

Cost Accounting: A Managerial Emphasis, 14th Edition
Horngren, Datar and Rajan
Check Figures for Exercises and Problems

Chapter 2. An Introduction to Cost Terms and Purposes

- 2-16** 1. S, \$1.1856 D, \$1.0213 R, \$0.6400
- 2-17** 1. yeast D/V, flour D/V, pkg D or I/V, dep ov I/F or V, dep mix I/F or V, rent I/F, ins I/F, fact util I/F and V, fin labor D/V or F, mix mgr I/F, matl hand I/F or V, cust I/F, guard I/F, mach I/F or V, mach maint I/F or V, maint sup I/V, clean sup I/F. 2. Dep. M&M, MDM, MH, Mac., Mac.MP, MS
- 2-18** A. D/V B. I/F C. I/V D. I/F E. D/V F. I/F G. D/V H. I/V
- 2-19** A. D/F B. I/F C. D/V D. D/F E. I/F F. I/V G. I/F H. D/V
- 2-20** A. D/V B. I/F C. D/F D. D/F E. D/V F. I/V G. D/V H. I/F
- 2-21** 2. 100 mins; Plan A; 240 mins; Plan B; 540 mins; Plan C
- 2-22** 1. VC=\$130 FC per ton of capacity per day=\$150,000 (0-100)
\$300,000 (101-200); \$450,000 (201-300) 3. (a) \$196.67 (b) \$211.82
- 2-23** 1. 0 to 49,200 jaw breakers 2. FC=\$13,680 VC=\$0.30 per jaw breaker
3. RelR=49,200 to 98,400 FC=\$16,200 VC=\$0.27 per jaw breaker
- 2-24** 1. DP, DP, DP, M, P, D, P, D, CS, DP
- 2-25** 1. 1. # of Trans 2. # of Emp 3. CPU hrs 4. # of RS 5. # of PO 6. # of Del 7. # of Inv
2. 1. # of JE 2. Sal & Wg 3. # of Trans 4. # of New Prod 5. # of Matl Types
6. Dist Trav 7. # of Cr Sales Trans
- 2-26** 2. Total=\$2,000; \$20/attendee 3. Total=\$3,600; \$7.2/attendee
- 2-27** 1. FC=\$28,000 VC per flange=\$1 (material) + \$2.80(labor)
2. OI \$(7,000) 3. OI \$24,000.
- 2-28** 3. a. inv b. inv c. per d. per e. inv f. per g. per h. per
- 2-29** 1a. Purch \$152,000 1b. COGS \$145,000 2. OI \$34,000
- 2-30** 1a. Purch \$250,000 1b. COGS \$243,000 2. OI \$14,800
- 2-31** 1. \$85 2. \$185 3. \$775 4. \$180 5. \$1,790 6. \$20
- 2-32** 1. COGM=\$136,000 thousand 2. OI=\$47,000 thousand
- 2-33** COGM=\$413,000 thousand OI=\$70,000 thousand
- 2-34** OI=\$50 million COGM=\$645 million
- 2-35** 4. DM used=\$320/unit Dep=\$80/unit 5. Total DM=\$384 mil Total dep=\$80 mil
- 2-36** OI=\$(3) million COGM=\$228 million
- 2-37** 1. Prime costs=\$150 million, Conversion costs=\$105 million
2. Total inv costs=\$213 million Period costs=\$94 million
4. DM used=\$54 per unit Dep=\$3 per unit 5. TDMC=\$162,000,000
Total dep=\$6,000,000 6. (a) \$2 million (b) \$3 million
- 2-38** 1. (a) \$3,266 (b) \$354 (c) \$610 (d) \$4,230
- 2-39** 1. \$210,000 2. \$190,000 3. \$85,000
- 2-40** 1. \$1,440 2. 13,000 units 3. \$5.40 per unit 4. OI \$142,000
- 2-41** 1. \$16.25/unit 3. \$32,500
- 2-42** A. \$20,700 B. \$1,300 C. \$11,800 D. \$6,500

Chapter 10. Determining How Costs Behave

- 10-16** 1. \$1,900 + (\$0.35 x Machine-hours)
- 10-17** 2. $y = \$50$ $y = \$30 + \$0.20X$ $y = \$1X$ 3. Fixed, Mixed, Variable

