

The logo for the Certified Management Accountant (CMA) certification, featuring the letters 'CMA' in a serif font inside a white square with a blue shadow effect.

*IMA's Certification for
Accountants and
Financial Professionals
in Business*

CMA 2010 Support Package

**Part 1: Financial Planning,
Performance and Control**

Practice Questions

CMA Exam Support Practice Questions – Part I

1. Which of the following types of budget systems **most** strongly supports the objective of improving communication and promoting coordination?
 - a. Bottom up, flexible budgets.
 - b. Bottom up, fixed budgets.
 - c. Top down, flexible budgets.
 - d. Top down, fixed budgets.

2. The table below shows the estimated probabilities of the percent of defective units resulting from a production run.

<u>Percent Defective</u>	<u>Probability</u>
2%	30%
3%	50%
4%	20%

The expected percent defective for a production run would be

- a. 1.50%.
 - b. 2.30%.
 - c. 2.90%.
 - d. 3.00%.

3. Reeves Inc. has developed a new production process to manufacture its product. The new process is complex and requires a high degree of technical skill. However, management believes there is a good opportunity for the employees to improve as they become more familiar with the production process. The production of the first unit requires 100 direct labor hours. If a 70% learning curve is used, the cumulative direct labor hours required to produce a total of eight units would be
 - a. 196 hours.
 - b. 274 hours.
 - c. 392 hours.
 - d. 560 hours.

4. A forecasting technique that is a combination of the last forecast and the last observed value is called
 - a. Delphi.
 - b. least squares.
 - c. regression.
 - d. exponential smoothing.

5. A large manufacturer's forecast of total sales revenues for a year is **least** likely to be influenced by
- the seasonal pattern of sales revenues throughout the year.
 - anticipated interest rates and unemployment rates.
 - expected shortages of key raw materials.
 - input from sales personnel.
6. Carson Products sells sweatshirts and is preparing for a World Cup Soccer match. The cost per sweatshirt varies with the quantity purchased as follows.

<u>Quantity</u>	<u>Unit cost</u>
4,000	\$14.00
5,000	13.50
6,000	13.00
7,000	12.50

Carson must purchase the shirts one month before the game and has analyzed the market and estimated sales levels as follows.

Unit sales	4,000	5,000	6,000	7,000
Probability	15%	20%	35%	30%

The estimated selling price is \$25 for sales made before and during the day of the game. Any shirts remaining after game day can be sold at wholesale to a local discount store for \$10.

The expected profit if Carson purchased 6,000 shirts is

- \$64,500.
 - \$66,000.
 - \$69,000.
 - \$72,000.
7. The type of budget that is available on a continuous basis for a specified future period by adding a month, quarter, or year in the future as the month, quarter, or year just ended is deleted, is called a
- rolling budget.
 - kaizen budget.
 - activity-based budget.
 - flexible budget.

8. In the budgeting and planning process for a firm, which one of the following should be completed first?
- Sales budget.
 - Financial budget.
 - Cost management plan.
 - Strategic plan.
9. Which one of the following is **not** an advantage of activity-based budgeting?
- Better identification of resource needs.
 - Linking of costs to outputs.
 - Identification of budgetary slack.
 - Reduction of planning uncertainty.
10. In preparing a corporate master budget, which one of the following is **most** likely to be prepared last?
- Sales budget.
 - Cash budget.
 - Production budget.
 - Cost of Goods Sold budget.
11. Which one of the following is **most** important to a successful budgeting effort?
- Experienced analysts.
 - Integrated budget software.
 - Reliable forecasts and trend analysis.
 - Top management support.
12. In an organization that plans by using comprehensive budgeting, the master budget refers to
- a compilation of all the separate operational and financial budget schedules of the organization.
 - the booklet containing budget guidelines, policies, and forms to use in the budgeting process.
 - the current budget updated for operations for part of the current year.
 - a budget of a not-for-profit organization after it is approved by the appropriate authoritative body.

13. Steers Company has just completed its pro forma financial statements for the coming year. Relevant information is summarized below.

