

### LO.a: Distinguish between costs included in inventories and costs recognized as expenses in the period in which they are incurred.

1. A company manufactures copper wires and prepares its financial statements in accordance with IFRS. During its latest full fiscal year, the company recorded the following data:

Inventory Item	<b>Amount</b> €
Raw material copper costs	200,000
Storage of finished wires	50,000
Wasted copper materials from abnormal production	25,000
errors during the year	
Transportation-in costs	10,000
Tax-related duties	6,000
Administrative overhead	12,000
Trade discounts due to volume purchases	5,000
throughout the year	

The total costs included in inventory (in €) for the year are *closest* to:

- A. 205,000.
- B. 211,000.
- C. 216,000.
- 2. A company incurs the followings costs related to its inventory during the year:

Cost	¥ millions
Purchase price	140,000
Trade discounts	2,000
Import duties	15,000
Shipping of raw materials to manufacturing facility	45,000
Manufacturing conversion costs	66,000
Abnormal costs as a result of waste material	30,000
Storage cost prior to shipping to customers	9,000

The amount charged to inventory cost (in millions) is *closest* to:

- A. ¥264,000.
- B. ¥266,000.
- C. ¥273,000.
- 3. Which of the following costs is *least likely* to be included in inventory?
  - A. Cost of raw materials.
  - B. Cost of transporting finished goods to showroom.
  - C. Cost of storing raw materials.
- 4. Which of the following is *least likely* to reduce the purchase price of inventories?
  - A. Rebates.
  - B. Tax related duties.



- C. Trade discounts.
- 5. The purchase price of inventories will *most likely* increase due to which of the following?
  - A. Handling.
  - B. Trade discounts.
  - C. Rebates.

#### LO.b: Describe different inventory valuation methods (cost formulas).

- 6. In order to match the actual historical cost of the inventory items to their physical flow, the inventory valuation method that *most likely* achieves this objective is:
  - A. FIFO.
  - B. LIFO.
  - C. specific identification.
- 7. Anc Corp. reports under IFRS. Which of the following inventory valuation methods is the company *least likely* to use?
  - A. LIFO.
  - B. Specific Identification.
  - C. Weighted average cost.
- 8. Which of the following inventory valuation methods is not permitted under IFRS?
  - A. FIFO.
  - B. LIFO.
  - C. Weighted average cost.
- 9. Which of the following is *most likely* to have the greatest impact on the amount of reported cost of sales and inventory?
  - A. Changes in selling price.
  - B. Nature of product.
  - C. Inventory valuation method.
- 10. Which of the following methods requires a separate purchases account?
  - A. Periodic inventory system.
  - B. Perpetual inventory system.
  - C. Specific identification valuation method.
- 11. Goods that are not ordinarily interchangeable and are likely to be segregated are valued using the:
  - A. First in first out method.
  - B. Specific identification method.
  - C. Weighted average cost method.
- 12. A company values measures its ending inventory using the costs of its recent purchases. Which of the following inventory valuation methods is the company *most likely* using?
  - A. FIFO.



- B. LIFO.
- C. Specific Identification.
- 13. The amount assigned to cost of sales and inventory is *most* impacted by which of the following?
  - A. Inventory valuation method.
  - B. Increasing prices.
  - C. Type of good.

## LO.c: Calculate and compare cost of sales, gross profit, and ending inventory using different inventory valuation methods and using perpetual and periodic inventory systems.

- 14. If a company uses a perpetual inventory system, the inventory method that *best* matches the actual historical cost of the inventory sold with their physical flow is:
  - A. FIFO.
  - B. LIFO.
  - C. specific identification.
- 15. Selected data from IMC Company that uses the FIFO inventory method is provided below:

	Units	\$/Unit	Total (\$)
Opening inventory	2,000	10.0	20,000
Purchase	500	10.5	5,250
Sales	1,100	15.0	16,500
Purchase	600	11.0	6,600
Sales	1,200	15.0	18,000
Ending inventory	800		

If IMC used a perpetual system versus a periodic inventory system, the gross margin would *most likely* be:

- A. lower.
- B. the same.
- C. higher.
- 16. Which inventory valuation method records purchases and sales of goods in inventory as they occur?
  - A. Perpetual inventory system.
  - B. Periodic inventory system.
  - C. Specific identification method.
- 17. A company switches from periodic inventory system to perpetual inventory system. The cost of sales and ending inventory will be the same if the company has been following which of these inventory valuation methods?
  - A. FIFO.
  - B. LIFO.
  - C. Weighted average cost.