- 10-18** 1. K 2. B 3. G 4. J 5. I 6. L 7. F 8. K 9. C
- 10-19** a. (1) b. (6) c. (9) d. (2) e. (8) f. (10) g. (3) h. (8)
- 10-20** 1. VC: labor, soap, water, power; FC: depreciation, salaries
2. Total cost \$573,500
- 10-21** 1. (a) Var (b) Mixed (c) Fixed
2. Telephone costs per month = \$70 + (\$0.02 per telephone minute)
3. Monthly utilities cost = \$130 + (\$0.30 per kw hour) + (\$0.02 per telephone minute)
4. \$820
- 10-22** 1. Total costs 2012 \$948,750; 2013 \$1,042,750 2. 2012 \$12.65; 2013 \$13.03
- 10-23** 1. $y = \$100,000 + \$250X$
- 10-24** 1. yes 2. $y = \$10,125 + \$25X$
- 10-25** 1. $y = \$286,000 + \$38X$ 3. \$5,000 based on actual; \$(3,000) based on linear function
- 10-26** 1. (a) \$33; \$0.50 higher than Ryan's offer (b) No
2. Purchasing will cost \$54,000 more
- 10-27** 1. $y = \$48,271 + \$3.93X$ 2. \$21.97 3. \$4,394
- 10-28** 1. Purchase costs = \$840 + (\$4 x Quantity purchased)
2. High-Low: Oct \$12,040 Nov \$13,240 Dec \$10,840
4. Regression: Oct \$12,056 Nov \$13,157 Dec \$10,955
- 10-29** 2-units \$830,000 4-units \$1,507,000 8-units \$2,754,000
- 10-30** 1. 2-units \$875,000 3-units \$1,266,850 4-units \$1,643,600
- 10-31** 1. $y = \$2X + \0 3. \$200,000
- 10-32** 2. Weekly total costs = \$5,664 + (\$37.41 x number of orders per week)
4. (\$10,217) 5. AWO = 512 (rounded)
- 10-33** 3. $y = \$46,667 + \$8.333X$ 4. (a) \$8,723 (b) \$8,333
- 10-34** 3. Inspection costs using units inspected: \$3,232.00
Inspection costs using inspection labor-hours: \$3,321.40
- 10-36** 1. \$5,807,249 2. Difference \$1,962,751
- 10-37** 1. Total costs to produce 2nd thru 7th boats: \$6,504,983
- 10-38** 1a. Regression coefficients: Intercept 12,889.93 X Variable 426.77
1b. Regression coefficients: Intercept 6,573.41 X Variable 56.27
- 10-39** 1. Regression coefficients: Intercept -2,807.10 Setups 58.62 Setup Hrs 52.31
- 10-41** 3. \$1,266,947
- 10-42** 1. Revenue = \$47,801 – (1.92 x Advertising expense)
3. Revenue = \$23,538 + (5.92 x Advertising expense)

Chapter 11. Decision Making and Relevant Information

- 11-16** 1. Difference in favor of remachining \$2,000
2. Difference in favor of replacing \$3,500
- 11-17** 1. Relevant costs per unit: Make \$200 Buy \$260
2. Total relevant costs: Keep \$52,500 Replace \$53,300
- 11-18** 1. (b) \$30,000 increase 2. (b) \$85,000
- 11-19** 1. Yes, increases OI by \$50,000 2. No, decreases OI by \$15,000
3. No, decreases OI by \$25,000
- 11-20** 1. \$339 2. Making CMCBs has a \$410,000 advantage
3. Make CMCBs
- 11-21** 1. \$82,852 2. No 3. Relevant costs: A \$1,901,852 B \$1,858,820
- 11-22** 1. Cola \$5.00 Lemonade \$4.90 Punch \$7.05 NOJ \$8.90