Projected net income	\$100,000
Anticipated capital expenditures	50,000
Increase in working capital	25,000
Depreciation expense	15,000

From the information provided above, the increase in Steers' cash account for the coming year will be

- a. \$25,000.
 - b. \$40,000.
 - c. \$90,000.
 - d. \$160,000.
14. Holland Company is in the process of projecting its cash position at the end of the second quarter. Shown below is pertinent information from Holland's records.

Cash balance at end of 1st quarter	\$ 36,000
Cash collections from customers for 2nd quarter	1,300,000
Accounts payable at end of 1st quarter	100,000
Accounts payable at end of 2nd quarter	75,000
All 2nd quarter costs and expenses (accrual basis)	1,200,000
Depreciation (accrued expense included above)	60,000
Purchases of equipment (for cash)	50,000
Gain on sale of asset (for cash)	5,000
Net book value of asset sold	35,000
Repayment of notes payable	66,000

From the data above, determine Holland's projected cash balance at the end of the second quarter.

- a. Zero.
- b. \$25,000.
- c. \$60,000.
- d. \$95,000.

15. Werner Company buys raw materials from several suppliers, and makes payments according to the following schedule.

In the month of purchase	25%
In the month after purchase	60%
In the second month after purchase	15%

In preparing the master budget for the fourth quarter of the year, Werner assumed that total purchases for the quarter would be spread evenly over the three months. In its pro forma balance sheet, Werner anticipated a December 31 account payable balance of \$207,000. What amount of purchase did Werner anticipate for the fourth quarter of the year?

- a. \$496,800.
 - b. \$558,900.
 - c. \$621,000.
 - d. \$690,000.
16. Maximilian Computer Company uses a comprehensive budgeting system in planning its annual operations. Which of the following **best** describes the information needed in order to determine the budgeted cost of circuit boards to be purchased for use in building its laptop computer? Assume one circuit board is used in each laptop.
- a. Begin with budgeted laptop sales in units, add the desired ending inventory of circuit boards, deduct the expected beginning inventory of circuit boards, and multiply the resulting amount by the budgeted purchase cost per circuit board.
 - b. Begin with budgeted laptop sales in units, deduct the desired ending inventory of circuit boards, add the expected beginning inventory of circuit boards, and multiply the resulting amount by the purchase cost per circuit board.
 - c. Begin with budgeted laptop production in units, deduct the desired ending inventory of circuit boards, add the expected beginning inventory of circuit boards, and multiply the resulting amount by the purchase cost per circuit board.
 - d. Begin with budgeted laptop production in units, add the desired ending inventory of circuit boards, deduct the expected beginning inventory of circuit boards, and multiply the resulting amount by the budgeted purchase cost per circuit board.
17. The starting point for creating a master budget for a proprietary secretarial school would be
- a. estimating salaries of the instructors.
 - b. forecasting enrollment.
 - c. preparing a capital expenditure budget.
 - d. preparing the student recruiting budget.
18. Trumbull Company budgeted sales on account of \$120,000 for July, \$211,000 for August, and \$198,000 for September. Collection experience indicates that 60% of the budgeted

sales will be collected the month after the sale, 36% the second month, and 4% will be uncollectible. The cash from accounts receivable that should be budgeted for September would be

- a. \$169,800.
- b. \$194,760.
- c. \$197,880.
- d. \$198,600.

19. The Profit and Loss Statement of Madengrad Mining Inc. includes the following information for the current fiscal year.

Sales	\$160,000
Gross profit	48,000
Year-end finished goods inventory	58,300
Opening finished goods inventory	60,190

The cost of goods manufactured by Madengrad for the current fiscal year is

- a. \$46,110.
- b. \$49,890.
- c. \$110,110.
- d. \$113,890.

20. The JoyT Company manufactures Maxi Dolls for sale in toy stores. In planning for this year, JoyT estimated variable factory overhead of \$600,000 and fixed factory overhead of \$400,000. JoyT uses a standard costing system, and factory overhead is allocated to units produced on the basis of standard direct labor hours. The denominator level of activity budgeted for this year was 10,000 direct labor hours, and JoyT used 10,300 actual direct labor hours.