18. A firm which prepares its financial statements according to U.S. GAAP and uses a periodic inventory system had the following transactions during the year:

Date	Activity	Tons (000s)	\$ per Ton
	Beginning inventory	1	500
February	Purchase	8	540
May	Sale	5	600
July	Purchase	2	575
November	Sale	3	620

The cost of sales (in '000s) is *closest* to:

- A. \$4,550 using FIFO.
- B. \$4,435 using LIFO.
- C. \$4,342 using weighted average.
- 19. Kevin Corporation Limited prepares its financial statements in accordance with IFRS. The inventory related costs incurred during the year include the following:

Raw materials	\$56,000
Direct labor	\$40,000
Storage of finished goods	\$18,000
Abnormal costs	\$6,000
Transportation of raw materials	\$10,000

The total inventory cost recorded is *closest* to:

- A. \$102,000.
- B. \$106,000.
- C. \$112,000.
- 20. The information on a company's inventory is given below:

Opening inventory	0 units
1 <sup>st</sup> purchase	500 units at \$30/unit
2 <sup>nd</sup> purchase	1000 units at \$33/unit
3 <sup>rd</sup> purchase	1200 units at \$34/unit
Total Sales	2000 units at \$50/unit

Using a periodic inventory system and the weighted average method, the ending inventory value is *closest* to:

- A. \$22,633.
- B. \$23,023.
- C. \$23,800.
- 21. Jackson Enterprises uses the FIFO inventory valuation method. The company bought 400 generators at a price of \$300 each on January 5, 2012. 300 of these generators were sold off at a price of \$450 each by the end of March, 2012. On April 10, 2012, 250 more generators



were bought at a price of \$325 each. By May 31, 2012, 225 generators were further sold off at a price of \$500 each. What would be the inventory on June 1, 2012 for the company?

- A. \$38,125.
- B. \$40,625.
- C. \$62,500.
- 22. Swan Brothers Limited uses weighted average cost as the inventory valuation method. The following table shows their purchases and sales for the first two quarters of cotton bales.

Date	Purchased	Sold	Cost per bale	Price per bale
January 1	180	0	200	250
February 1	20	150	210	250
March 1	0	25	225	275
April 1	200	0	225	275
May 1	100	0	250	280
June 1	0	175	275	300

What is the cost of ending inventory?

- A. \$33,060.
- B. \$36,250.
- C. \$39,750.
- 23. Calvin Clients Limited reports its inventory and cost of goods sold using the LIFO valuation method. The following table shows the details of purchases and sales for the year 2010. Assume that in each month, the purchases happen at the start of the month and sales happen at the end of the month.

Month	Units	Units	Cost per unit	Price per unit
	purchased	sold		
January	50	0	100	150
March	100	25	110	150
May	0	60	n/a	175
June	125	0	125	175
July	120	0	150	180
October	0	80	n/a	200
December	0	60	n/a	225

What is the cost of goods sold for the company?

- A. \$19,625
- B. \$29,850
- C. \$37,850
- LO.d: Calculate and explain how inflation and deflation of inventory costs affect the financial statements and ratios of companies that use different inventory valuation methods.
- 24. In an environment of rising inventory unit costs, which of the following methods is *most likely* to report the highest amount of ending inventory?



- A. FIFO.
- B. LIFO.
- C. Weighted average cost.
- 25. A company decides to change its inventory method from FIFO to the weighted average cost method. Assuming that the change happens during a period of rising inventory costs, which of the following financial ratios will *most likely* increase as a result of this change?
  - A. Current.
  - B. Debt-to-equity.
  - C. Number of days in inventory.
- 26. Company ABC operates in an environment of declining prices. Its reported profits will tend to be the *lowest* if it accounts for inventory using the:
  - A. FIFO method.
  - B. LIFO method.
  - C. weighted average cost method.

### LO.e: Explain LIFO reserve and LIFO liquidation and their effects on financial statements and ratios.

27. Analyst 1: Under US GAAP, companies that use the LIFO method must disclose in their financial notes the amount of LIFO reserve.

Analyst 2: LIFO reserve can be used to adjust reported LIFO inventory and cost of goods sold balances to the FIFO method for comparison purposes.