2. Cola \$110.00 Lemonade \$58.80 Punch \$42.30 NOJ \$115.70
 3. Max total CM per day \$1,235.30
- 11-23** Only Model 14 (CM/machine hour is \$9.50 vs. \$9.00 for Model 9)
- 11-24** No, net benefit of closing Stockdale center is \$6 million
- 11-25** 1. OI increases by \$7,000 by closing RI store
 2. OI increases by \$11,000 by opening another store like RI store
- 11-26** First allocate 1,000 machine-hours to Kelly, then allocate remaining 1,000 machine-hours to Taylor resulting in OI = \$16,000
- 11-27** 1. (a) \$8,000 benefit of buying new machine
 (b) \$8,000 benefit of buying new machine 2. No effect.
- 11-28** 1. Replace, benefit of \$337,500 2. \$5,137,500 (= \$4,800,000 + \$337,500)
 3. (i) Upgrade if <18,000 units (ii) Replace if > 18,000 units
 4. Upgrade, since first year OI \$307,500 higher
- 11-29** 1. Accept, OI increases by \$90,000 2a. Reject, OI decreases by \$50,000 2b. \$30
- 11-30** 1. Relevant cost to manufacture = \$1,340,000 2. Cost to purchase = \$1,360,000
- 11-31** 1. Relevant OI: Easyspread 1.0 \$160; Easyspread 2.0 \$165; Introduced immediately
- 11-32** 1. \$49,000 2. Accept offer because OI decreases by \$3,500 3. >\$11
- 11-33** 1. 50,000 units of R3 and zero units of HP6
 2. Yes. OI will increase \$250,000 by producing 130,000 of HP6 and zero of R3
 3. 20,000 of S3; 45,000 of R3; Zero of HP6
- 11-34** 1. Benefit of continuing Tables Line, \$130,000 2. Increase OI by \$128,000
 3. No, benefit of keeping Northern Division open \$140,000
 4. Yes, benefit of opening Southern Division, \$40,000
- 11-35** 1. Buy from Tidnish if production less than 140,000 units
 2. Buy from Tidnish if production less than 190,000 units
- 11-36** 1. No, \$8,000 benefit of making 2. Buy, \$12,000 benefit
 3. No, \$4,800 benefit of making burners
- 11-37** 1. b 2. e, decrease OI by \$16,800 3. c 4. a 5. b 6. e 7. e, \$3.55
- 11-38** 1. CM: A \$75,000; B \$68,500
 2. Fixed cost savings if shutdown: A \$46,000; D \$76,600
- 11-39** 1. CM per pound: A110 \$4.00 B382 \$2.80 C657 \$7.00
 2. Units to produce max CM: A110 200 B382 200 C657 800
- 11-40** 2. 18 Della's Delights and 8 Bonny's Bourbons
- 11-41** 1. Do not drop, difference of \$120
- 11-42** 1. Cost difference by replacing +\$13,000
 2. Lower cash outflow over 2 years by replacing -\$22,000
 3. Purchase price of \$154,000 or less

Chapter 12. Pricing Decisions and Cost Management

- 12-16** 1. OI increases by \$600
- 12-17** 1. If accepted, OI will be \$1,049,000
- 12-18** 1. \$25 per kilo 2. \$45 per kilo
- 12-19** 1. Value-added costs, a Nonvalue-added costs, b, c, g Gray area, d, e, f
 2. Value-added costs, \$865,000 Nonvalue-added costs, \$225,000
 3. Value-added costs, \$817,200 Nonvalue-added costs, \$97,550
- 12-20** 1. Value-added costs, \$475,512; Nonvalue-added costs, \$16,848; Gray area, \$84,240

2. \$208,890 3. \$248,400
- 12-21** 1. \$45,000 2. \$25,000 3. Yes, \$0.31 per tile
- 12-22** 1. \$1,738 2. \$1,550 3. Yes, target costs per unit = \$1,564.20
- 12-23** 1. Price to be charged per room-night \$45; Markup per room 50%
2. No, price reduction lowers total CM.
- 12-24** 1. Total fixed costs \$4,125,000 2. Incr. in OI \$63,700 3. \$8,342.86
- 12-25** 1. BE = 257,400 units 2a. OI \$6,065,000 2b. OI \$7,065,000
- 12-26** 1. OI \$22,000 2. Accept, incr. in OI \$1,000
- 12-27** 1. OLoss \$(3,120) 2. Incr. in OI \$15,120 4. Any price >\$35
- 12-28** 1a. Total sales rev \$5,070,000 1b. SP \$10.14 1c. ROI 9.75% 1d. Markup 4%
2. New selling price \$9.10 3. OI = \$(122,500)
- 12-29** 1. \$39.92 2. No, cost reduction is only \$5.08 per unit
3. Design change has a greater impact
- 12-30** 1. TOI \$1,300,000 2. SP \$12; Markup 27.66% 3. ROI 15.96%
- 12-31** 2. Repair \$460 Replace \$440 3. Repair
- 12-32** 1. Price \$18 2. Price to maximize CM \$19
- 12-33** 1. SR \$11.91 BR \$17.27
2. L \$4.64 per TH; S \$503.275 per setup hr; U \$36.80 per MH
3. Billing rate per TH: HTT \$13.22 ACT \$23.35
- 12-34** 1. \$6,000,000 2. \$2,000,000 3. \$1,850,000
- 12-35** 1. \$500 for pleasure travelers; \$2,100 for business travelers 2. Elasticity of demand
3. Require Saturday night stay to qualify for lower fares.
- 12-36** 1. \$500 is sunk 2. \$35,000
- 12-37** 1. \$1,800 2. Revised cost per unit \$1,752.50; Revised target cost \$1,755
3. Revised cost per unit \$1,977.50; Revised target cost \$1,980
4. Req. 2 OI \$39,500 Req. 3 OI \$40,500

