

CHAPTER 9

INVENTORIES: ADDITIONAL VALUATION ISSUES

MULTIPLE CHOICE—Conceptual

Answer	No.	Description
d	1.	Knowledge of lower of cost or market valuations.
d	2.	Appropriate use of LCM valuation.
c	3.	Definition of "market" under LCM.
b	4.	Definition of "ceiling."
a	5.	Definition of "designated market value."
c	6.	Application of lower of cost or market valuation.
d	7.	Effect of inventory write-down.
b	8.	Net realizable value under LCM.
d	9.	Definition of "net realizable value."
a	10.	Valuation of inventory at net realizable value.
d	11.	Appropriate use of net realizable value.
a	12.	Material purchase commitments.
a	13.	Loss recognition on purchase commitments.
d	14.	Appropriate use of the gross profit method.
b	15.	Appropriate use of the gross profit method.
d	16.	Advantage of retail inventory method.
c	17.	Conventional retail inventory method.
a	18.	Assumptions of the retail inventory method.
d	19.	Appropriate use of the retail inventory method.
b	20.	Markdowns and the conventional retail method.
a	21.	Markups and the conventional retail method.
b	*22.	Knowledge of the cost ratio for retail inventory methods.
c	23.	Inventory turnover ratio.
c	*24.	Dollar-value LIFO retail method.

MULTIPLE CHOICE—Computational

Answer	No.	Description
a	25.	Value inventory at LCM.
c	26.	Relative sales method of inventory valuation.
c	27.	Entry for purchase commitment loss.
d	28.	Calculate cost of goods sold given a markup on cost.
d	29.	Calculate merchandise purchases given a markup on cost.
a	30.	Calculate total sales from cost information.
a	31.	Markup on cost equivalent to a markup on selling price.
b	32.	Estimate ending inventory using gross profit method.
c	33.	Calculate ending inventory using gross profit method

*This topic is dealt with in an Appendix to the chapter.

MULTIPLE CHOICE—Computational (cont.)

Answer	No.	Description
b	34.	Calculate ending inventory using gross profit method.

- | | | |
|---|------|--|
| a | 35. | Estimate cost of inventory destroyed by fire. |
| a | 36. | Determine items to be included in inventory. |
| b | 37. | Calculate cost of retail ratio to approximate LCM. |
| b | 38. | Calculate ending inventory at retail. |
| a | 39. | Calculate cost to retail ratio approximating LCM. |
| b | 40. | Calculate cost of inventory lost using retail method. |
| b | *41. | Calculate ending inventory at cost using LIFO retail. |
| c | *42. | Determine cost to retail ratio using LIFO retail. |
| b | 43. | Calculate inventory turnover ratio. |
| d | 44. | Determine cost to retail ratio to approximate LCM. |
| c | *45. | Determine cost to retail ratio using LIFO cost. |
| d | 46. | Calculate ending inventory at retail. |
| a | 47. | Calculate ending inventory using conventional retail. |
| a | *48. | Calculate ending inventory cost using dollar-value LIFO. |
| b | *49. | Calculate cost of ending inventory using LIFO retail. |
| a | *50. | Calculate ending inventory cost using dollar-value LIFO. |

MULTIPLE CHOICE—CPA Adapted

Answer	No.	Description
d	51.	Recognizing a loss due to LCM.
b	52.	Appropriate use of replacement costs in LCM.
b	53.	Identification of the designated market value.
a	54.	Estimate cost of inventory lost by theft.
a	55.	Determine cost of ending inventory using retail method.
d	56.	Determine cost of ending inventory using retail method.
a	*57.	Calculate ending inventory using LIFO retail.

EXERCISES

Item	Description
E9-58	Lower of cost or market.
E9-59	Lower of cost or market.
E9-60	Lower of cost or market.
E9-61	Lower of cost or market.
E9-62	Lower of cost or market.
E9-63	Relative sales value method.
E9-64	Gross profit method.
E9-65	Gross profit method.
E9-66	Gross profit method.
E9-67	Comparison of inventory methods.

<u>L.O. 6</u>		<u>L.O. 7</u>		<u>L.O. *8</u>	
<u>No.</u>	<u>Type</u>	<u>No.</u>	<u>Type</u>	<u>No.</u>	<u>Type</u>
16.	MC	23.	MC	22.	MC
17.	MC	43.	MC	24.	MC
18.	MC	62.	E	41.	MC
19.	MC			42.	MC
20.	MC			45.	MC
21.	MC			48.	MC
22.	MC			49.	MC
28.	MC			50.	MC
29.	MC			57.	MC
30.	MC			67.	E
31.	MC			70.	P
36.	MC			71.	P
37.	MC			72.	P
38.	MC			73.	P
40.	MC			74.	P
44.	MC				
46.	MC				
47.	MC				
55.	MC				
67.	E				
69.	P				

Choice

Note: MC = Multiple

E = Exercise

P = Problem

MULTIPLE CHOICE—Conceptual

1. Which of the following is true about lower of cost or market?
 - a. It is inconsistent because losses are recognized but not gains.
 - b. It usually understates assets.
 - c. It can increase future income.
 - d. All of these.

2. The primary basis of accounting for inventories is cost. A departure from the cost basis of pricing the inventory is required where there is evidence that when the goods are sold in the ordinary course of business their
 - a. selling price will be less than their replacement cost.
 - b. replacement cost will be more than their net realizable value.
 - c. cost will be less than their replacement cost.
 - d. future utility will be less than their cost.

3. When valuing raw materials inventory at lower of cost or market, what is the meaning of the term "market"?
 - a. Net realizable value
 - b. Net realizable value less a normal profit margin
 - c. Current replacement cost
 - d. Discounted present value

4. In no case can "market" in the lower of cost or market rule be more than
 - a. estimated selling price in the ordinary course of business.
 - b. estimated selling price in the ordinary course of business less reasonably predictable costs of completion and disposal.
 - c. estimated selling price in the ordinary course of business less reasonably predictable costs of completion and disposal and an allowance for an approximately normal profit margin.
 - d. estimated selling price in the ordinary course of business less reasonably predictable costs of completion and disposal, an allowance for an approximately normal profit margin, and an adequate reserve for possible future losses.

5. Designated market value
 - a. is always the middle value of replacement cost, net realizable value, and net realizable value less a normal profit margin.
 - b. should always be equal to net realizable value.
 - c. may sometimes exceed net realizable value.
 - d. should always be equal to net realizable value less a normal profit margin.

6. Lower of cost or market
 - a. is most conservative if applied to the total inventory.
 - b. is most conservative if applied to major categories of inventory.
 - c. is most conservative if applied to individual items of inventory.
 - d. must be applied to major categories for taxes.