Based on the output accomplished during the year, 9,900 standard direct labor hours should have been used. Actual variable factory overhead was \$596,000, and actual fixed factory overhead was \$410,000 for the year. Based on this information, the volume variance for JoyT for this year is

- a. \$4,000 unfavorable.
- b. \$6,000 unfavorable.
- c. \$10,000 unfavorable.
- d. \$16,000 unfavorable.

21. Garland Company uses a standard cost system. The standard for each finished unit of product allows for 3 pounds of plastic at \$0.72 per pound. During December, Garland bought 4,500 pounds of plastic at \$0.75 per pound, and used 4,100 pounds in the production of 1,300 finished units of product. What is the material purchase price variance for the month of December?
- \$117 unfavorable.
 - \$123 unfavorable.
 - \$135 unfavorable.
 - \$150 unfavorable.
22. Simpson Inc. is a major consumer electronics distributor with 4 regional sales offices in major cities and 12 district sales offices in mid-sized cities in the U.S. Sal Jones is the Regional Director of the New York regional sales office. Jones is responsible for meeting the region's sales goals, and controlling the costs of the regional office and the 4 district offices in his region. The New York Region is which one of the following types of responsibility centers?
- Cost center.
 - Revenue center.
 - Profit center.
 - Investment center.
23. Which one of the following **best** describes the performance elements contained in most balanced scorecards?
- | | <u>Financial
Performance Measures</u> | <u>Nonfinancial
Performance Measures</u> |
|----|---|--|
| a. | No | No. |
| b. | No | Yes. |
| c. | Yes | No. |
| d. | Yes | Yes. |
24. Roberta Johnson is the manager of Sleep-Well Inn, one of a chain of motels located throughout the U.S. An example of an operating cost at Sleep-Well that is both direct and fixed is
- Johnson's salary.
 - water.
 - toilet tissue.
 - advertising for the Sleep-Well Inn chain.

25. The schedule of cost of goods manufactured of Gruber Fittings, Inc. shows the following balances for its fiscal year-end.

Direct manufacturing labor	\$ 280,000
Manufacturing overhead	375,000
Ending work-in-process inventory	230,000
Raw materials used in production	450,000
Cost of goods manufactured	1,125,000

The value of the work-in-process inventory at the beginning of the fiscal year was

- a. \$625,000.
 - b. \$250,000.
 - c. \$210,000.
 - d. \$20,000.
26. When compared with normal spoilage, abnormal spoilage
- a. arises more frequently from factors that are inherent in the manufacturing process.
 - b. is given the same accounting treatment as normal spoilage.
 - c. is generally thought to be more controllable by production management than normal spoilage.
 - d. is not typically influenced by the “tightness” of production standards.
27. Assuming that there is a constant contribution margin per unit, the change in period-to-period operating income when using variable costing can be explained by the change in the
- a. unit sales level multiplied by the unit sales price.
 - b. finished goods inventory level multiplied by the unit sales price.
 - c. unit sales level multiplied by the unit contribution margin.
 - d. finished goods inventory level multiplied by the unit contribution margin.
28. Tucariz Company processes Duo into two joints products, Big and Mini. Duo is purchased in 1,000-gallon drums for \$2,000. Processing costs are \$3,000 to process the 1,000 gallons of Duo into 800 gallons of Big and 200 gallons of Mini. The selling price is \$9 per gallon for Big and \$4 per gallon for Mini. If the physical measure method is used to allocate joint costs to the final products, the total cost assigned to produce Mini is
- a. \$500.
 - b. \$1,000.
 - c. \$4,000.
 - d. \$4,500.

29. Pane Company uses a job costing system and applies overhead to products on the basis of direct labor cost. Job No. 75, the only job in process on January 1, had the following costs assigned as of that date: direct materials, \$40,000; direct labor, \$80,000; and factory overhead, \$120,000. The following selected costs were incurred during the year.