Chapter 13. Strategy, Balanced Scorecard, and Strategic Profitability Analysis

- 13-16** 1. Cost leadership strategy
- 13-17** 1. Yes, consistent with strategy
- 13-18** 1. Product differentiation
- 13-19** 1. OI: 2010 \$1,750,000 2011 \$3,126,700 (Change is \$1,376,700 F)
2. Growth \$725,580 F Price-recovery \$333,788 F Productivity \$580,488 F
- 13-20** MSz \$295,000 F CL \$70,632 F PD \$1,011,068 F Very successful
- 13-21** 1. 500; \$155,000
2. \$77,500 maximum savings (= 250 x \$310)
- 13-22** 1. Product differentiation strategy
- 13-23** 1. 2010: \$2,600,000 2011: \$3,219,500
2. Growth \$280,000 F Price-recovery \$247,500 F Productivity \$92,000 F
- 13-24** MSz \$168,000 F CL \$92,000 F PD \$359,500 F
- 13-25** 1. Manufacturing: 40, \$324,000; Selling and customer service: 20, \$198,000
Design: discretionary cost so cannot be calculated 2. \$243,000
- 13-26** 1. Cost leadership strategy
- 13-27** 1. 2010 \$840,000; 2011 \$975,000
2. Growth \$200,000 F Price-recovery \$254,000 U Productivity \$189,000 F
- 13-28** Industry-market-size factor \$60,000 F Cost leadership \$189,000 F
Product differentiation \$114,000 U; Very successful

- 13-29** 1. Software implementation support: 20, \$82,000
Software development: discretionary cost so cannot be calculated 2. \$61,500
- 13-30** 2. Cost leadership strategy
- 13-31** 1. 2010: \$47,000; 2011: \$79,000 2. Change in OI: Growth \$31,000 F
Price-recovery \$22,500 U; Productivity \$23,500 F Overall \$36,820 F
- 13-32** Change in OI: Industry-MSz factor \$7,440 F Product differentiation \$4,500 U
Cost leadership \$29,060 F Overall \$32,000 F
- 13-33** 1. Mfg. 3,000; \$39,000 S&CS 10; \$5,500 2. \$5,500 max. savings
- 13-35** 1. Yes 2. Yes; Yes 3. No 4. Yes, linkage. To strengthen linkage add gas station performance measures 5. Yes, agree.
- 13-36** 1. Not successful 2. Not helpful 3. Yes
2. No, partial productivity measures cannot be aggregated over different inputs.
3. Use to set targets for next year or compare over multiple periods.
- 13-37** 1. 2012: DM: 1.5 wallets per yard CC: 0.98 wallets per unit of capacity
2011: DM: 1.26 wallets per yard CC: 0.8 wallets per unit of capacity
- 13-38** 1. 0.1776 units of output per \$ of input 2. Increased 21.0%
- 13-39** 1. Product differentiation strategy 2. 2010 \$198,000 2011 \$219,300
3. Growth \$0 Price-recovery \$65,100 U Productivity \$86,400 F
4. Not successful in implementing product differentiation strategy