- A. Analyst 1 is correct.
- B. Analyst 2 is correct.
- C. Both analysts are correct.
- 28. LIFO liquidation occurs when the number of units in ending inventory:
  - A. increases from the number of units that were present at the beginning of the year.
  - B. decreases from the number of units that were present at the beginning of the year.
  - C. increases/ decreases from the number of units that were present at the beginning of the year.
- 29. If inventory unit costs have generally risen from year to year, a LIFO liquidation will *most likely*:
  - A. produce an inventory related increase in gross profits.
  - B. produce an inventory related decrease in gross profits.
  - C. have no impact on gross profits.

# LO.f: Convert a company's reported financial statements from LIFO to FIFO for purposes of comparison.

The following information relates to Questions 30-35



An equity research analyst is studying the effect of Company XYZ's use of the LIFO method to account for its inventory. For this purpose, the analyst gathers the following information.

**Exhibit 1. Balance Sheet Information (US\$ Millions)** 

As of 31 December	2015	2014
Cash and cash equivalents	17.2	15.7
Accounts receivable	62.6	45.8
Inventories	62	53.9
Other current assets	12.5	6.5
Total current assets	154.3	121.9
Property and equipment, net	303.5	297.2
<b>Total assets</b>	457.8	419.1
Total current liabilities	149.5	139.5
Long-term debt	64.4	60.4
Total liabilities	213.9	199.9
Common stock and paid in capital	165.2	165.2
Retained earnings	78.7	54
Total shareholders' equity	243.9	219.2
Total liabilities and shareholders' equity	457.8	419.1

**Exhibit 2. Income Statement Information (US\$ Millions)** 

For the Year Ended 31 December	2015	2014
Sales	434.6	416.1
Cost of goods sold	221.1	214.7
Depreciation and amortization expense	13.9	11.9
Selling, general, and administrative expense	e 165.6	163.7
Interest expense	3.1	1.8
Income tax expense	6.2	4.8
Net income	24.7	19.2

The analyst also finds the following information in the notes to the financial statements.

- The LIFO reserves as of 31 December 2014 and 2015 are \$11.7 million and \$15.5 million respectively, and
- The effective income tax rate applicable to the company for 2015 and earlier periods is 20 percent.
- 30. If company XYZ had used FIFO instead of LIFO, the amount of inventory reported as of 31 December 2015 would have been *closet* to:
  - A. \$46.5 million.
  - B. \$65.8 million.
  - C. \$77.5 million.
- 31. If company XYZ had used FIFO instead of LIFO, the amount of cost of goods sold reported by it for the year ended 31 December 2015 would have been *closest* to:
  - A. \$205.6 million.
  - B. \$217.3 million.



- C. \$224.9 million.
- 32. If company XYZ had used FIFO instead of LIFO, its reported net income for the year ended 31 December 2015 would have been higher by an amount *closet* to:
  - A. \$3 million.
  - B. \$3.8 million.
  - C. \$15.5 million.
- 33. If company XYZ had used FIFO instead of LIFO, its retained earnings as of 31 December 2015 would have been higher by an amount closest to:
  - A. \$11.7 million.
  - B. \$12.4 million.
  - C. \$15.5 million.
- 34. If company XYZ had used FIFO instead of LIFO, which of the following ratios computed as of 31 December 2015 would *most likely* have been lower?
  - A. Cash ratio.
  - B. Current ratio.
  - C. Gross profit margin.
- 35. If company XYZ had used FIFO instead of LIFO, its debt to equity ratio computed as of 31 December 2015 would have:
  - A. increased.
  - B. decreased.
  - C. remained unchanged.

#### LO.g: Describe the measurement of inventory at the lower of cost and net realisable value.

- 36. Nathan Scott is an accountant at Dan Motors Limited. The company prepares its accounts in accordance with IFRS. The inventory cost at year end is \$29,000, while the estimated selling price is \$34,000. If the costs necessary to make the inventory worthy of being sold are \$6,000, the inventory recorded will be *closest* to:
  - A. \$28,000.
  - B. \$29,000.
  - C. \$34,000.
- 37. Under US GAAP, inventory is measured at:
  - A. Lower of cost or market where market value must be greater than net realizable value.
  - B. Net realizable value.
  - C. Lower of cost or market where market value is bound by the limits: NRV, NRV minus normal profit margin.
- 38. Which of the following statements is *most accurate*?
  - A. Reversal of a write-down limited to the amount of original write-down is permitted under US GAAP.



