

NRAEF ManageFirst
Controlling Foodservice Costs
Answer Key



Upper Saddle River, New Jersey 07458

National Restaurant Association
EDUCATIONAL FOUNDATION 

Chapter 1

What is Cost Control?

Page Activity

2 Test Your Knowledge

- | | | |
|---------|--------|--------|
| 1 True | 3 True | 5 True |
| 2 False | 4 True | 6 True |

6 Cost Cutting Practice

- 1 Answers will vary but should include some of the following ideas: for electricity and gas costs, Julia could evaluate how her operation can reduce usage—turning the thermostat down a few degrees, turning off lights in unused sections of the establishment. For produce delivery fees, perhaps consolidating deliveries with one vendor, using a different produce vendor with lower fees, using fewer produce items on the menu. For milk, seek out other vendors who offer similar products at a lower price, raise menu prices, and consider substituting a different ingredient in place of milk in some recipes.
- 2 Answers will vary, depending on the changes the students suggest. Some possible effects are that if the changes do not affect service, customers might not notice any difference; some menu changes might be unacceptable to customers; noticeable changes might cause customers to go elsewhere.
- 3 Answers will vary. The following is a possible response. While Julia cannot change the rate charged for gas and electricity, she might be able to reduce overall use of gas and electricity and, thereby, reduce the overall cost of these utilities.

8 How Variable Is the Cost?

- | | | |
|-----|-----|----------|
| 1 F | 3 V | 5 F or S |
| 2 S | 4 F | 6 V |

14 Evaluating Cost Control Software

Answers will vary. Each student will have a different way of comparing the three software programs they have selected. However, be sure that the criteria they have selected appear to be appropriate across the three programs. The comparison chart they create should support the reason for their selection of a particular software program. As long as they provide a sound rationale for the selection, you should accept their response. You can also offer any additional insights into the various programs with which you are familiar.

The following is an example of a possible comparison chart:

Software Comparison Chart				
Name of Software	Criteria	Criteria	Criteria	Criteria
Software program 1				
Software program 2				
Software program 3				

16 Review Your Learning

1 A

3 A

5 A

7 A

9 D

2 A

4 B

6 C

8 D

10 D

Chapter 2

A Closer Look at Food Cost

Page Activity

18 Test Your Knowledge

- 1 False 3 True 5 True
2 True 4 True

21 Figuring Food Cost

1 \$4,277 ($\$898 + 4,782 = 5,680 - 1,403 = 4,277$)

2 \$4,088 ($\$2,223 + 14,764 = 16,987 - 12,899 = 4,088$)

NOTE: You can check your work by plugging the answer into the original cost of food sold formula. $\$2,223 + 14,764 = 16,987 - 4,088 = 12,899$.

3 \$1,501 ($\$19,834 + 2,112 = 21,946$; $21,946 - 20,445 = 1,501$)
Original formula: $\$1,501 + 20,445 = 21,946 - 2,112 = 19,834$

☐ \$2,112 (Opening inventory is always the same as the closing inventory of the previous period).

4 \$26,624 ($\$8,375 + 18,249 = 26,624$)
\$19,627 ($\$26,624 - 6,997 = 19,627$)

5 \$3,227 ($\$15,892 - 12,665 = 3,227$)
\$4,313

6 \$24,439 ($\$20,441 + 3,998 = 24,439$)
\$19,774 ($\$24,439 - 4,665 = 19,774$)

23 How to Figure Food Cost Percentages

- 1 30.3% ($\$5,722 \div 18,900 = 0.3027$)
2 33.8% ($\$1.35 \div 4.00 = 0.3375$)
3 45% ($\$1.35 \div 3.00 = 0.45$)

26 Review Your Learning

- 1 C 4 B 7 A
2 B 5 D
3 C 6 C

Chapter 3

Using Standardized Recipes to Determine Standard Portion Cost

Page Activity

28 Test Your Knowledge

1 False

2 True

3 False

4 True

5 True

32 Calculating the Shrinkage of Prime Rib

1 AP price per pound: **\$6.49**

2 EP price per pound: **\$7.54**

3 AP weight: **18 lb**

4 AP net cost: **\$116.82** ($\$6.49 \times 18 = \116.82)

5 Final weight: **13 lb**

6 Final net cost: **\$98.02** ($\$7.54 \times 13 = \98.02)

7 Shrinkage pounds: **5 lb** ($18 - 13 = 5$)

8 Shrinkage percentage: **28%** ($5 \div 18 = 0.277$, or 0.28)

9 Cost per portion: **\$5.66** ($12 \div 16 = 0.75$; $\$7.54 \times 0.75 = \5.655 , or $\$5.66$)

37 Converting a Standardized Recipe to a Recipe Cost Card

Completed Recipe Cost Card:

Item: Braised Celery Recipe Cost Card							
Recipe Amount	Recipe Unit	Ingredients	Invoice Cost	Invoice Unit	Recipe Cost	Recipe Unit	Extended Cost
6.0	lb	Celery	28.75	30 lb	.96	lb	\$ 5.76
4.0	oz	Butter	50.40	24 lb	.13	oz	0.52
3.0	pt	Chicken stock	3.00	1 gal	.38	pt	1.14
to taste		Salt			.10		0.10
to taste		Pepper			.10		0.10
						Total	\$ 7.62
						# portions	24
						Cost/portion	\$ 0.32

39 Review Your Learning

1 D

3 D

5 A

7 B

2 C

4 B

6 C

Chapter 4

Cost Control and the Menu—Determining Selling Prices and Product Mix

Page Activity

42 Test Your Knowledge

- 1 True 3 False 5 True
 2 False 4 False

46 Using Formulas to Figure Menu Selling Prices

1 Labor	4 .30
All other expenses	4 .28
Profit	4 .10
Total	= .68

Menu selling price = \$8.91 ($1.00 - 0.68 = 0.32$; $2.85 \div 0.32 = \$8.91$)

- 2 \$12.82 or rounded up to \$13.00. The number needs to be greater than the answer to ensure you are still making a profit.

$$1.00 \div 0.34 = 2.94 \times \$4.36 = \$12.82$$

- 3 \$5.12 or rounded up to \$5.25. The number needs to be greater than the answer to ensure you are still making a profit.

$$\$1.74 \div 0.34 = \$5.12$$

52 Completing a Menu Product Mix

Menu Product Mix Spreadsheet						
Item	Number Sold	Cost	Selling Price	Food Cost Percentage	Total Cost	Total Sales
Vegetarian meat loaf	354	\$ 1.23	\$ 2.95	42%	\$435.42	\$1,044.30
Vegetable fried rice	487	.89	2.75	32%	433.43	1,339.25
Apple tofu sausage	525	.96	2.85	34%	504.00	1,496.25
Plantain chips	1,001	.36	1.25	29%	360.36	1,251.25
Beverages	1,156	.18	1.00	18%	208.08	1,156.00
Tofu ice cream	194	.22	.85	26%	42.68	164.90
Total				31%	\$1,983.97	\$6,451.95

54 Menu Controls and the Executive Chef

- Answers will vary, but the reasons should relate to the standard food cost, product mix, and income statement.
- Answers will vary. As long as the rationale supports the reasons, accept the responses.
- Answers will vary. The responses should show a thoughtful analysis of the situation and not attack the personality of the person.

56 Burrito Biggies Menu Product Mix Case Study

- Completed menu product mix spreadsheet:

Menu Product Mix Spreadsheet						
Item	Number Sold	Cost	Selling Price	Food Cost Percentage	Total Cost	Total Sales
Taco	890	\$0.32	\$ 0.89	36%	\$ 284.80	\$ 792.10
Burrito	775	\$0.42	1.62	26%	\$ 325.50	1,255.50
Tamale	800	0.29	0.79	37%	232.00	632.00
Chili con queso/chips	520	0.40	1.49	27%	208.00	774.80
Salsa/chips	780	0.26	0.89	29%	202.80	694.20
Beverages	1,650	0.16	0.89	18%	264.00	1,468.50
Total				27%	\$ 1,517.10	\$ 5,617.10

- 2 27%
- 3 The selling price, food cost percentage, and total sales will vary, based upon students' decisions of how to handle the cost increases. However, the composite food cost percentage must remain at 27%.
- 4 Answers will vary. Each presentation should include information about the new menu product mix and how it will offset the increase in cheese cost. There can be multiple changes to the menu product mix—such as price increases and increasing efforts to sell higher quantities of more profitable menu items. The proposals should be reasonable for the circumstances, not increasing an item's price too much, etc. Accept responses that show a thorough analysis of the situation along with a sound rationale that can justify the proposed menu product mix.
- 5 Answers will vary. Students will complete the menu product mix spreadsheet to reflect their proposed menu product mix. Accept responses that accurately reflect their proposals and are mathematically accurate.