Traceable to jobs:

Direct materials	\$178,000	
Direct labor	<u>345,000</u>	\$523,000

Not traceable to jobs:

Factory materials and supplies	46,000	
Indirect labor	235,000	
Plant maintenance	73,000	
Depreciation on factory equipment	29,000	
Other factory costs	<u>76,000</u>	459,000

Pane's profit plan for the year included budgeted direct labor of \$320,000 and factory overhead of \$448,000. There was no work-in-process on December 31. Pane's overhead for the year was

- \$11,000 overapplied
 - \$24,000 overapplied.
 - \$11,000 underapplied.
 - \$24,000 underapplied.
30. Parker Company pays each member of its sales staff a salary as well as a commission on each unit sold. For the coming year, Parker plans to increase all salaries by 5% and to keep unchanged the commission paid on each unit sold. Because of increased demand, Parker expects the volume of sales to increase by 10%. How will the total cost of sales salaries and commissions change for the coming year?
- Increase by 5% or less.
 - Increase by more than 5% but less than 10%.
 - Increase by 10%.
 - Increase by more than 10%.

31. Kepler Optics makes lenses for telescopes. Because Kepler will only sell lenses of the highest quality, the normal spoilage during a reporting period is 1,000 units. At the beginning of the current reporting period, Kepler had 2,200 units in inventory, and during the period, production was started and completed on 4,000 units. Units in inventory at the end of the current reporting period were 1,500, and the units transferred out were 3,000. During this period, the abnormal spoilage for Kepler's lense production was
- a. 700 units.
 - b. 1,000 units.
 - c. 1,700 units.
 - d. 3,200 units.
32. Which one of the following is an advantage of using variable costing?
- a. Variable costing complies with the U.S. Internal Revenue Code.
 - b. Variable costing complies with generally accepted accounting principles.
 - c. Variable costing makes cost-volume relationships more easily apparent.
 - d. Variable costing is most relevant to long-run pricing strategies.
33. Huntington Corporation pays bonuses to its managers based on operating income, as calculated under variable costing. It is now two months before year-end, and earnings have been depressed for some time. Which one of the following actions should Wanda Richards, production manager, implement if she desires to maximize her bonus for this year?
- a. Step up production so that more manufacturing costs are deferred into inventory.
 - b. Eliminate \$2.3 million of advertising and marketing costs.
 - c. Postpone \$1.8 million of discretionary equipment maintenance until next year.
 - d. Implement, with the aid of the controller, an activity-based costing and activity-based management system.

34. Juniper Manufacturing uses a weighted-average process costing system at its satellite plant. Goods pass from the Major Assembly Department to the Finishing Department to finished goods inventory. The goods are inspected twice in the Finishing Department. The first inspection occurs when the goods are 30% complete, and the second inspection occurs at the end of production. The following data pertain to the Finishing Department for the month of July.

	<u>Units</u>
Good units started and completed during July	65,000
Normal spoilage - first inspection	2,000
Abnormal spoilage - second inspection	150
Ending work-in-process inventory, 60% complete	15,000

There was no beginning work-in-process inventory in July. Juniper recognizes spoiled units to make the cost of all spoilage visible in their management reporting. Equivalent units for assigning costs for July would total

- a. 74,000.
 - b. 74,150.
 - c. 74,600.
 - d. 74,750.
35. Breegle Company produces three products (B-40, J-60, and H-102) from a single process. Breegle uses the physical volume method to allocate joint costs of \$22,500 per batch to the products. Based on the following information, which product(s) should Breegle continue to process after the splitoff point in order to maximize profit?

	<u>B-40</u>	<u>J-60</u>	<u>H-102</u>
Physical units produced per batch	1,500	2,000	3,200
Sales value per unit at splitoff	\$10.00	\$4.00	\$7.25
Cost per unit of further processing after splitoff	3.05	1.00	2.50
Sales value per unit after further processing	12.25	5.70	9.75

- a. B-40 only.
- b. J-60 only.
- c. H-102 only.
- d. B-40 and H-102 only.