7. An item of inventory purchased this period for \$15.00 has been incorrectly written down to its current replacement cost of \$10.00. It sells during the following period for \$30.00, its normal selling price, with disposal costs of \$3.00 and normal profit of \$12.00. Which of the following statements is *not* true?
 - a. The cost of sales of the following year will be understated.
 - b. The current year's income is understated.
 - c. The closing inventory of the current year is understated.
 - d. Income of the following year will be understated.

8. When inventory declines in value below original (historical) cost, and this decline is considered other than temporary, what is the maximum amount that the inventory can be valued at?
 - a. Sales price
 - b. Net realizable value
 - c. Historical cost
 - d. Net realizable value reduced by a normal profit margin

9. Net realizable value is
 - a. acquisition cost plus costs to complete and sell.
 - b. selling price.
 - c. selling price plus costs to complete and sell.
 - d. selling price less costs to complete and sell.

10. If a unit of inventory has declined in value below original cost, but the market value exceeds net realizable value, the amount to be used for purposes of inventory valuation is
 - a. net realizable value.
 - b. original cost.
 - c. market value.
 - d. net realizable value less a normal profit margin.

11. Inventory may be recorded at net realizable value if
 - a. there is a controlled market with a quoted price.
 - b. there are no significant costs of disposal.
 - c. the inventory consists of precious metals or agricultural products.
 - d. all of these.

12. If a material amount of inventory has been ordered through a formal purchase contract at the balance sheet date for future delivery at firm prices,
 - a. this fact must be disclosed.
 - b. disclosure is required only if prices have declined since the date of the order.
 - c. disclosure is required only if prices have since risen substantially.
 - d. an appropriation of retained earnings is necessary.

13. The credit balance that arises when a net loss on a purchase commitment is recognized should be
 - a. presented as a current liability.
 - b. subtracted from ending inventory.
 - c. presented as an appropriation of retained earnings.
 - d. presented in the income statement.

14. The gross profit method of inventory valuation is *invalid* when
 - a. a portion of the inventory is destroyed.
 - b. there is a substantial increase in inventory during the year.
 - c. there is no beginning inventory because it is the first year of operation.
 - d. none of these.

15. Which statement is *not* true about the gross profit method of inventory valuation?
 - a. It may be used to estimate inventories for interim statements.
 - b. It may be used to estimate inventories for annual statements.
 - c. It may be used by auditors.
 - d. None of these.

16. A major advantage of the retail inventory method is that it
 - a. provides reliable results in cases where the distribution of items in the inventory is different from that of items sold during the period.
 - b. hides costs from competitors and customers.
 - c. gives a more accurate statement of inventory costs than other methods.
 - d. provides a method for inventory control and facilitates determination of the periodic inventory for certain types of companies.

17. An inventory method which is designed to approximate inventory valuation at the lower of cost or market is
 - a. last-in, first-out.
 - b. first-in, first-out.
 - c. conventional retail method.
 - d. specific identification.

18. The retail inventory method is based on the assumption that the
 - a. final inventory and the total of goods available for sale contain the same proportion of high-cost and low-cost ratio goods.
 - b. ratio of gross margin to sales is approximately the same each period.
 - c. ratio of cost to retail changes at a constant rate.
 - d. proportions of markups and markdowns to selling price are the same.

19. Which statement is true about the retail inventory method?
 - a. It may not be used to estimate inventories for interim statements.
 - b. It may not be used to estimate inventories for annual statements.
 - c. It may not be used by auditors.
 - d. None of these.

20. When the conventional retail inventory method is used, markdowns are commonly ignored in the computation of the cost to retail ratio because
 - a. there may be no markdowns in a given year.
 - b. this tends to give a better approximation of the lower of cost or market.
 - c. markups are also ignored.
 - d. this tends to result in the showing of a normal profit margin in a period when no markdown goods have been sold.

21. To produce an inventory valuation which approximates the lower of cost or market using the conventional retail inventory method, the computation of the ratio of cost to retail should
- include markups but not markdowns.
 - include markups and markdowns.
 - ignore both markups and markdowns.
 - include markdowns but not markups.
- *22. When calculating the cost ratio for the retail inventory method,
- if it is the conventional method, the beginning inventory is included and markdowns are deducted.
 - if it is the LIFO method, the beginning inventory is excluded and markdowns are deducted.
 - if it is the LIFO method, the beginning inventory is included and markdowns are not deducted.
 - if it is the conventional method, the beginning inventory is excluded and markdowns are not deducted.
23. The inventory turnover ratio is computed by dividing the cost of goods sold by
- beginning inventory.
 - ending inventory.
 - average inventory.
 - number of days in the year.
- *24. When using dollar-value LIFO, if the incremental layer was added last year, it should be multiplied by
- last year's cost ratio and this year's index.
 - this year's cost ratio and this year's index.
 - last year's cost ratio and last year's index.
 - this year's cost ratio and last year's index.

Multiple Choice Answers—Conceptual

- | | | | | | |
|------|------|-------|-------|-------|--------|
| 1. d | 5. a | 9. d | 13. a | 17. c | 21. a |
| 2. d | 6. c | 10. a | 14. d | 18. a | *22. b |
| 3. c | 7. d | 11. d | 15. b | 19. d | 23. c |
| 4. b | 8. b | 12. a | 16. d | 20. b | *24. c |

Solutions to those Multiple Choice questions for which the answer is “none of these.”

- The gross profit percentage applicable to the goods in ending inventory is different from the percentage applicable to the goods sold during the period.
- Many answers are possible.

MULTIPLE CHOICE—Computational

25. Milo Corporation has two products in its ending inventory, each accounted for at the lower of cost or market. A profit margin of 30% on selling price is considered normal for each product. Specific data with respect to each product follows:

	<u>Product #1</u>	<u>Product #2</u>
Historical cost	\$30.00	\$ 60.00
Replacement cost	35.00	54.00
Estimated cost to dispose	10.00	26.00
Estimated selling price	70.00	120.00

In pricing its ending inventory using the lower of cost or market, what unit values should Milo use for products #1 and #2, respectively?