Chapter 21. Capital Budgeting and Cost Analysis

- 21-17** 1. a. \$135,049 b. 3.73 years c. 20.98% d. 14.3%
- 21-18** 1. a. \$36,048 b. 3.93 years c. 21.96% d. 15.45% e. 30.91%
- 21-19** 1. a. \$9,447 b. 4.80 years c. 16.17% d. 10.82% e. 21.64%
- 21-20** 1. \$(1,830) 2. 2.83 years 3. >4 years 4. 11.44% 5. 6.52%
- 21-21** 1. Plan I \$(3,878,950) Plan II \$(4,239,250) Plan III \$(3,866,850)
- 21-22** 1b. A 3.0 years B 2.25 years C 2.0 years
2. A \$169,000 B \$207,800 C \$(311,500)
- 21-23** 1. NPV \$14,142 2. IRR 16.51% 3. AARR 12.71% 4. 19.23%
- 21-24** 1. a. NPV \$7,013 b. Payback 2.97 years c. IRR 15.59%
2. AARR 10.91%
- 21-25** 1. a. NPV \$6,486 b. Payback 3.49 years c. Disc. Payback 4.51 years d. IRR 13.34%
- 21-26** 1. NPV: Option 1, \$292,500 Option 2, \$301,078 Option 3, NPV \$243,590
- 21-27** 2. Payback: Modernizing 3.04 years Replace 3.63 years
3. NPV: Modernizing \$27,035,424 Replace \$28,540,032
- 21-28** 2. NPV: Modernizing \$15,416,955 Replace \$13,839,302
- 21-29** 1. NPV \$55,248,000 2a. NPV \$(32,378,000) 2b. NPV \$11,436,000
- 21-30** 1. NPV \$5,100 IRR 9.79%
2. High Point: NPV \$23,888 IRR 15.94% Low Point: NPV \$(13,688) IRR 2.82%
3. High Point: NPV \$15,433 IRR 13.25% Low Point: NPV \$(1,610) IRR 7.42%
4. NPV \$(550)
- 21-31** 1. 5.30 years 2. 5.68 years
- 21-32** 1. a. \$11,970 b. Var \$18,240 and Fixed \$640 (in favor of new machine)
c. \$6,030 (in favor of new machine) d. \$8,200 (in favor of new machine)

2. NPV of purchasing the new machine is \$(20,283) 3. \$5,908.24
- 21-33** 1. NPV \$16,948 2. AARR 10%
- 21-34** 2. NPV \$(28,702)
- 21-35** 2. NPV \$246,576
- 21-36** 1. NPV \$83,260 2. NPV \$81,697 4. \$641 5. \$(455)
- 21-37** 1. NPV \$34,615 2. NPV \$(75,995)
3. NPV \$(3,570); IRR 9.83% (for \$260,000 rev.), NPV \$(41,761); IRR 8.02% (for \$240,000 rev.) 4. NPV \$28,384; IRR 11.3% (for \$260,000 rev.), NPV \$(12,265); IRR 9.42% (for \$240,000 rev.)
- 21-38** 2. NPV As Is: \$(1,134,224); NPV Outsourcing: \$(1,145,020)

Chapter 14. Cost Allocation, Customer-Profitability Analysis, and Sales-Variance Analysis

- 14-16** 1. 380%
- 14-17** 1. Alloc. based on revenues: DM A: \$939,840 C: \$2,699,840 D: \$660,160 F: \$(199,840)
Alloc. based on dir. costs: DM A: \$878,240 C: \$3,145,600 D: \$584,000 F: \$(507,840)
Alloc. based on segment mgn.: DM A: \$1,056,880 C: \$1,859,840 D: \$802,960 F: \$380,320
Alloc. based on # of employees: DM A: \$1,100,000 C: \$1,600,000 D: \$850,000 F: \$550,000
2. Number of employees 3. None
- 14-18** 1. H 40.22% R 28.67% C 65.57%
2. Direct costs: H -8.60% R -29.58% C 37.45%
Floor space: H -4.07% R 0.99% C 18.41%
of Employees: H 4.78% R 0.99% C 6.61%
4. No
- 14-19** 1. Pulp 14.9% Paper 21.3% Fibers 20.8% Total 20.0%
2. Pulp -3.2% Paper 28.4% Fibers 22.1% Total 20.0%
3. Paper, most receptive Pulp, least receptive 4. New approach
- 14-20** 1. NAW \$68,375 SAW \$26,790 BSS \$16,905 WM \$28,830
2. Dist-Channel OI: Wholesale \$61,165 Retail \$40,735 Overall \$40,900
3. Dist-Channel OI: Wholesale \$13,165 Retail \$27,735 Overall \$40,900
- 14-21** 1. Avery \$54,150; Okie \$(16,700); Wizard \$84,300; Grainger \$(10,200); Duran \$700
2. Total OI \$112,250
- 14-22** 1. OI: CP \$725 CHP \$(220)
- 14-23** 1. SVV: LT \$14,000 U UT \$8,500 F Total \$5,500 U
2. SQV: LT \$8,000 F UT \$3,000 F Total \$11,000 F
SMV: LT \$22,000 U UT \$5,500 F Total \$16,500 U
- 14-24** 1. SQV: P \$1,200 U C \$1,000 U Total \$2,200 U
2. SMV: P \$960 U C \$2,400 F Total \$1,440 F
SVV: P \$2,160 U C \$1,400 F Total \$760 U
- 14-25** SMV: K \$247,500 U L \$60,500 F OR \$110,000 U Total \$77,000 U
SQV: K \$210,000 F L \$231,000 F OR \$350,000 F Total \$791,000 F
- 14-26** MShareV \$1,243,000 U MSizeV \$2,034,000 F
- 14-27** 2. OGU \$4,193 OGD \$(614) CP \$516 CM \$(623) Total \$3,472