58 Review Your Learning

- 1 D ($0.28 + 0.33 + 0.14 = 0.75$; $1.00 - 0.75 = 0.25$; $\$4.50 \div 0.25 = \18.00)
- 2 B ($\$110,575 \div 450,690 = 0.25$; $\$1.90 \div 0.25 = \7.60)
- 3 C ($1.00 \div 0.25 = 4$)
- 4 A
- 5 D
- 6 D
- 7 A

Chapter 5

Controlling Food Costs in Purchasing and Receiving

Page Activity

60 Test Your Knowledge

- 1 False 3 True 5 False 7 False 9 False 11 True
2 True 4 True 6 True 8 False 10 True 12 True

71 Calculating EP Percentage and EP Cost

	Item A	Item B	Item C
AP weight	60 lb	40 lb	80 lb
EP weight	55 lb	35 lb	70 lb
AP price per pound	\$2.75	\$2.25	\$8.50
EP %	92%	88%	88%
EP cost per pound	\$2.99	\$2.56	\$9.66
EP cost per ounce	\$0.19	\$0.16	\$0.60

72 What Would You Do?

- Answers will vary, but the overall consensus should be no. A possible question to ask in reference to this discussion is: What makes a situation ethical?
- Answers will vary, but the overall consensus should be no. A possible question to ask in reference to this discussion is: What makes this situation different from the first and do those differences matter?
- Answers will vary. Possible questions to ask in reference to this discussion are:
 - ☐ Is this the type of behavior that you would support for others on your staff?
 - ☐ Would you be willing to go on TV and tell a reporter about this situation and your acceptance of the gift?
 - ☐ How is it going to influence your relationship with the representative?
 - ☐ What principles do you hold to steadfastly and live by?
- Ethically, no, he should not offer either gift.
- Answers will vary. The following is a possible response: It could increase your costs, but there are other costs to consider as well, such as the model of behavior you are presenting to the rest of your staff and strained vendor relationships if you don't buy from the representative.

76 Calculating Par Stock Amount to Order

- 1** 15 gallons (1.5 usage per day $\times$ 7 days = 10.5 rounded to 11 gallons + 4 gallons safety stock = 15 gallons par stock)

Note: 10.5 gallons was rounded up to 11 gallons.

3 cases. (15 gallons par stock – 5 gallons on hand = 10 gallons needed)

Note: Round up to nearest case order of 12 gallons or 3 cases.

- 2** 92 boxes (13 boxes used per day $\times$ 7 days = 91 boxes + 1 box safety stock = 92 boxes par stock)
37 boxes (92 boxes – 55 boxes = 37 boxes)

77 Calculating the Amount to Purchase Using EP and Yield Percent

- 1** 33.33 pounds AP (12 ounces EP $\div$ 16 ounces AP = 0.75 or 75% yield;
25 pounds EP $\div$ 0.75 yield = 33.33 pounds AP)
- 2** 53.33 pounds AP (2.25 pounds EP $\div$ 3 pounds AP = 0.75 or 75% yield;
40 pounds EP $\div$ 0.75 yield = 53.33 pounds AP)
- 3** 22.39 pounds AP (8 ounces EP $\div$ 12 ounces AP = 0.67 or 67% yield;
15 pounds EP $\div$ 0.67 = 22.39 pounds AP)

78 Calculating the Amount to Purchase in Catering Services

- 1** 341 pounds to purchase (16 ounces $\div$ 4 ounces = 4 SPU; 4 SPU $\times$ 0.55 yield = 2.2 PF;
750 $\div$ 2.2 PF = 340.9 or 341 pounds to purchase)
- 2** 141 pounds to purchase (16 ounces $\div$ 10 ounces = 1.6 SPU; 1.6 SPU $\times$ 0.80 = 1.28 PF;
180 $\div$ 1.28 PF = 140.6 or 141 pounds to purchase)
- 3** 162 pounds to purchase (16 ounces $\div$ 8 ounces = 2 SPU; 2 SPU $\times$ 0.85 = 1.7 PF;
275 $\div$ 1.7 PF = 161.76 or 162 pounds to purchase)