- a. \$30.00 and \$58.00.
 b. \$39.00 and \$58.00.
 c. \$39.00 and \$60.00.
 d. \$35.00 and \$54.00.
26. At a lump-sum cost of \$36,000, Sealy Company recently purchased the following items for resale:

<u>Item</u>	<u>No. of Items Purchased</u>	<u>Resale Price Per Unit</u>
M	4,000	\$2.50
N	2,000	8.00
O	6,000	4.00

The appropriate cost per unit of inventory is:

- | | <u>M</u> | <u>N</u> | <u>O</u> |
|----|----------|----------|----------|
| a. | \$2.50 | \$8.00 | \$4.00 |
| b. | \$1.55 | \$9.93 | \$1.66 |
| c. | \$1.80 | \$5.76 | \$2.88 |
| d. | \$3.00 | \$3.00 | \$3.00 |
27. During 2001, Terry Co., a manufacturer of chocolate candies, contracted to purchase 100,000 pounds of cocoa beans at \$3.00 per pound, delivery to be made in the spring of 2002. Because a record harvest is predicted for 2002, the price per pound for cocoa beans had fallen to \$2.30 by December 31, 2001.

Of the following journal entries, the one which would properly reflect in 2001 the effect of the commitment of Terry Co. to purchase the 100,000 pounds of cocoa is

- | | | | |
|----|---|---------|---------|
| a. | Cocoa Inventory | 300,000 | |
| | Accounts Payable | | 300,000 |
| b. | Cocoa Inventory | 230,000 | |
| | Loss on Purchase Commitments | 70,000 | |
| | Accounts Payable | | 300,000 |
| c. | Estimated Loss on Purchase Commitments | 70,000 | |
| | Estimated Liability on Purchase Commitments | | 70,000 |
| d. | No entry would be necessary in 2001. | | |

Use the following information for questions 28 and 29.

Sloan Company, a wholesaler, budgeted the following sales for the indicated months:

	<u>June</u>	<u>July</u>	<u>August</u>
Sales on account	\$2,790,000	\$2,860,000	\$2,980,000
Cash sales	180,000	200,000	260,000

Total sales	<u>\$2,970,000</u>	<u>\$3,060,000</u>	<u>\$3,240,000</u>
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All merchandise is marked up to sell at its invoice cost plus 20%. Merchandise inventories at the beginning of each month are at 30% of that month's projected cost of goods sold.

28. The cost of goods sold for the month of June is anticipated to be
- \$2,232,000.
 - \$2,325,000.
 - \$2,356,000.
 - \$2,475,000.
29. Merchandise purchases for July are anticipated to be
- \$2,448,000.
 - \$3,114,000.
 - \$2,550,000.
 - \$2,595,000.
30. Hernandez Company had a gross profit of \$240,000, total purchases of \$280,000, and an ending inventory of \$160,000 in its *first* year of operations as a retailer. Hernandez's sales in its first year must have been
- \$360,000.
 - \$440,000.
 - \$120,000.
 - \$400,000.
31. A markup of 40% on cost is equivalent to what markup on selling price?
- 29%
 - 35%
 - 40%
 - 60%
32. Miller, Inc. estimates the cost of its physical inventory at March 31 for use in an interim financial statement. The rate of markup on cost is 25%. The following account balances are available:
- | | |
|--------------------|-----------|
| Inventory, March 1 | \$220,000 |
| Purchases | 172,000 |
| Purchase returns | 8,000 |
| Sales during March | 350,000 |
- The estimate of the cost of inventory at March 31 would be
- \$34,000.
 - \$104,000.
 - \$121,500.
 - \$78,000.
33. On January 1, 2001, the merchandise inventory of Colter, Inc. was \$1,000,000. During 2001 Colter purchased \$2,000,000 of merchandise and recorded sales of \$2,500,000. The gross profit rate on these sales was 25%.
- What is the merchandise inventory of Colter at December 31, 2001?
- \$500,000.
 - \$625,000.
 - \$1,125,000.
 - \$1,875,000.
34. For 2001, cost of goods available for sale for Vale Corporation was \$900,000. The gross profit rate was 30%. Sales for the year were \$800,000. What was the amount of the ending inventory?
- \$0.
 - \$340,000.

- c. \$270,000.
 - d. \$240,000.
35. On April 15 of the current year, a fire destroyed the entire uninsured inventory of a retail store. The following data are available:

Sales, January 1 through April 15	\$450,000
Inventory, January 1	75,000
Purchases, January 1 through April 15	375,000
Markup on cost	25%

- The amount of the inventory loss is estimated to be
- a. \$90,000.
 - b. \$45,000.
 - c. \$112,500.
 - d. \$75,000.
36. The inventory account of Lance Company at December 31, 2001, included the following items:

	<u>Inventory Amount</u>
Merchandise out on consignment at sales price (including markup of 40% on selling price)	\$20,000
Goods purchased, in transit (shipped f.o.b. shipping point)	12,000
Goods held on consignment by Lance	10,000
Goods out on approval (sales price \$7,600, cost \$6,400)	7,600

- Based on the above information, the inventory account at December 31, 2001, should be reduced by
- a. \$19,200.
 - b. \$27,600.
 - c. \$31,200.
 - d. \$23,200.

37. Flynn Sales Company uses the retail inventory method to value its merchandise inventory. The following information is available for the current year:

	<u>Cost</u>	<u>Retail</u>
Beginning inventory	\$ 36,000	\$ 60,000
Purchases	174,000	240,000
Freight-in	3,000	—
Net markups	—	10,200
Net markdowns	—	12,000
Employee discounts	—	1,200
Sales	—	246,000

If the ending inventory is to be valued at the lower of cost or market, what is the cost to retail ratio?

- $\$213,000 \div \$300,000$
- $\$213,000 \div \$310,200$
- $\$210,000 \div \$312,000$
- $\$213,000 \div \$298,200$

Use the following information for questions 38 through 42.

The following data concerning the retail inventory method are taken from the financial records of Stone Company.

	<u>Cost</u>	<u>Retail</u>
Beginning inventory	\$ 98,000	\$140,000
Purchases	448,000	640,000
Freight-in	12,000	—
Net markups	—	40,000
Net markdowns	—	28,000
Sales	—	672,000

38. The ending inventory at retail should be
- \$148,000.
 - \$120,000.
 - \$128,000.
 - \$84,000.
39. If the ending inventory is to be valued at approximately the lower of cost or market, the calculation of the cost to retail ratio should be based on goods available for sale at (1) cost and (2) retail, respectively of
- \$558,000 and \$820,000.
 - \$558,000 and \$792,000.
 - \$558,000 and \$780,000.
 - \$546,000 and \$780,000.
40. If the foregoing figures are verified and a count of the ending inventory reveals that merchandise actually on hand amounts to \$108,000 at retail, the business has
- realized a windfall gain.
 - sustained a loss.
 - no gain or loss as there is close coincidence of the inventories.
 - none of these.
- *41. Assuming no change in the price level if the LIFO inventory method were used in conjunction with the data, the ending inventory at cost would be
- \$85,200.
 - \$84,000.
 - \$81,600.
 - \$86,400.