- B. Reversal of a write-down is permitted only under IFRS and limited to the amount of original write-down.
- C. Reversal of a write-down is permitted under both IFRS and US GAAP but the amount of reversal varies for both standards.

#### LO.h: Describe implications of valuing inventory at net realisable value for financial statements and ratios.

- 39. A company which prepares its financial statements using IFRS wrote down its inventory value by €40,000 in 2011. In 2012, prices increased and the same inventory was worth €50,000 more than its value at the end of 2011. Which of the following statements is *most accurate*? In 2012, the company's cost of sales:
  - A. was unaffected.
  - B. decreased by €40,000.
  - C. decreased by  $\in$ 50,000.
- 40. A kitchen appliance store prepares its financial statements in accordance with IFRS. The store has 500 mixer-grinders in its inventory. Each unit is sold at a price of \$150. The store paid on an average of \$140 per unit to the manufacturer of the appliance. Sale of appliances has been slow in recent months. The store estimates it can sell each mixer-grinder for \$130 if it announces a sale for a limited period along with free shipping at the cost of \$5 per mixer-grinder. The manufacturer has also lowered the price to \$100 because of the low demand. The total carrying amount of the 500 mixer-grinders on the store's balance sheet would be *closest* to:
  - A. \$62,500.
  - B. \$65,000.
  - C. \$70,000.
- 41. Following information is available for a manufacturing company:

Cost of ending inventory computed using FIFO	\$2.5 million
Net realizable value	\$2.3 million
Current replacement cost	\$2.1 million

If the company uses IFRS instead of U.S. GAAP its cost of goods sold (\$ millions) is *most likely*:

- A. the same.
- B. 0.2 lower.
- C. 0.2 higher.

### LO.i: Describe the financial statement presentation of and disclosures relating to inventories.

- 42. The *most appropriate* way to account for the assets, that have been selected to be spun-off, until the distribution occurs is to classify them as:
  - A. held for sale with no depreciation taken.



- B. held for use until disposal with no deprecation taken.
- C. held for use until disposal with depreciation continuing to be taken.
- 43. Which of the following is *least likely* to be a financial statement disclosure required by IFRS concerning inventory?
  - A. The carrying amount of inventory at fair value plus costs to sell.
  - B. The carrying amount in classifications of inventory such as work in progress, finished goods, etc.
  - C. The circumstances that led to the reversal of a write down of inventories.

#### LO.j: Explain issues that analysts should consider when examining a company's inventory disclosures and other sources of information.

- 44. Reversal of prior-year inventory write-downs are most likely permitted under:
  - A. U.S. GAAP only.
  - B. IFRS only.
  - C. U.S. GAAP and IFRS.
- 45. Which of the following is *least likely* correct about the measurement of inventory value under U.S.GAAP?
  - A. Inventory is measured at the lower of cost or market value.
  - B. The lower limit of the market value is net realizable value minus a normal profit margin.
  - C. Reversal of write downs are permitted under U.S. GAAP and prohibited under IFRS.

## LO.k: Calculate and compare ratios of companies, including companies that use different inventory methods.

- 46. Which ratio is *most likely* higher for a company using FIFO method to account for inventory, during a period of rising prices, when compared against a company using weighted average cost method?
  - A. Debt-to-equity ratio.
  - B. Inventory turnover.
  - C. Return on sales.
- 47. Given below is the information of a company that uses the FIFO inventory method:

Opening inventory of 1000 units at \$12/unit

Purchase of 200 units at \$12.8/unit

Sale of 600 units at \$14/unit

Purchase of 200 units at \$13/unit

Sale of 600 units at \$14/unit

If the company used a perpetual system versus a periodic inventory system, the gross margin would *most likely* be:

- A. higher.
- B. lower.
- C. the same.



- 48. Which ratio is *most likely* higher for a company using LIFO method to account for inventory, during a period of rising prices, when compared against a company using FIFO method?
  - A. Current ratio.
  - B. Gross margin.
  - C. Inventory turnover.
- 49. Amerco Inc. uses the LIFO method and Britco Ltd. uses the FIFO method. During periods of falling prices, compared to the cost of replacing of the inventory, the cost of goods sold reported by:
  - A. Britco is too high.
  - B. Amerco is too high.
  - C. Amerco is too low.
- 50. A company decides to change its inventory method from FIFO to the weighted average cost method. If the inventory prices are decreasing during this period, which of the following financial ratios will *most likely* decrease as a result of this change?
  - A. Debt-to-equity.
  - B. Current.
  - C. Number of days in inventory.