81 Butcher Test for Turkey

- | | |
|--------------------------------------|---------------------------------------|
| 1 Total cost: \$7.25 | 5 Total cost AP: \$7.25 |
| 2 Weight AP: 5 lb 0 oz | 6 Trim Total: \$0.10 |
| 3 Less trim weight: 2 lb 2 oz | 7 Net cost: \$7.15 |
| 4 Yield of item: 2 lb 14 oz | 8 Cost per pound EP: \$2.49/lb |

85 Review Your Learning

- 1** B
- 2** D
- 3** D
- 4** D
- 5** A ($\$3.50 \times 10 \text{ lb} = \35.00 ; $7 \text{ lb} \div 10 \text{ lb} = 0.7$; $\$35.00 \div 0.7 = \50.00)
- 6** B ($30 \text{ lb} \div 0.7 = 42.85$ rounded to 43 lb)
- 7** C
- 8** D
- 9** A ($16 \div 4 = 4$; $4 \times 0.85 = 3.4$; $400 \div 3.4 = 117.64$ rounded to 118 lb)
- 10** D
- 11** C
- 12** B
- 13** D
- 14** A
- 15** B
- 16** D ($7 + 3 = 10$; $10 - [3 - 1] = 10 - 2 = 8$ cases)

Chapter 6

Controlling Food Cost in Storage and Issuing

Page Activity

88 Test Your Knowledge

- 1 False 3 False 5 True 7 True 9 True
 2 False 4 True 6 True 8 True

99 Calculating Averaged Price

- 1 \$26.33 ($\$48 + \$100 + \$168 = \316 ; $\$316 \div 12 = \26.33)
 2 \$20.08 ($\$90 + \$63 + \$88 = \241 ; $\$241 \div 12 = \20.08)
 3 \$12.88 ($\$33 + \$70 = \103; $\$103 \div 8 = \12.88)

101 Inventorying the Produce Section

- 1 See chart below.

Physical Inventory for Miller Grill Restaurant				
Category: Produce	Date:		Counted by:	Recorded by:
Item	Count	Unit	Price	Total
Corn, whole kernel	5	#10 can	5.35	\$ 26.75
Cranberry sauce	4	#10 can	8.15	\$ 32.60
Mushrooms, whole	2	#10 can	10.25	\$ 20.50
Peaches, halves	3	#10 can	4.75	\$ 14.25
Pineapple, crushed	6	#10 can	4.85	\$ 29.10
Tomato, purée	6	#10 can	3.50	\$ 21.00
Tomato, whole peeled	5	#10 can	3.45	\$ 17.25
TOTAL				\$ 161.45

- 2 Answer = \$161.45

104 Calculating Inventory Turnover Rate

- 1 1.24 ($\$20,150 + \$18,950 = \$39,100$; $\$39,100 \div 2 = \$19,550$;
 $\$24,300 \div \$19,550 = 1.242$, or 1.24)
 2 1.21 ($\$12,750 + \$10,500 = \$23,250$; $\$23,250 \div 2 = \$11,625$;
 $\$14,050 \div \$11,625 = 1.208$, or 1.21)
 3 1.23 ($\$27,850 + \$24,350 = \$52,200$; $\$52,200 \div 2 = \$26,100$;
 $\$32,100 \div 26,100 = 1.229$, or 1.23)

107 Inventory Request

- 1** \$2,454 (Opening inventory for July is the same as the closing inventory for June.)
- 2** \$3,105
- 3** \$11,124 ($\$2,454 + \$11,775 = \$14,229$; $\$14,229 - \$3,105 = \$11,124$)
- 4** 30.9% ($\$11,124 \div \$35,890 = 30.9\%$)
- 5** 4.0 ($\$2,454 + \$3,105 = \$5,559$; $\$5,559 \div 2 = \$2,779.50$ or $\$2,780$; $\$11,124 \div \$2,780 = 4.0$)
- 6** Answers will vary. The following is a possible response. It is high with the standard being 1–2. Possible answers as to why: Chinese food preparation uses many fresh vegetables, meats, poultry, and seafood in its preparation. Poor inventory management is also a possibility. There is no definitive answer, but being able to analyze the situation will increase students' knowledge of inventory turnover and its application.
- 7** Answers will vary. Students could select any of the valuation methods. However, make sure that the answer is reasonable with a good justification for selecting that method. The average cost method is probably not a reasonable alternative to use. The actual cost method could be reasonable if students intend to mark the price on everything they receive.