3. OGU \$3,467.50 OGD \$1.00 CP \$566 CM \$(562.50) Total \$3,472
- 14-28** 1. B \$4,700,000 C \$(400,000) D \$4,450,000 Total \$8,750,000
2. B \$3,895,400 C \$460,100 D \$4,394,500 Total \$8,750,000
3. Cake Division
- 14-29** 1. (01) \$75 (02) \$900 (03) \$(50) (04) \$420 (05) \$120 (06) \$35
- 14-30** 1. P \$2,012 Q \$11,545 R \$38,720 S \$41,856 T \$(3,346)
- 14-31** 1. A \$49,330 B \$39,085 C \$(8,660) D \$70,995 E \$89,980
- 14-32** 1. ACM: PPro \$1,922,800 PCE \$6,246,800 PKid \$1,738,800 Total \$9,908,400
BCM: PPro \$2,566,620 PCE \$6,316,640 PKid \$3,707,340 Total \$12,590,600
2. ASM: PalmPro 11% PalmCE 35% PalmKid 54%
BSM: PalmPro 14% PalmCE 37% PalmKid 49%
3. SVV \$1,135,680 U SMV \$486,680 U SQV \$649,000 U
- 14-33** 1. MShareV \$1,038,400 U MSizeV \$389,400 F 3. 388,000 units; 25%
- 14-34** 1. SVV \$37,400 F 2. SQV \$48,400 F 3. SMV \$11,000 U
- 14-35** 1. \$30,750 2. DMEV \$610 U 3. \$0 4. DMYV \$2,050 U DMMV \$1,440 F
- 14-36** 1. \$6,500 2. DLPV \$0 DLEV \$10 U 3. G 60%; E 40% 4. DLYV \$78 U
DLMV \$68 F
- 14-37** 2. a. \$145.83 b. \$86.45 c. \$53.61 d. \$91.83
- 14-38** 1. Arch. CLOI AA \$15,900 BB \$17,900 Total Arch DCOI \$12,525
Comm. CLOI CC \$34,700 DD \$8,030 EE \$3,125 Total Comm. DCOI \$11,815
Overall OI \$(5,445)
2. CC, BB, AA, DD, EE
- 14-39** 2. CLOI SR: \$2,060 SRU: \$3,290 NS: \$3,335 SB: \$1,015 SM: \$2,747
WS: \$10,225
3. CLOI SR: \$2,156 SRU: \$3,290 NS: \$3,463 SB: \$1,127 SM: \$3,067
WS: \$10,705
4. CLOI SR: \$2,225 SRU: \$3,290 NS: \$3,610 SB: \$1,180 SM: \$3,572
WS: \$11,050

Chapter 22. Management Control Systems, Transfer Pricing, and Multinational Considerations

- 22-17** 1. Cost centers 2. Centralized 3. Yes 4a. Profit centers and more decentralized
- 22-18** 1. Centralized 2. Decentralized 3. Profit Centers
- 22-19** 1. (a) Market Price: China to SK \$500 SK to US \$1,340
(b) 200% of Full Costs: China to SK \$640 SK to US \$2,920
(c) 350% of Variable Costs: China to SK \$350 SK to US \$2,450
2. 350% of variable costs
- 22-20** 1. No, sell raw lumber, incremental benefit of \$50 per board foot
2. No, FLD will sell finished lumber, which does not maximize company OI
3. Yes, company OI will be maximized
- 22-21** 1. (a) Market Price: Mining \$6,000,000 Metals \$1,800,000
(b) 110% of Full Costs: Mining \$1,200,000 Metals \$6,600,000
2. Market Price: Mining Div Mgr \$60,000 Metals Div Mgr \$18,000
110% of Full Costs: Mining Div Mgr \$12,000 Metals Div Mgr \$66,000
Mining DM prefers market-based transfer price
Metals DM prefers transfer price at 110% of full costs