### LO.I: Analyze and compare the financial statements of companies, including companies that use different inventory methods.

- 51. A high inventory turnover ratio and low number of days of inventory on hand indicates:
  - A. effective inventory management.
  - B. inadequate amount of inventory.
  - C. obsolete inventory.
- 52. The ratio *least likely* used to measure the efficiency of inventory management is:
  - A. Days of inventory on hand.
  - B. Gross profit margin.
  - C. Cash ratio.
- 53. Which of the following ratios is *least likely* to be used to evaluate the efficiency or effectiveness of inventory management?
  - A. Days of inventory on hand.
  - B. Gross profit margin.
  - C. Quick ratio.
- 54. Which of the following is *most likely* to be an indicator of highly effective inventory management?
  - A. Low inventory turnover ratio.
  - B. Low gross profit margin.
  - C. Low number of days of inventory on hand.



#### **Solutions**

#### 1. B is correct.

<b>Inventory Item</b>	<b>Amount(in €)</b>
Raw materials	200,000
Transportation-in	10,000
Tax-related duties	6,000
Less: Trade discounts	(5,000)
Total inventory costs	211,000

#### 2. A is correct.

The costs to include in inventories are all costs of purchase, costs of conversion, and other costs incurred in bringing the inventories to their present location and condition.

Cost	¥ millions
Purchase price	140,000
Less Trade discounts	(2,000)
Import duties	15,000
Shipping of raw materials to manufacturing facility	45,000
Manufacturing conversion costs	66,000
Total inventory costs	264,000

- 3. C is correct. Inventory costs include: cost of raw materials, cost of conversion and cost necessary to bring inventory to final location and condition. The cost of storing finished goods inventory is expensed and hence not included in the inventory cost. Refer to IFT Notes for the list of costs which are included in inventory and the list of costs that expensed.
- 4. B is correct. Tax related duties are an expense and increase the purchase price of inventories.
- 5. A is correct. Handling, transportation costs increase the cost of inventory.
- 6. C is correct. Specific identification best matches the physical flow of the inventory items because it tracks the actual units that are sold
- 7. A is correct. LIFO is permitted under US GAAP.
- 8. B is correct. IFRS does not permit the use of LIFO method for inventory valuation.
- 9. C is correct. The inventory valuation method has a significant impact on the amount allocated to cost of sales and inventory.
- 10. A is correct. The periodic inventory system requires a separate purchases account.



- 11. B is correct. Goods that are not ordinarily interchangeable and are likely to be segregated are valued using the specific identification method.
- 12. A is correct. Under FIFO, costs of most recent purchases is allotted to ending inventory.
- 13. A is correct.
- 14. C is correct. Specific identification matches the actual historical costs of the specific inventory items to their physical flow: The costs remain in inventory until the actual identifiable inventory is sold
- 15. B is correct. When using the FIFO inventory method the ending inventory, the cost of goods sold and the gross margin, are the same under either the perpetual or periodic methods. The use of a perpetual or periodic system makes a difference under weighted average, and LIFO.
- 16. A is correct.
- 17. A is correct. The choice of system affects the cost of sales and ending inventory for LIFO or weighted average cost method.
- 18. C is correct.

19. B is correct. Inventory cost = Raw materials + Direct labor + Transportation
 Inventory cost = 56,000 + 40,000 + 10,000 = 106,000.
 Abnormal cost and storage cost of finished goods are excluded from the cost of inventory.

20. B is correct.

**Ending Inventory Weighted Average Calculations** 

	Units	\$/unit	Total \$
Purchase #1	500	\$30	\$15,000
Purchase #2	1000	\$33	\$33,000
Purchase #3	1200	\$34	\$40,800
Total available	2,700		\$88,800

Average cost 88,800 / 2,700 = \$32.89 Ending inventory 2,700 - 2,000 = 700 units. \$32.89 \* 700 = \$23,023

21. B is correct. Under FIFO method:

Purchased 400



Sold	(300)
Remainder as at March 2012	100
Purchased further	250
Sold (100 old+125 new)	(225)
Remainder (new)	125
Therefore, inventory cost $125 * 325 = $ \$	40,625.