- *42. Assuming that the LIFO inventory method were used in conjunction with the data and that the inventory at retail had increased during the period, then the computation of retail in the cost to retail ratio would
- exclude both markups and markdowns and include beginning inventory.
 - include markups and exclude both markdowns and beginning inventory.
 - include both markups and markdowns and exclude beginning inventory.
 - exclude markups and include both markdowns and beginning inventory.
43. The 2001 financial statements of Young Company reported a beginning inventory of \$80,000, an ending inventory of \$120,000, and cost of goods sold of \$400,000 for the year. Young's inventory turnover ratio for 2001 is
- 5.0 times.
 - 4.0 times.
 - 3.3 times.
 - 2.9 times.

Use the following information for questions 44 through 48.

Trent Co. uses the retail inventory method. The following information is available for the current year.

	<u>Cost</u>	<u>Retail</u>
Beginning inventory	\$117,000	\$183,000
Purchases	442,000	623,000
Freight-in	8,000	—
Employee discounts	—	3,000
Net markups	—	22,000
Net Markdowns	—	30,000
Sales	—	585,000

44. If the ending inventory is to be valued at approximately lower of average cost or market, the calculation of the cost ratio should be based on cost and retail of
- \$450,000 and \$645,000.
 - \$450,000 and \$642,000.
 - \$559,000 and \$825,000.
 - \$567,000 and \$828,000.
- *45. If the ending inventory is to be valued at approximately LIFO cost, the calculation of the cost ratio should be based on cost and retail of
- \$567,000 and \$828,000.
 - \$567,000 and \$798,000.
 - \$450,000 and \$615,000.
 - \$450,000 and \$645,000.
46. The ending inventory at retail should be
- \$240,000.
 - \$225,000.
 - \$216,000.
 - \$210,000.
47. The approximate cost of the ending inventory by the conventional retail method is
- \$143,850.
 - \$142,380.
 - \$147,000.
 - \$153,720.
- *48. Assuming that the LIFO inventory method is used, that the beginning inventory is the base inventory when the index was 100, and that the index at year end is 112, the ending inventory at dollar-value LIFO retail cost is
- \$120,689.
 - \$139,135.

- c. \$143,850.
- d. \$153,720.

Use the following information for questions 49 and 50.

Barr Company, which uses the retail LIFO method to determine inventory cost, has provided the following information for 2001:

	<u>Cost</u>	<u>Retail</u>
Inventory, 1/1/01	\$110,000	\$160,000
Net purchases	378,000	562,000
Net markups		68,000
Net markdowns		30,000
Net sales		508,000

- *49. Assuming stable prices (no change in the price index during 2001), what is the cost of Barr's inventory at December 31, 2001?
- a. \$151,200.
 - b. \$167,960.
 - c. \$165,200.
 - d. \$158,760.
- *50. Assuming that the price index was 105 at December 31, 2001 and 100 at January 1, 2001, what is the cost of Barr's inventory at December 31, 2001 under the dollar-value-LIFO retail method?
- a. \$162,920.
 - b. \$167,960.
 - c. \$170,858.
 - d. \$160,400.

Multiple Choice Answers—Computational

- | | | | | | | |
|-------|-------|-------|-------|--------|--------|--------|
| 25. a | 29. d | 33. c | 37. b | *41. b | *45. c | *49. b |
| 26. c | 30. a | 34. b | 38. b | *42. c | 46. d | *50. a |
| 27. c | 31. a | 35. a | 39. a | 43. b | 47. a | |
| 28. d | 32. b | 36. a | 40. b | 44. d | *48. a | |

MULTIPLE CHOICE—CPA Adapted

51. Von Distribution Co. has determined its December 31, 2001 inventory on a FIFO basis at \$240,000. Information pertaining to that inventory follows:

Estimated selling price	\$255,000
Estimated cost of disposal	10,000
Normal profit margin	30,000
Current replacement cost	220,000

Von records losses that result from applying the lower of cost or market rule. At December 31, 2001, the loss that Von should recognize is

- a. \$0.
 - b. \$5,000.
 - c. \$15,000.
 - d. \$20,000.
52. Under the lower of cost or market method, the replacement cost of an inventory item would be used as the designated market value
- a. when it is below the net realizable value less the normal profit margin.
 - b. when it is below the net realizable value and above the net realizable value less the normal profit margin.
 - c. when it is above the net realizable value.
 - d. regardless of net realizable value.

53. The original cost of an inventory item is above the replacement cost and the net realizable value. The replacement cost is below the net realizable value less the normal profit margin. As a result, under the lower of cost or market method, the inventory item should be reported at the
- net realizable value.
 - net realizable value less the normal profit margin.
 - replacement cost.
 - original cost.

54. Grant Company's accounting records indicated the following information:

Inventory, 1/1/01	\$ 600,000
Purchases during 2001	3,000,000
Sales during 2001	4,000,000

A physical inventory taken on December 31, 2001, resulted in an ending inventory of \$700,000. Grant's gross profit on sales has remained constant at 30% in recent years. Grant suspects some inventory may have been taken by a new employee. At December 31, 2001, what is the estimated cost of missing inventory?

- \$100,000.
 - \$150,000.
 - \$200,000.
 - \$300,000.
55. Eaton Co. uses the retail inventory method to estimate its inventory for interim statement purposes. Data relating to the computation of the inventory at July 31, 2001, are as follows:

	<u>Cost</u>	<u>Retail</u>
Inventory, 2/1/01	\$ 200,000	\$ 250,000
Purchases	1,200,000	1,575,000
Markups, net		175,000
Sales		1,700,000
Estimated normal shoplifting losses		20,000
Markdowns, net		110,000

Under the lower of cost or market method, Eaton's estimated inventory at July 31, 2001 is

- \$119,000.
 - \$133,000.
 - \$136,000.
 - \$170,000.
56. At December 31, 2001, the following information was available from Goff Co.'s accounting records:

	<u>Cost</u>	<u>Retail</u>
Inventory, 1/1/01	\$147,000	\$ 205,000
Purchases	833,000	1,155,000
Additional markups		40,000
Available for sale	<u>\$980,000</u>	<u>\$1,400,000</u>

Sales for the year totaled \$1,100,000. Markdowns amounted to \$10,000. Under the lower of cost or market method, Goff's inventory at December 31, 2001 was

- \$257,000.
 - \$210,000.
 - \$217,000.
 - \$203,000.
- *57. On December 31, 2001, Karney Co. adopted the dollar-value LIFO retail inventory method. Inventory data for 2002 are as follows:

36. a $(\$20,000 \times 40\%) + \$10,000 + (\$7,600 - \$6,400) = \$19,200.$
37. b Cost: $\$36,000 + \$174,000 + \$3,000 = \$213,000.$
Retail: $\$60,000 + \$240,000 + \$10,200 = \$310,200.$
38. b $\$140,000 + \$640,000 + \$40,000 - \$28,000 - \$672,000 = \$120,000.$
39. a Cost: $\$98,000 + \$448,000 + \$12,000 = \$558,000.$
Retail: $\$140,000 + \$640,000 + \$40,000 = \$820,000.$
40. b Conceptual.
- *41. b $\frac{\$98,000}{\$140,000} \times \$120,000 = \$84,000.$
- *42. c Conceptual.
43. b $\$400,000 \div [(\$80,000 + \$120,000) \div 2] = 4 \text{ times}$
44. d Cost: $\$117,000 + \$442,000 + \$8,000 = \$567,000.$
Retail: $\$183,000 + \$623,000 + \$22,000 = \$828,000.$
- *45. c Cost: $\$442,000 + \$8,000 = \$450,000.$
Retail: $\$623,000 + \$22,000 - \$30,000 = \$615,000.$
46. d $\$183,000 + \$623,000 - \$3,000 + \$22,000 - \$30,000 - \$585,000 = \$210,000.$
47. a $\$210,000 \times .685 = \$143,850.$
- *48. a Base year price = EI = $\frac{\$210,000}{1.12} = \$187,500$
- | | | |
|-------------------------------------|---|--------------------------------|
| $\$183,000$ @ cost | = | $\$117,000$ |
| $\$4,500 \times .732^* \times 1.12$ | = | <u>$3,689$</u> |
| | | <u>$\\$120,689$</u> |
- * $\frac{\$450,000}{\$615,000} = .732$
- *49. b Cost to retail ratio = $\$378,000 \div (\$562,000 + \$68,000 - \$30,000) =$
0.63
- EI = $\$160,000 + \$562,000 + \$68,000 - \$30,000 - \$508,000$
= $\$252,000$ at retail
 $\$252,000 - \$160,000 = \$92,000$
Cost of inventory = $\$110,000 + (\$92,000 \times .63) = \$167,960.$
- *50. a Base year price: EI = $\$252,000 \div 1.05 = \$240,000$
- | | | |
|---|---|--------------------------------|
| $\$160,000$ @ cost | = | $\$110,000$ |
| <u>$80,000$</u> $\times .63 \times 1.05$ | = | <u>$52,920$</u> |
| <u>$\\$240,000$</u> | | <u>$\\$162,920$</u> |

DERIVATIONS — CPA Adapted

No.	Answer	Derivation
51.	d	$\$240,000 - \$220,000 \text{ (RC)} = \$20,000.$

52. b Conceptual.
53. b Conceptual.
54. a $\$4,000,000 \times .70 = \$2,800,000$ (COGS)
 $\$600,000 + \$3,000,000 - \$2,800,000 - \$700,000 = \$100,000$.
55. a $(\$200,000 + \$1,200,000) \div (\$250,000 + \$1,575,000 + \$175,000) = 0.7$
 $(\$250,000 + \$1,575,000 + \$175,000 - \$20,000 - \$110,000 - \$1,700,000) \times 0.7 = \$119,000$.
56. d $\$980,000 \div \$1,400,000 = 0.7$
 $(\$1,400,000 - \$10,000 - \$1,100,000) \times 0.7 = \$203,000$.
- *57. a $\$550,000 \div 1.1 = \$500,000$
 $\$310,000 + (\$60,000 \times 1.1 \times .7) = \$356,200$.

EXERCISES

Ex. 9-58—Lower of cost or market.

Determine the proper unit inventory price in the following independent cases by applying the lower of cost or market rule. Circle your choice.

	1	2	3	4	5
Cost	\$8.10	\$10.50	\$12.20	\$5.00	\$7.20
Net realizable value	8.85	10.20	12.30	4.25	6.90
Net realizable value less normal profit	8.15	9.00	11.40	3.75	5.80
Market replacement cost	7.90	10.25	12.50	3.90	5.40

Solution 9-58

Case 1	\$ 8.10	Case 4	\$3.90
Case 2	\$10.20	Case 5	\$5.80
Case 3	\$12.20		

Ex. 9-59—Lower of cost or market.

Determine the unit value that should be used for inventory costing following "lower of cost or market value" as described in ARB No. 43.

	A	B	C	D	E	F
Cost	\$2.35	\$2.40	\$2.30	\$2.54	\$2.44	\$2.33
Replacement cost	2.20	2.60	2.20	2.50	2.42	2.36
Net realizable value	2.50	2.50	2.50	2.45	2.50	2.50
Net realizable value less normal profit	2.25	2.30	2.35	2.30	2.30	2.30

Solution 9-59

Case A	\$2.25	Case D	\$2.45
Case B	\$2.40	Case E	\$2.42
Case C	\$2.30	Case F	\$2.33

Ex. 9-60—Lower of cost or market.

Assume in each case that the selling expenses are \$6 per unit and that the normal profit is \$4 per unit. Calculate the limits for each case. Then enter the amount that should be used for lower of cost or market.

	<u>Selling Price</u>	<u>Upper Limit</u>	<u>Replacement Cost</u>	<u>Lower Limit</u>	<u>Cost</u>	
<u>LCM</u>						
(a)	\$54	\$_____	\$38	\$_____	\$45	\$_____
(b)	47	_____	39	_____	40	_____
(c)	56	_____	42	_____	43	_____
(d)	48	_____	45	_____	43	_____

Solution 9-60

	<u>Upper Limit</u>	<u>Lower Limit</u>	<u>LCM</u>
(a)	\$48	\$44	\$44
(b)	41	37	39
(c)	50	46	43
(d)	42	38	42

Ex. 9-61—Lower of cost or market.

The December 31, 2001 inventory of Dwyer Company consisted of four products, for which certain information is provided below.

<u>Product</u>	<u>Original Cost</u>	<u>Replacement Cost</u>	<u>Estimated Disposal Cost</u>	<u>Expected Selling Price</u>	<u>Normal Profit on</u>
A	\$26.00	\$22.00	\$6.50	\$40.00	15%
B	\$42.00	\$40.00	\$10.00	\$48.00	25%
C	\$130.00	\$125.00	\$25.00	\$190.00	30%
D	\$19.00	\$15.80	\$3.00	\$28.00	20%

Instructions

Using the lower of cost or market approach applied on an individual-item basis, compute the inventory valuation that should be reported for each product on December 31, 2001.