- 22-22 1. \$90, the incremental costs 3. Between \$90 and \$125 per unit
- 22-23 1. (a) Full manufacturing cost per unit: U.S. \$0 Austrian \$1,380,000
(b) Market price: U.S. \$975,000 Austrian \$345,000 2. \$800
- 22-24 1. Sell 10,000 units in Austria, net income \$1,380,000
2. No, will not maximize company OI
3. \$900 per unit; results in \$40,000 of additional import duties and income taxes
- 22-25 1. No, do not buy from outside suppliers, net cost \$15,000; set transfer price between \$120 and \$135.
2. Yes, buy from outside suppliers, net benefit \$3,000
3. Yes, buy from outside suppliers, net benefit \$5,000 Transfer price, \$120
- 22-26 Yes, purchase from outside supplier, net benefit \$15,000
- 22-27 1. \$92 per screen 2. \$107 per screen
3. a. First 6,000 units, \$65 per screen Remaining 14,000 units, \$92 per screen
b. All SD's output should be transferred to AD
- 22-28 1. No, transfer should not be made if no excess capacity Yes, \$200 is correct TP
2. Yes, transfer to Div B with transfer price between \$120 and \$150 per unit
3. $30 \times 200 = \$6,000$ increase in company OI;
Div B is indifferent to buying at \$150 because division OI equals \$0
- 22-29 1. \$175 will provide Div A with same OI; Yes, consistent with general guideline
2. (a) \$120 per unit for first 100 units; \$155 per unit for next 100 units; \$195 per unit for next 800 units
(b) Under TP policy: 100 units to Div B = \$70,500 company contribution
vs. 200 units to Div B = \$70,000 company contribution
- 22-30 1. OI \$160,000 2. Harvesting: 200% Bonus \$7,000 MP Bonus \$5,000
Processing: 200% Bonus \$1,000 MP Bonus \$3,000
- 22-31 2. Harvesting: 200% OI \$140,000 MP OI \$60,000

Chapter 23. Performance Measurement, Compensation, and Multinational Considerations

- 23-16 2. A: 10%; 2.0; 20% B: \$5,000,000; 10%; 0.1
C: \$10,000,000; \$50,000; 1%
- 23-17 1. TP 2011: 8.0% TP 2012: \$8,000 \$2,000 TP 2013: \$12,000 \$2,000
LA 2011: 22.0% LA 2012: \$705 LA 2013: \$580 \$4,640 12.5%
GD 2011: 11.5% GD 2012: \$1,625 \$11,525 \$4,350 14.1%
GD 2013: \$1,720 \$16,640 \$4,900 10.3%
- 23-18 1. ROI 6.25% 2. \$780 3. \$764
- 23-19 1. ROI 16% 2. RI \$538,000
- 23-20 2. Charter DM: J-J \$0 J-D \$6,600 2012 \$6,600
Mesa DM: J-J \$10,840 J-D \$11,120 2012 \$21,960
- 23-21 1. Yes, replace
2. ROI: Yr1 7.02%; Yr2 7.84%; Yr3 8.89%; Yr4 10.26%; Yr5 12.12%
- 23-22 1. ROI: NC = 7.5% PP = 9.0% 2. RI: NC = \$(693,000) PP = \$153,000
3. RI: NC = \$(1,485,000) PP = \$(855,000)
4. EVA: NC = \$(1,049,400) PP = \$(390,600)
- 23-23 Radnor, RI based on net BV
Easttown, RI based on gross BV
Marion, ROI based on either gross or net BV
- 23-24 1a. OI \$697,500 1b. Norwegian ROI (based on kroners) 9.5%