108 Review Your Learning

- 1** C
- 2** B
- 3** C
- 4** A
- 5** B [$(\$565 + \$25) - \$50 = \540]
- 6** C ($\$8,885 + \$12,000 = \$20,885$; $\$20,885 \div 2 = \$10,442.50$; $\$11,450 \div \$10,442.50 = 1.096$, or 1.10)
- 7** C
- 8** D
- 9** A
- 10** C ($\$42.00 + \$58.00 + \$75.00 = \175.00 ; $\$175.00 \div 12 = \14.58)

Chapter 7

Controlling Food Cost in Production

Page Activity

110 Test Your Knowledge

- | | | | |
|---------|---------|--------|---------|
| 1 True | 3 False | 5 True | 7 False |
| 2 False | 4 True | 6 True | 8 True |

115 Calculating Portions

Section 1

- Baked turkey and cornbread dressing: 127 ($27\% \times 470 = 126.9$, or 127)
- Roasted pork tenderloin with apricot glaze: 85 ($18\% \times 470 = 84.6$, or 85)
- Blackened redfish: 56 ($12\% \times 470 = 56.4$, or 56)
- Roast prime rib of beef: 136 ($29\% \times 470 = 136.3$, or 136)
- Macaroni and cheese: 66 ($14\% \times 470 = 65.8$, or 66)

Section 2

- Firehouse spaghetti: 80 ($21\% \times 380 = 79.8$, or 80)
- Parmesan chicken: 90 ($24\% \times 380 = 91.2$, or 91)
- Chicken enchilada: 57 ($15\% \times 380 = 57.0$)
- Cha-cha chicken: 72 ($19\% \times 380 = 72.2$, or 72)
- Coconut shrimp: 80 ($21\% \times 380 = 79.8$, or 80)

Section 3

- Grilled shrimp: 77 ($18\% \times 425 = 76.5$, or 77)
- Seafood Newburg: 111 ($26\% \times 425 = 110.5$, or 111)
- BBQ ribs: 94 ($22\% \times 425 = 93.5$, or 94)
- Steak tips linguini: 60 ($14\% \times 425 = 59.5$, or 60)
- Beef stroganoff: 85 ($20\% \times 425 = 85.0$)

117 Analyzing a Waste Report

- 1 Answers will vary, but it is important that each group states its assumptions regarding the restaurant's situation.
- 2 Answers will vary. Although the report gives a reason why the food was discarded, each group should be able to identify several possibilities for why the food had to be wasted that go beyond the reason for discarding it. The groups should be looking for the possible root cause of the situation or problem. Some reasons could include: improper food production techniques, lack

of or poor training, stock rotation problems, possible purchasing issues, receiving problems, and storage problems.

- 3 Answers will vary, but groups should be able to identify several ways to solve the root cause of the waste. For example, if waste was caused by storage problems, the groups should suggest a solution that will eliminate or reduce storage problems.
- 4 Answers will vary. Each group might have a different strategy it would use to address this question. As long as each group provides a sound rationale for their decisions, accept their responses. However, at the same time, challenge them on their thinking.

120 Converting a Recipe

- 1 Conversion factor: 1.8 (90 desired yield ÷ 50 recipe yield = 1.8)

Chicken à la King Recipe					
Ingredient	Recipe amount	New amount	Conversion factor	Converted amount	Recipe amount
Chicken, diced	8 lb	128 oz	1.8	230.4 oz	14 lb
Butter	1 lb	16 oz	1.8	28.8 oz	1.75 lb
Green pepper, chopped	12 oz		1.8	21.6 oz	1 lb 6 oz
Mushrooms, sliced	1 lb	16 oz	1.8	28.8 oz	1.75 lb
Pimentos, sliced	14 oz		1.8	25.2 oz	1lb 10 oz
Heavy cream	3 qt	96 oz	1.8	172.8 oz	1 gal 3 pt
Egg yolks	1 doz	12 each	1.8	21.6 ea	22 ea
Salt	4 tsp		1.8	7.2 tsp	2 Tbsp 1 tsp
Sherry	1 qt	32 oz	1.8	57.6 oz	1 qt 3 cups
White pepper	to taste				to taste

- 2 Answers will vary in the Recipe Amount column. Accept answers as long as they are reasonable.