Solution 9-61

<u>Product</u> <u>Market</u>	<u>Ceiling</u>	<u>Floor</u>	<u>Designated</u> <u>Market</u>	<u>Cost</u>	Lower of Cost or
A	\$40.00 – \$6.50 = \$33.50	\$33.50 – \$6.00 = \$27.50	\$27.50	\$26.00	\$26.00
B	\$48.00 – \$10.00 = \$38.00	\$38.00 – \$12.00 = \$26.00	\$38.00	\$42.00	\$38.00
C	\$190.00 – \$25.00 = \$165.00	\$165.00 – \$57.00 = \$108.00	\$125.00	\$130.00	\$125.00
D	\$28.00 – \$3.00 = \$25.00	\$25.00 – \$5.60 = \$19.40	\$19.40	\$19.00	\$19.00

Ex. 9-62—Lower of cost or market.

At 12/31/01, the end of Collins Company's first year of business, inventory was \$3,100 and \$2,800 at cost and at market, respectively.

Following is data relative to the 12/31/02 inventory of Collins:

<u>Item</u>	<u>Original</u> <u>Cost</u> <u>Per Unit</u>	<u>Replacement</u> <u>Cost</u>	<u>Net</u> <u>Realizable</u> <u>Value</u>	<u>Net Realizable</u> <u>Value Less</u> <u>Normal Profit</u>	<u>Appropriate</u> <u>Inventory</u> <u>Value</u>
A	\$.75	\$.45			
B	.45	.40			
C	.75	.80			
D	.80	.65			
E	.90	.85			

Selling price is \$1.00/unit for all items. Disposal costs amount to 10% of selling price and a "normal" profit is 20% of selling price. There are 1,000 units of *each item* in the 12/31/02 inventory.

Instructions

- Prepare the entry at 12/31/01 necessary to implement the lower of cost or market procedure assuming Collins uses a contra account for its balance sheet.
- Complete the last three columns in the 12/31/02 schedule above based upon the lower of cost or market rules.
- Prepare the entry(ies) necessary at 12/31/02 based on the data above.
- How are inventory losses disclosed on the income statement?

Solution 9-62

(a) Loss Due to Market Decline of Inventory	300	
Allowance to Reduce Inventory to Market		300

(b)	Original Cost <u>Per Unit</u>	Replacement Cost	Net Realizable Value	Net Realizable Value Less Normal Profit	Appropriate Inventory Value
<u>Item</u>					
A	\$.75	\$.45	\$.90	\$.70	\$.70
B	.45	.40	.90	.70	.45
C	.75	.80	.90	.70	.75
D	.80	.65	.90	.70	.70
E	<u>.90</u>	.85	.90	.70	<u>.85</u>
	<u>\$3.65</u>				<u>\$3.45*</u>

*\$3.45 × 1,000 = \$3,450

(c) Allowance to Reduce Inventory to Market	300	
Cost of Goods Sold		300
Loss Due to Market Decline of Inventory	200	
Allowance to Reduce Inventory to Market		200
(Cost of inventory at 12/31/02 = \$3,650)		

OR

A student can record a recovery of \$100.

(d) Inventory losses can be disclosed separately (below gross profit in operating expenses) or they can be shown as part of cost of goods sold.

Ex. 9-63 – Relative sales value method.

Adler Realty Company purchased a plot of ground for \$900,000 and spent \$2,100,000 in developing it for building lots. The lots were classified into Highland, Midland, and Lowland grades, to sell at \$100,000, \$75,000, and \$50,000 each, respectively.

Instructions

Complete the table below to allocate the cost of the lots using a relative sales value method.

<u>Grade</u>	<u>No. of Lots</u>	<u>Selling Price</u>	<u>Total Revenue</u>	<u>% of Total Sales</u>	<u>Apportioned Cost</u>	
					<u>Total</u>	<u>Per Lot</u>
Highland	20	\$	\$		\$	\$
Midland	40	\$			\$	
Lowland	<u>100</u>	\$	<u> </u>		<u> </u>	\$
	<u>160</u>		<u> </u>		<u> </u>	

Solution 9-63

Grade	No. of Lots	Selling Price	Total Revenue	% of Total Sales	Apportioned Cost	
					Total	Per Lot
Highland	20	\$100,000	\$ 2,000,000	20%	\$ 600,000	\$30,000
Midland	40	75,000	3,000,000	30%	900,000	\$22,500
Lowland	100	50,000	5,000,000	50%	1,500,000	\$15,000
	<u>160</u>		<u>\$10,000,000</u>		<u>\$3,000,000</u>	

Ex. 9-64—Gross profit method.

An inventory taken the morning after a large theft discloses \$55,000 of goods on hand as of March 12. The following additional data is available from the books:

Inventory on hand, March 1	\$ 84,000
Purchases received, March 1 – 11	70,000
Sales (goods delivered to customers)	135,000

Past records indicate that sales are made at 50% above cost.

Instructions

Estimate the inventory of goods on hand at the close of business on March 11 by the gross profit method and determine the amount of the theft loss. Show appropriate titles for all amounts in your presentation.

Solution 9-64

Beginning Inventory	\$ 84,000
Purchases	<u>70,000</u>
Goods Available	154,000
Goods Sold (\$135,000 ÷ 150%)	<u>90,000</u>
Estimated Ending Inventory	64,000
Physical Inventory	<u>55,000</u>
Theft Loss	<u>\$ 9,000</u>

Ex. 9-65—Gross profit method.

On January 1 a store had inventory of \$55,000. January purchases were \$46,000 and January sales were \$100,000. On February 1 a fire destroyed most of the inventory. The rate of gross profit was 25% of cost. Merchandise with a selling price of \$5,000 remained undamaged after the fire. Compute the amount of the fire loss, assuming the store had no insurance coverage. Label all figures.

Solution 9-65

Beginning Inventory	\$ 55,000
Purchases	<u>46,000</u>
Goods available	101,000
Cost of sale (\$100,000 ÷ 125%)	<u>(80,000)</u>
Estimated ending inventory	21,000
Cost of undamaged inventory (\$5,000 ÷ 125%)	<u>(4,000)</u>
Estimated fire loss	<u>\$17,000</u>

Ex. 9-66—Gross profit method.

Reese Co. prepares monthly income statements. Inventory is counted only at year end; thus, month-end inventories must be estimated. All sales are made on account. The rate of mark-up on cost is 20%. The following information relates to the month of May.

Accounts receivable, May 1	\$21,000
Accounts receivable, May 31	27,000
Collections of accounts during May	84,000
Inventory, May 1	45,000
Purchases during May	65,000

Instructions

Calculate the estimated cost of the inventory on May 31.