36. A review of the year-end accounting records of Elk Industries discloses the following information.

Raw materials	\$ 80,000
Work-in-process	128,000
Finished goods	272,000
Cost of goods sold	1,120,000

The company's underapplied overhead equals \$133,000. On the basis of this information, Elk's cost of goods sold is **most** appropriately reported as

- a. \$987,000.
 - b. \$1,213,100.
 - c. \$1,218,000.
 - d. \$1,253,000.
37. Coach Corporation is considering which capacity measure is appropriate to use as the denominator level of activity when applying fixed factory overhead to units produced. Assume that Coach selects direct labor hours as the cost driver and the following additional data are available from the prior year.

	<u>Hours</u>
Standard direct labor hours for normal capacity	200,000
Standard direct labor hours allowed for units produced in the prior year	210,000
Standard direct labor hours for the master budget capacity	220,000

Which of the following capacity measures for the denominator-level of activity would have resulted in an unfavorable volume variance?

- a. Both normal capacity and master budget capacity.
 - b. Neither normal capacity nor master budget capacity.
 - c. Normal capacity only.
 - d. Master budget capacity only.
38. In allocating support department costs to operating departments, the allocation method that **best** accounts for interdepartmental relationships between support departments is the
- a. reciprocal method.
 - b. direct method.
 - c. step method.
 - d. physical volume method.

39. Which of the following is **not** a correct comparison of a just-in-time system with a traditional system?

<u>Traditional</u>	<u>Just-in-Time</u>
a. Longer lead times	Shorter lead times
b. Inventory is an asset	Inventory is a liability
c. Some scrap tolerated	Zero defects desired
d. Lot size based on immediate need	Lot size based on formulas

40. To meet Zylon Corporation's overall objectives, the Frame Division has just initiated a program to increase sales by improving the manufacturing quality of its products. The **most** appropriate management level to be responsible for this program is the

- a. sales manager.
- b. production manager.
- c. division president.
- d. receiving and inspection manager.

41. The cost of scrap, rework, and tooling changes in a product quality cost system is categorized as a(n)

- a. external failure cost.
- b. internal failure cost.
- c. prevention cost.
- d. appraisal cost.

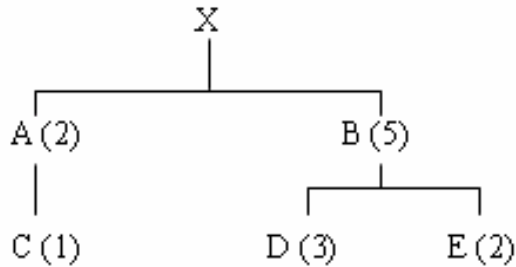
42. When management of the sales department has the opportunity to override the system of internal controls of the accounting department, a weakness exists in

- a. risk management.
- b. information and communication
- c. monitoring.
- d. the control environment.

43. Of the following, the **primary** objective of compliance testing is to determine whether

- a. procedures are regularly updated.
- b. financial statement line items are properly stated.
- c. controls are functioning as planned.
- d. collusion is taking place.

44. Segregation of duties is a fundamental concept in an effective system of internal control. Nevertheless, the internal auditor must be aware that this safeguard can be compromised through
- lack of training of employees.
 - collusion among employees.
 - irregular employee reviews.
 - absence of internal auditing.
45. Starr Company uses material requirements planning (MRP) and manufactures a product with the following product structure tree



Starr has just received an order for 100 units of X, the finished product. The company has 20 units of X, 100 units of B, and 50 units of E in inventory. How many units of E must Starr purchase in order to fill the order?

- 1,000.
 - 830.
 - 800.
 - 550.
46. Which one of the following forms of audit is **most** likely to involve a review of an entity's performance of specific activities in comparison to organizational specific objectives?
- Information system audit.
 - Financial audit.
 - Operational audit.
 - Compliance audit.