121 Researching and Converting Recipes

Answers will vary. Given that this assignment will produce individual charts, accept students' examples as long as the ingredients are listed and the student shows how he or she arrived at the answer.

123 Calculating Recipe Yield

- 1 Corned beef: 48 oz
Potatoes: 32 oz
Onions: 16 oz
Beef stock: 32 oz
- 2 25 (128 ÷ 5 = 25.6, or 25)

124 Calculating Recipe Yield: Garden of Eaten Restaurant

1 $168 \text{ oz} (8 + 128 + 32 = 168)$

2 $24 (168 \text{ oz} \div 7 \text{ oz} = 24)$

3

Crab Bisque				
Ingredient	New amount	Conversion factor	Converted amount	Recipe amount
1 c roux	8 oz	0.17	1.4 oz	3 Tbsp
1 gal milk	128 oz	0.17	21.8 oz	3 cups
1 qt crabmeat	32 oz	0.17	5.4 oz	1-7 oz can
Salt, to taste				To taste
Pepper, to taste				To taste

Math for the conversion factor:

$(4 \text{ portions} \times 7 \text{ oz} = 28 \text{ oz desired amount};$

$28 \text{ oz desired amount} \div 168 \text{ oz recipe amount} = 0.1666 \text{ or } 0.17 \text{ conversion factor})$

- 4 Answers will vary. The following are some possible responses: Use good judgment in adding spice. Taste the bisque first and then add spices as needed. Converting recipes to a lower yield should cause little variation in the final outcome. Accept any other reasons that have a sound foundation.

126 Review Your Learning

1 D

2 C $(450 \times 0.27 = 121.5, \text{ or } 122)$

3 B $(122 \div 25 = 4.88, \text{ or } 4.9)$

4 C (Note: A whole pie must be made, thus the round up to 7.)

5 C

6 D $(16 \text{ oz} \times 0.9 = 14.4 \text{ oz})$

7 C

8 C

9 A

10 D

Chapter 8

Controlling Food Cost in Service and Sales

Page Activity

130 Test Your Knowledge

- 1 True 3 True 5 False 7 False 9 True 11 False
 2 False 4 True 6 False 8 True 10 True

143 Benefits to Accepting Credit Cards

- 1 Answers will vary. As long as the students provide responses that show they reviewed and compared the benefits, accept their responses.
 2 Answers will vary. As long as the students provide responses that show they reviewed and compared the benefits, accept their responses.
 3 Answers will vary. As long as the students provide responses that show they reviewed and compared the benefits, accept their responses. You might want to ask them additional questions to ensure they have a sound reason for their thinking.

146 Figuring the Daily Sales Report

Daily Sales Report	
Date: Friday, September 20	Location: Shift:
Prepared by:	Verified by:
Register reading ending	\$ 37,532.50
Less: register reading start	\$ 35,475.01
= Sales	\$ 2,057.49
Currency/coin turned in	\$ 1,211.30
Checks turned in	\$ 72.78
Charges turned in	\$ 944.85
= Total amount turned in	\$ 2,228.93
Less: bank	\$ 175.00
= Net turned in	\$ 2,053.93
Sales	\$ 2,057.49
Less: net amount turned in	\$ 2,053.93
= Difference	\$ 3.56
Reason	

- 1 Answers will vary. The following is a possible response. Although the register indicated sales of \$2057.49, the net amount turned in was only \$2053.93, indicating a short of \$3.56. Some reasons for this could simply be poor counting of money while making change, or it could be the start of some minor theft. However, this amount is still minor and probably does not indicate actual theft.
- 2 Answers will vary. The following is a possible response. Cathy needs to put some controls in place and train her workers on how to handle cash. She should also do more monitoring and follow through to ensure that these minor discrepancies are minimized.