Solution 9-66

Collections of accounts	\$ 84,000
Add accounts receivable, May 31	27,000
Deduct accounts receivable, May 1	<u>(21,000)</u>
Sales during May	<u>\$ 90,000</u>
Inventory, May 1	\$ 45,000
Purchases during May	<u>65,000</u>
Goods available	110,000
Cost of sales (\$90,000 ÷ 120%)	<u>(75,000)</u>
Estimated cost of inventory, May 31	<u>\$ 35,000</u>

Ex. 9-67—Comparison of inventory methods.

In the cases cited below, five different conditions are possible when X is compared with Y. These possibilities are as follows:

- a. X equals Y
- b. X is greater than Y
- c. X is less than Y
- d. X is equal to or greater than Y
- e. X is equal to or less than Y

Instructions

In the space provided show the relationship of X and Y for each of the following independent statements.

- _____ 1. "Cost or market, whichever is lower," may be applied to (1) the inventory as a whole or to (2) categories of inventory items. Compare (X) the reported value of inventory when procedure (1) is used with (Y) the reported value of inventory when procedure (2) is used.
- _____ 2. Prices have been rising steadily. Physical turnover of goods has occurred approximately 4 times in the last year. Compare (X) the ending inventory computed by LIFO method with (Y) the same ending inventory computed by the moving average method.
- _____ 3. The retail inventory method has been used by a store during its first year of operation. Compare (X) markdown cancellations with (Y) markdowns.
- _____ 4. Prices have been rising steadily. At the beginning of the year a company adopted a new inventory method; the physical quantity of the ending inventory is the same as that of the beginning inventory. Compare (X) the reported value of inventory if LIFO was the new method with (Y) the reported value of inventory if FIFO was the new method.
- _____ 5. Prices have been rising steadily. Physical turnover of goods has occurred five times in the last year. Compare (X) unit prices of ending inventory items at moving average pricing with (Y) those at weighted average pricing.

Solution 9-67

1. d 2. c 3. e 4. c 5. b

PROBLEMS

Pr. 9-68—Gross profit method.

On December 31, 2001 Abel Company's inventory burned. Sales and purchases for the year had been \$1,500,000 and \$980,000, respectively. The beginning inventory (Jan. 1, 2001) was \$190,000; in the past Abel's gross profit has averaged 40% of selling price.

Instructions

Compute the estimated cost of inventory burned, and give entries as of December 31, 2001 to close merchandise accounts.

Solution 9-68

Beginning inventory		\$ 190,000	
Add: Purchases		<u>980,000</u>	
Cost of goods available		1,170,000	
Sales	\$1,500,000		
Less 40%	<u>(600,000)</u>	<u>900,000</u>	
Estimated inventory lost		<u>\$ 270,000</u>	

Sales	1,500 000	
Income Summary		1,500,000
Cost of Goods Sold	900,000	
Fire Loss	270,000	
Beginning Inventory		190,000
Purchases		980,000

Pr. 9-69—Retail inventory method.

When you undertook the preparation of the financial statements for Vancey Company at January 31, 2002, the following data were available:

	<u>At Cost</u>	<u>At Retail</u>
Inventory, February 1, 2001	\$72,800	\$ 98,500
Markdowns		35,000
Markups		73,000
Markdown cancellations		20,000
Markup cancellations		10,000
Purchases	219,500	294,000
Sales		345,000
Purchases returns and allowances	4,300	5,500
Sales returns and allowances		10,000

Instructions

Compute the ending inventory at cost as of January 31, 2002, using the retail method which approximates lower of cost or market. Your solution should be in good form with amounts clearly labeled.

Solution 9-69

	<u>At Cost</u>		<u>At Retail</u>
Beginning inventory, 2/1/01	\$ 72,800		\$ 98,500
Purchases	\$219,500		\$294,000
Less purchase returns	<u>4,300</u>	<u>215,200</u>	<u>5,500</u>
Totals		<u>\$288,000</u>	<u>387,000</u>
Add markups (net)			<u>63,000</u>

Totals	450,000
Deduct markdowns (net)	<u>15,000</u>
Sales price of goods available	435,000
Sales less sales returns	<u>335,000</u>
Ending inventory, 1/31/02 at retail	<u>\$100,000</u>
Ending inventory at cost: Ratio of cost to retail =	
$\$288,000 \div \$450,000 = 64\%$;	
$\$100,000 \times 64\% = \$64,000$	<u>\$ 64,000</u>

***Pr. 9-70**—Retail inventory method.

The records of Irvin Stores included the following data:

Inventory, May 1, at retail, \$14,500; at cost, \$10,150
Purchases during May, at retail, \$42,900; at cost, \$31,550
Freight-in, \$2,000; purchase discounts, \$250
Additional markups, \$3,800; markup cancellations, \$400; net markdowns, \$1,300
Sales during May, \$46,700

Instructions

Calculate the estimated inventory at May 31 on a LIFO basis. Show your calculations in good form and label all amounts.

	<u>Cost</u> <u>Ratio</u>	<u>Retail</u>	
*Solution 9-70			
	<u>Cost</u>	<u>Retail</u>	<u>Ratio</u>
Inventory, May 1	<u>\$10,150</u>	<u>\$14,500</u>	.70
Purchases	31,550	42,900	
Freight-in	2,000		
Purchase discounts	(250)		
Net markups		3,400	
Net markdowns		<u>(1,300)</u>	
Totals excluding beginning inventory	<u>33,300</u>	<u>45,000</u>	.74
Goods available	<u>\$43,450</u>	59,500	
Sales		<u>(46,700)</u>	
Inventory, May 31		<u>\$12,800</u>	
Estimated inventory, May 31 ($\$12,800 \times .70$)	<u>\$ 8,960</u>		

***Pr. 9-71**—LIFO retail inventory method, fluctuating prices.

Cabel Department Store wishes to use the retail LIFO method of valuing inventories for 2002. The appropriate data are as follows:

<u>Retail</u>	<u>At Cost</u>	<u>At</u>
December 31, 2001 inventory (base layer)	\$1,150,000	\$2,100,000
Purchases (net of returns, allowances, markups, and markdowns)	2,100,000	3,500,000
Sales		2,740,000
Price index for 2002		110

Instructions

Complete the following schedule (fill in all blanks and show calculations in the parentheses):

***Solution 9-71** (cont.)

<u>Adjustment of Inventory to LIFO Basis</u>	<u>Cost</u>	<u>Retail</u>
Ending inventory at base year prices ($\$2,860,000 \div 1.10$)		\$2,600,000
Beginning inventory at base year prices	\$1,150,000	<u>2,100,000</u>
Increase at base year prices		<u>\$ 500,000</u>
Increase at 2002 retail ($\$500,000 \times 1.10$)		<u>\$ 550,000</u>
Increase at 2002 cost ($\$550,000 \times 60\%$)	<u>330,000</u>	
Inventory, December 31, 2002 at LIFO cost	<u>\$1,480,000</u>	

***Pr. 9-72**—LIFO retail inventory method, stable prices.

Nelsen Variety Store uses the LIFO retail inventory method. Information relating to the computation of the inventory at December 31, 2001, follows:

	<u>Cost</u>	<u>Retail</u>
Inventory, January 1, 2001	\$143,000	\$220,000
Purchases	480,000	700,000
Freight-in	80,000	
Sales		750,000
Net markups		160,000
Net markdowns		60,000

Instructions

Assuming that there was no change in the price index during the year, compute the inventory at December 31, 2001, using the LIFO retail inventory method.