22. A is correct.

Weighted average cost per unit = 
$$\frac{\text{Total cost incurred}}{\text{Total units purchased}}$$
Weighted average cost per unit = 
$$\frac{180 * 200 + 20 * 210 + 200 * 225 + 100 * 250}{500} = \frac{110,200}{500}$$
= \$220.4

Ending Inventory = Number of units remaining  $\times$  weighted average cost per unit Ending Inventory = [(180 + 20 + 200 + 100) - (150 + 25 + 175)] \* 220.4 = \$33,060.

23. B is correct. Under the LIFO method we assume that the most recently purchased items are sold first. The first sale happens in March. These items were purchased at 110 so the cost for March is 25 \* 110. We do the same for the remaining months.

Month	Units	Units	Cost per unit	COGS for the	<b>Ending Inventory:</b>
	purchased	sold		month	# of units @ cost
January	50	0	100	0	50 @ 100
March	100	25	110	25 * 110	50 @ 100
					75 @ 110
May	0	60	n/a	60 * 110	50 @100
					15 @ 110
June	125	0	125	0	50 @100
					15 @ 110
					125 @ 125
July	120	0	150	0	50 @100
					15 @ 110
					125 @ 125
					120 @ 150
October	0	80	n/a	80 * 150	50 @100
					15 @ 110
					125 @ 125
					40 @ 150
December	0	60	n/a	40 * 150	
				20 * 125	

Cost of goods sold = 25 \* 110 + 60 \* 110 + 80 \* 150 + (40 \* 150 + 20 \* 125) = \$29,850

24. A is correct. In an environment of rising inventory unit costs, FIFO is most likely to report the highest amount of ending inventory.



- 25. B is correct. All else held constant, in a period of rising costs, the ending inventory would be lower under weighted average and cost of goods sold (CGS) will be higher (compared to FIFO) resulting in lower net income and retained earnings. There will be no impact on the debt level, current or long-term. Therefore, the debt-to-equity ratio (Total debt ÷ Total shareholder's equity) will increase due to the decrease in retained earnings (and lower shareholders' equity).
- 26. A is correct. In a declining price environment, the newest inventory is the lowest-cost inventory. Therefore, using the FIFO method i.e. selling the older, expensive inventory first, will result in higher cost of sales and lower profit.
- 27. C is correct. Under US GAAP, companies that use the LIFO method must disclose in their financial notes the amount of the LIFO reserve or the amount that would have been reported in inventory if the FIFO method had been used. This information can be used to adjust reported LIFO inventory and cost of goods sold balances to the FIFO method for comparison purposes.
- 28. B is correct. LIFO liquidation occurs when the number of units in ending inventory declines from the number of units that were present at the beginning of the year.
- 29. A is correct. If inventory unit costs have generally risen from year to year, then a LIFO liquidation will produce an inventory-related increase in gross profits.
- 30. C is correct. Inventory (FIFO method) = Inventory (LIFO method) + LIFO reserve
  - = \$62 million + 15.5 million
  - = \$77.5 million
- 31. B is correct. COGS (FIFO method) = COGS (LIFO method) Increase in LIFO reserve
  - = \$221.1 million (15.5 million 11.7 million)
  - = \$217.3 million
- 32. A is correct. NI (FIFO method) = NI (LIFO method) + Increase in LIFO reserve  $\times$  (1 Tax rate)
  - = \$24.7 million + 3.8 million × (1 20%)
  - = \$27.74 million

Therefore, the increase in net income is:

Increase in NI = NI (FIFO method) – NI (LIFO method)

- = \$27.74 million 24.7 million
- = \$3.04 million
- 33. B is correct.

RE (FIFO method) = RE (LIFO method) + LIFO reserve  $\times$  (1 – Tax rate)

- $= $78.7 \text{ million} + 15.5 \text{ million} \times (1 20\%)$
- = \$91.1 million

Therefore, the increase in retained earnings is:



Increase in RE = RE (FIFO method) – RE (LIFO method) = \$91.1 million – 78.7 million = \$12.4 million