147 Theft and Reputation—What Should I Do?

- 1 Answers will vary. Some students will line up with termination, while others will not. There is no easy solution to this situation. As long as the class has discussed this thoroughly and reviewed all the options and pros and cons, accept their solutions.
- 2 Answers will vary. As long as the class offers a rationale and sound reason for how they would handle these groups, accept their responses. Add any other insights you might want the class to think about.
- 3 The following is a possible response: This situation could have been avoided if controls had been established in the first place. While controls many seem stringent, most employees like to work in a structured environment.

149 Review Your Learning

- | | | | |
|-----|-----|------|------|
| 1 C | 5 D | 9 A | 13 C |
| 2 B | 6 C | 10 D | 14 D |
| 3 B | 7 A | 11 B | |
| 4 C | 8 D | 12 A | |

Chapter 9

Controlling Labor Costs

Page Activity

152 Test Your Knowledge

- | | | | | | |
|--------|---------|--------|---------|----------|---------|
| 1 True | 3 True | 5 True | 7 True | 9 False | 11 True |
| 2 True | 4 False | 6 True | 8 False | 10 False | |

161 Calculating Payroll Dollars Available

- 1 \$4,420 ($\$17,000 \times 0.26 = \$4,420$)
- 2 \$2,723 ($\$4,420 - \$1,697 = \$2,723$)
- 3 \$1,373 ($\$2,723 - \$1,350 = \$1,373$)

164 Forecasting Positions for the Master Schedule

- 1 3 ($300 \div 5 = 60$; $60 \div 20 = 3$)
- 2 \$101.25 (3 servers for 5 hours = 15 hours; $\$6.75 \times 15 = \101.25)
- 3 \$176.70 ($\$277.95 - \$101.25 = \176.70)

171 Calculating Turnover Rate Percentage

- 1 256% ($87 \div 34 = 2.56 \times 100 = 256\%$)
- 2 225% ($126 \div 56 = 2.25 \times 100 = 225\%$)
- 3 67% ($56 \div 84 = .67 \times 100 = 67\%$)

177 Activity Labor Costs and Personnel Issues

- 1 Answers will vary. The groups should show a sound rationale with supporting reasons for their answers.
- 2 Answers will vary. The following are possible responses: I appreciate your experience; however, we have strict hiring practices and standards. I could review your performance after six months and see if there can be an adjustment. This would not be fair to my other loyal employees.
- 3 Answers will vary. The following are possible responses: As a manager, you could say nothing, since each individual's wages are confidential. Terry comes with much experience. Terry has loyal customers at her other restaurant who she will be able to bring into our restaurant to increase sales.
- 4 Answers will vary. The following are some possible factors to consider: Budget, fringe benefits, job description, labor cost, payroll dollars, quality and quantity standards, and sales projections.

149 Review Your Learning

- 1** C
- 2** C
- 3** D
- 4** C ($\$80,000 \times 0.28 = \$22,400$)
- 5** B ($\$22,400 \times 0.077 = \$1,724.8$ or $\$1,725$)
- 6** C ($\$22,400 - \$1,725 = \$20,675 - \$1,500 = \$19,175$)
- 7** A ($\$19,175 - \$8,000 = \$11,175$)
- 8** A ($\$11,175 - \$840 = \$10,335 \div 7.15 = 1,445.45$ or $1,445$)
- 9** D ($50 \div 12 = 4.166$ or 4.17 ; $4.17 \times 100 = 417\%$)
- 10** D
- 11** D
- 12** B
- 13** C
- 14** A
- 15** C
- 16** D

Appendix

Page Activity

189 Review Your Learning

- 1 \$34,240 ($\$856,000 \times 0.04 = \$34,240$)
- 2 B
- 3 15.78, or 16 percent ($710 \div 4,500 = 0.1578$)
- 4 See chart below.

10 cases lettuce	at \$35.76/case	\$	357.60
12 cases tomatoes	at \$25.00/case	\$	300.00
6 cases radishes	at \$14.28/case	\$	85.68
4 cases strawberries	at \$47.84/case	\$	191.36
Subtotal		\$	934.64
Next-day delivery charge 7% of order subtotal		\$	65.42
Invoice total		\$	1,000.06

- 5 45% ($200 + 250 = 450$; $450 \div 1000 = 0.45$)