***Solution 9-72**

Nelsen Variety Store
LIFO Retail Computation
December 31, 2001

	<u>At Cost</u>	<u>At Retail</u>	<u>Ratio</u>
Inventory, January 1, 2001	\$143,000	\$ 220,000	
Purchases	480,000	700,000	
Freight-in	80,000		
Net markups		160,000	
Net markdowns		(60,000)	
Total (excluding beginning inventory)	<u>560,000</u>	<u>800,000</u>	70%
Total (including beginning inventory)	<u>\$703,000</u>	1,020,000	
Less sales		<u>750,000</u>	
Inventory, Dec. 31, 2001, at retail		<u>\$ 270,000</u>	
Ending inventory		\$ 270,000	
Beginning inventory	\$143,000	(220,000)	
Increment		<u>\$ 50,000</u>	
Increment at cost ($\$50,000 \times 70\%$)	<u>35,000</u>		
Ending inventory at LIFO cost	<u>\$178,000</u>		

***Pr. 9-73**—Dollar-value LIFO-retail method.

The records of Evans Stores provided the following data for the year:

		<u>Cost</u>	<u>Retail</u>
(Base inventory)	Inventory, January 1	\$155,000	\$ 250,000
	Net purchases	830,800	1,318,000
	Sales		1,234,000

Other data are: Freight-in, \$14,000; net markups, \$8,000; net markdowns, \$6,000; and the price index for the year is 105.

Instructions

Determine the approximate valuation of the final inventory by the dollar-value, LIFO-retail method. Label all figures.

	<u>Cost</u>	<u>Retail</u>	<u>Ratio</u>
*Solution 9-73			
	<u>Cost</u>	<u>Retail</u>	<u>Ratio</u>
Inventory, January 1	\$155,000	\$ 250,000	
Net purchases	830,800	1,318,000	
Freight-in	14,000		
Net markups		8,000	
Net markdowns		(6,000)	
Totals excluding beginning inventory	<u>844,800</u>	<u>1,320,000</u>	.64
Goods available	<u>\$999,800</u>	1,570,000	
Sales		(1,234,000)	
Ending inventory		<u>\$ 336,000</u>	
Ending inventory deflated ($\$336,000 \div 1.05$)		\$ 320,000	
Base inventory	\$155,000	<u>(250,000)</u>	
Layer added		<u>\$ 70,000</u>	
New layer at end of year dollars ($\$70,000 \times 1.05 \times .64$)	<u>47,040</u>		
Estimated inventory at dollar value, LIFO	<u>\$202,040</u>		

***Pr. 9-74—Retail LIFO.**

Horne Book Store uses the conventional retail method and is now considering converting to the LIFO retail method for the period beginning 1/1/02. Available information consists of the following:

	<u>2001</u>		<u>2002</u>	
	<u>Cost</u>	<u>Retail</u>	<u>Cost</u>	
<u>Retail</u>				
Inventory 1/1	\$ 12,500	\$ 22,500	\$?	\$
?				
Purchases (net)	250,000	347,500	245,000	345,000
Net markups	—	5,000	—	10,000
Net markdowns	—	2,500	—	5,000
Sales (net)	—	323,000	—	336,000
Loss from breakage	—	500	—	-0-
Applicable price index	—	100	—	105

***Pr. 9-74 (cont.)**

Following is a schedule showing the computation of the cost of inventory on hand at 12/31/01 based on the conventional retail method.

	<u>Cost</u>	<u>Retail</u>	<u>Ratio</u>
Inventory 1/1/01	\$ 12,500	\$ 22,500	
Purchases (net)	250,000	347,500	
Net markups	—	5,000	
Goods available	<u>\$262,500</u>	375,000	70%
Sales (net)		(323,000)	
Net markdowns		(2,500)	
Loss from breakage		<u>(500)</u>	

Inventory 12/31/01 at retail		<u>\$ 49,000</u>
Inventory 12/31/01 at LCM ($\$49,000 \times 70\%$)	<u>\$ 34,300</u>	

Instructions

- (a) Prepare the journal entry to convert the inventory from the conventional retail to the LIFO retail method. Show detailed calculations to support your entry.
- (b) Prepare a schedule showing the computation of the 12/31/02 inventory based on the LIFO retail method as adjusted for fluctuating prices. Without prejudice to your answer to (a) above, assume that you computed the 1/1/02 inventory (retail value \$49,000) under the LIFO retail method at a cost of \$35,000.

***Solution 9-74**

(a)		<u>Cost</u>	<u>Retail</u>
	Goods available	\$262,500	\$375,000
	Less: Beginning inventory	(12,500)	(22,500)
	Net markdowns		(2,500)
	Cost to retail	<u>\$250,000</u>	<u>\$350,000</u>

$5/7 \times \$49,000 = \$35,000 - \$34,300 = \700 adjustment

Inventory	700	
Adjustment to Record Inventory at Cost		700

(b)		<u>Cost</u>	<u>Retail</u>	<u>Ratio</u>
	Inventory	\$ 35,000	\$ 49,000	
	Purchases	245,000	345,000	
	Net markups		10,000	
	Net markdowns		(5,000)	
	Total <u>245,000</u>	<u>350,000</u>	70%	
	Total goods available	<u>\$280,000</u>	399,000	
	Sales	(336,000)		
	Ending inventory at retail—end of year dollars		<u>\$ 63,000</u>	
	Ending inventory deflated ($\$63,000 \div 1.05$)		\$ 60,000	
	Beginning	\$35,000	49,000	
	Layer added ($\$11,000 \times 1.05 \times 70\%$)	8,085	<u>\$ 11,000</u>	
	Ending inventory at cost	<u>\$43,085</u>		