2. Comparable ROI for Norwegian 9%
3. U.S. RI \$97,500 Norwegian RI (in U.S. dollars) \$80,000
- 23-25** 1. Clothing: ROI 20.00% RI \$300,000
Cosmetics: ROI 16.00% RI \$600,000
2. EVA: Clothing = \$460,000 Cosmetics = \$450,000
- 23-27** 1. RI \$130,500 2. EVA \$263,925
- 23-28** 1. ROI Historical: Passion 38.24% Kiwi 19.13% Mango 23.46%
ROI Current: Passion 18.49% Kiwi 14.18% Mango 21.88%
- 23-29** 1. Denver ROI 60.25% Seattle ROI 18.21% Sacramento ROI 12.28%
2. Denver ROI 26.67% Seattle ROI 15.96% Sacramento ROI 11.73%
- 23-30** 1. US: ROI 12.5% RI \$27,250 France: ROI 12.8% RI 30,400 eu
France: ROI 13.8% RI \$88,160
- 23-31** 1. ATOI: US \$2,905,764 Germany \$1,865,500 NZ \$705,000
2. ROI: US 12.5% Germany 12.5% NZ 12.5%
3. RI: US \$1,046,075 Germany \$74,620 NZ \$(84,600)
4. ROI : US 20.83% Germany 19.23% NZ 16.67%
- 23-32** 1. Print: ROI 0.255
Internet: ROI 0.065
2. Print: ROI Before 0.255 ROI With 0.251
3a. RI: Print \$3,240 Internet \$(660) 3b. Proposal RI: \$28.0
- 23-34** 1. % of salary: Retail Banking 14% Business Banking 15% CrC 16%
- 23-35** 1a. OI \$(100,000) 1b. OI \$1,500,000
- 23-36** 2. Monroe is emphasizing profit
- 23-37** 1. Ft. Meyers RI: \$542,950 Scottsdale RI: \$495,680 Monterey RI: \$477,150
3. WACC 8.13%
4. Net Book Value: Ft. Meyers EVA: \$319,427.50 Scottsdale EVA \$281,878.90
Monterey EVA \$244,133.70
Gross Book Value: Ft. Meyers EVA: \$140,567.50 Scottsdale EVA \$159,115.90
Monterey EVA \$226,227.70

Chapter 20. Inventory Management, Just-in-Time, and Simplified Costing Methods

- 20-16** 1. EOQ 756 jerseys 2. 14 orders 3. 192 jerseys
- 20-17** 1. EOQ 293 jerseys
- 20-18** 1. 2,200 yards 2. 12 orders 3. 1,056 yards
- 20-19** 1. 600 units 2. \$4,500 3. \$4,500 4. 750 units
- 20-20** 1. RCC \$10: 895; \$8,944 RCC \$20: 447; \$8,944 RCC \$40: 224; \$8,944
2. RTC \$11,169
- 20-21** 1. Incremental increase in OI: \$600,000 2. \$600,000
- 20-22** 1. Implementation of JIT, \$315,000 annual net benefit (= 650,000 - \$335,000)
- 20-23** 1. dr. CGS \$3,432,000 3. Under ideal JIT, there would be zero ending inventories.
- 20-24** 1. dr. CGS \$3,432,000 dr. CC Allocated \$739,200
- 20-25** 1. dr. CGS \$3,432,000 dr. CC Allocated \$750,400
- 20-26** 1. Total costs: #1 \$33,060 #2 \$27,660 #3 \$22,800 #4 \$28,500 #5 \$33,060
EOQ 1,900 packages
2. EOQ 1,378 packages Ordering inv \$8,272 Carrying inv \$8,268
3. \$4,110 net benefit in first year
- 20-27** 1. EOQ 5,000 pairs 2. Reorder points 2,500 pairs

3. Safety stock 250 pairs; Reorder point w/ safety stock 2,750 pairs; EOQ 5,000 pairs
- 20-28**
1. \$2,746,000
 2. EOQ 7,515 J-pods per batch; 6.4 batches per year; Annual Cost = \$2,720,285
 3. JIT Annual cost \$2,637,100
- 20-29**
1. EOQ 4,000 computers
 2. 125 orders per year; Total relevant cost \$200,000
 3. EOQ = 5,164 Total relevant cost \$206,559
- 20-30**
1. Estimated savings of \$37,500
- 20-31**
1. Maji = \$935,930 Induk = \$928,950
- 20-32**
1. dr. CGS \$855,000
- 20-33**
1. dr. CGS \$855,000 dr. CGS (for CC allocation) \$38,000
- 20-34**
1. dr. CGS \$855,000 dr. CGS (for CC allocation) \$19,000
- 20-35**
1. The cost object is the value stream
 2. Value Stream OI: MD = \$210 ED = \$208
- 20-36**
1. Annual difference in favor of JIT \$105,000