- 34. A is correct. The cash ratio (cash and cash equivalents ÷ current liabilities) would be lower because cash would have been less under FIFO. XYZ's income before taxes would have been higher under FIFO, and consequently taxes paid by XYZ would have also been higher and cash would have been lower. There is no impact on current liabilities. Both XYZ's current ratio and gross profit margin would have been higher if FIFO had been used. The current ratio would have been higher because inventory under FIFO increases by a larger amount than the cash decreases for taxes paid. Because the cost of goods sold under FIFO is lower than under LIFO, the gross profit margin would have been higher.
- 35. B is correct. If XYZ had used FIFO instead of LIFO, the debt-to-equity ratio would have decreased. No change in debt would have occurred, but shareholders' equity would have increased as a result of higher retained earnings.
- 36. A is correct. The inventory is recorded at lower of the cost or the net realizable value. The net realizable value is the difference between estimated selling price and the costs incurred to bring the inventory into a saleable condition.

  Thus, the inventory is recorded at \$34,000 \$6,000 = \$28,000.
- 37. C is correct. Under US GAAP inventory is measured at the lower of cost or market where market value is bound by the limits: NRV, NRV minus normal profit margin.
- 38. B is correct. Reversal of a write-down is permitted only under IFRS and limited to the amount of original write-down. Under US GAAP the reversal of a write-down is not allowed.
- 39. B is correct. Under IFRS there will be reversal of the write-down. This reversal will be limited to 40,000. The reversal of the inventory write-down is recognized as a reduction in the cost of sales.
- 40. A is correct. Inventory is measured at the lower of cost or net realizable value. Lower of the two is NRV which is \$125. Under IFRS, net realizable value (NRV) = estimated selling price estimated costs necessary to get the inventory ready for sale and make the sale = 130 − 5 = 125. For 500 units: 500 \* 125 = \$62,500.
- 41. B is correct. Under IFRS, the inventory would be written down to its net realizable value (2.3 million) and cost of goods sold will increase by 0.2 million. Under U.S. GAAP, inventory is written down to its current replacement cost (\$2.1 million) and cost of goods sold will increase by 0.4 million. End result is that under IFRS the cost of goods sold will be lower by 0.2 million.



- 42. C is correct. Long-lived assets that will be disposed of other than by sale, such as a spin-off, an exchange for other assets, or abandonment, are classified as held for use until disposal and continue to be depreciated until that time.
- 43. A is correct. The disclosure required by IFRS is the carrying amount of inventory at fair value minus costs to sell.
- 44. B is correct. Reversal of prior-year inventory write-downs are permitted under IFRS but not under U.S. GAAP.
- 45. C is correct. Reversal of write downs are prohibited under U.S. GAAP and permitted under IFRS.
- 46. C is correct. In periods of rising prices FIFO results in a higher inventory value and a lower cost of goods sold and therefore a higher net income. The higher net income increases return on sales. The higher reported net income also increases retained earnings, and therefore results in a lower debt-to-equity ratio not a higher one. The combination of higher inventory and lower cost of goods sold decreases inventory turnover (CGS/inventory).
- 47. C is correct. When using the FIFO inventory method the ending inventory, the cost of goods sold and the gross margin, are the same under either the perpetual or periodic methods. The use of a perpetual or periodic system makes a difference under weighted average, and LIFO.
- 48. C is correct. During a period of rising prices, ending inventory under LIFO will be lower than that of FIFO and cost of goods sold higher; therefore, inventory turnover (CGS/average inventory) will be higher.
- 49. A is correct. Britco uses FIFO which means that cost of goods sold reflects old prices. Given that prices are falling, old prices are higher than the current cost of replacing inventory.
- 50. A is correct. All else held constant, in a period of declining costs the ending inventory would be higher under weighted average and cost of goods sold (COGS) will be lower (compared to FIFO) resulting in higher net income and retained earnings. There will be no impact on the debt level, current or long-term. Therefore the debt-to-equity ratio (Total debt ÷ Total shareholder's equity) will decrease due to the increase in retained earnings (and higher shareholders' equity).
- 51. A is correct.
- 52. C is correct. Cash ratio does not consider inventory. The three ratios used to measure the efficiency of inventory include days of inventory on hand, inventory turnover and gross profit margin.
- 53. C is correct. The quick ratio does not take into account inventory and is least likely to be used to evaluate inventory management. The three important ratios used to evaluate the



efficiency or effectiveness of inventory management include inventory turnover, days of inventory on hand, and gross profit.

54. C is correct. The indicators of highly effective inventory management include high inventory turnover ratio, high gross profit margin, and low number of days of inventory on hand