net operating income, £ 36.200

P13-21 (2) Hours required, 161,900 DLHs

P13-22 (1) Incremental contribution margin, \$0.98 per container

C13-23 No check figure

C13-24 No check figure

C13-25 No check figure

C13-26 No check figure

C13-27 No check figure

C13-28 No check figure

#### Chapter 14

P14-16 (2) NPV, \$12,516

P14-17 (2) NPV of cash flows \$(192,400)

P14-18 (2) Simple rate of return, 14%

P14-19 NPV, \$(45,210)

P14-20 (1) Project #1 profit index, 1.18

P14-21 NPV, \$18,211

P14-22 (1) Net annual cash receipts, \$63,900

P14-23 (3a) Internal rate of return, 10%

P14-24 (1) Project A profit index, 1.28

P14-25 (3) Payback, 2.5 years

P14-26 (1) NPV in favor of the new generator, \$14,635

P14-27 (2) Simple rate of return, 14.2%

P14-28 (1) NPV, \$(63,011)

P14-29 (1) NPV in favor of leasing, \$52,340

P14-30 (2) NPV, \$90,700

P14-31 (2) NPV of Alternative #2, \$7,801

P14-32 (1) Year 3 net cash flow, \$30,000

C14-33 No check figure

C14-34 (1) NPV in favor of leasing, \$3,949,950

C14-35 (1) NPV in favor of Alternative #2, \$24.640

C14-36 (1) NPV, \$926,252

## Chapter 15

P15-8 (1) Stamping rate,  $\omega 8.30$  per hour

P15-9 (1) Cost to Machine Tools Division, \$97,000

P15-10 (1) Cost to Milling, 340,000K

P15-11 (3) Cost to Retail Division in May, \$21,600

P15-12 Cost to Outpatient Clinic, \$60,000

P15-13 Cost to Food Services, \$122,185

P15-14 (2) Overhead rate in Metals, \$19.28

C15-15 (1) Overhead rate, Milling Dept., \$4.05

C15-16 (2b) Molding overhead rate, \$141.30 per DLH

### Chapter 16

P16-9 No check figure

P16-10 (1) Net cash provided by operating activities, \$104

P16-11 (2) Net decrease in cash, \$7

P16-12 (2) Net cash used for investing activities, \$164,000

P16-13 (1) Net cash provided by operating activities, \$39,000

P16-14 (2) Net cash provided by financing activities, \$67,000

P16-15 (2) Net decrease in cash, \$18,000

P16-16 Net cash provided by financing activities, \$310,000

P16-16 (2) Net cash used for investing activities, \$570,000

P16-18 Net cash provided by operating activities, \$356,000

P16-19 Net cash used for investing activities, \$230,000

## Chapter 17

P17-8 (2) Method A, 14%

P17-9 (1b) Current ratio, 2.5 to 1

P17-10 (1d) This year, 27.4 days; (1d) This year, 7.0 times

P17-11 (1a) This year, \$6.16; (1e) This year, 7.3

P17-12 (1a) This year, 6.8%; (2e) This year, \$52

P17-13 No check figure

P17-14 No check figure

P17-15 No check figure

P17-16 (1a) EPS this year, \$4.65; (1e) Book value per share last year, \$17.00

P17-17 (1d) Average collection period this year, 21.0 days; (1f) Times interest earned this year, 7.25 times

P17-18 No check figure

P17-19 No check figure P17-20 No check figure

# **Appendix A**

PA-5 (2) Price elasticity of demand: -1.2239
PA-6 (1b) Target price, \$90
PA-7 (1) Maximum purchase price: \$3,320
PA-8 (1a) Time rate, \$32 per hour
PA-9 (3) Profit-maximizing price: \$13.98

PA-10 (2a) Markup, 75%