47. In determining next year's overhead application rates, a company desires to focus on manufacturing capacity rather than output demand for its products. To derive a realistic application rate, the denominator activity level should be based on
- practical capacity.
 - maximum capacity.
 - normal capacity.
 - master-budget (expected annual) capacity.
48. An accounting system identification code that utilizes a sum-of-digits check digit will detect all of the following errors except
- completeness errors.
 - transcription errors.
 - transposition errors.
 - validity errors.
49. In entering the billing address for a new client in Emil Company's computerized database, a clerk erroneously entered a nonexistent zip code. As a result, the first month's bill mailed to the new client was returned to Emil Company. Which one of the following would **most** likely have led to discovery of the error at the time of entry into Emil Company's computerized database?
- Limit test.
 - Validity test.
 - Parity test.
 - Record count test.
50. A company's management is concerned about computer data eavesdropping and wants to maintain the confidentiality of its information as it is transmitted. The company should utilize
- data encryption.
 - dial back systems.
 - message acknowledgment procedures.
 - password codes.

51. Which one of the following would **most** compromise the use of backups as protection against loss or damage of master files?
- a. Use of magnetic tape.
 - b. Inadequate ventilation.
 - c. Storing of all files in one location.
 - d. Failure to encrypt data.
52. Shelly Smith, CMA, is the consumer electronics buyer for a major chain of department stores. His department's gross profit margin is monitored by senior management on a quarterly basis. When Smith thinks he may have trouble making the gross profit goal for a quarter, he may claim unauthorized charge-backs on merchandise invoices from the manufacturer. A retailer may obtain specific authorization from the manufacturer to deduct (charge-back) from the invoice for damaged goods, goods returned by customers, mistakes in shipping, and similar specific reasons. In accordance with IMA's Statement of Ethical Professional Practice, which one of the following statements is **most** correct?
- a. Smith is violating the Confidentiality standard by informing the manufacturer of the value and reason(s) for the charge-backs.
 - b. Smith is violating the Credibility standard by communicating erroneous information. The charge-back he claimed had not been approved by the manufacturer.
 - c. Smith is violating the Competence standard, because the Fair Trade Commission (FTC) has established regulations prohibiting charge-backs which are not approved by the vendor.
 - d. The unauthorized charge-backs do not violate IMA's Statement, or any other ethics policy. At worst, the charge-backs will be reversed in a future period.

Part 1 Answers

1. Key = a

2. Key = c

Sum of the percent defective multiplied by its probability of occurrence
 $(2\% \times .30) + (3\% \times .50) + (4\% \times .20) = .60 + 1.50 + .80 = 2.90\%$

3. Key = b

$100 \times .7 \times .7 \times .7 = 34.3$ average hours for 8 units; total hours = $8 \times 34.3 = 274.4$ hours

4. Key = d

Exponential smoothing combines the last forecast and the last observed value:

$$F_{t+1} = aY_t + (1 - a)F_t$$

where F_{t+1} = forecast of the time series for period t+1

Y_t = actual value of the time series in period t

F_t = forecast of the time series for period t

a = smoothing constant.

5. Key = a

Since the sales forecast is prepared for the whole year, known seasonal revenue fluctuation patterns should not significantly affect a total year forecast, unlike general economic conditions, sales personnel input, and raw materials supply issues.

6. Key = a

	Demand			
	4000	5000	6000	7000*
Revenue (orig. sales)	100,000	125,000	150,000	150,000
Cost of shirts	78,000	78,000	78,000	78,000
Wholesale revenue	20,000	10,000	0	0
Profit	42,000	57,000	72,000	72,000
Probability	15%	20%	35%	30%
Profit x probability	6,300	11,400	25,200	21,600
Expected profit (sum)	64,500			

* Sales limited to 6000, since purchased only 6000

7. Key = a

A rolling budget (or continuous budget) is a plan that always covers a specified future period by adding a period in the future and dropping the period just ended. It forces management to continuously focus on the future specified time period. The time period is always the same length, but the actual time period covered by the budget moves forward with the passage of time.

8. Key = d

Strategic planning drives all other planning and budgeting activities within the firm.

9. Key = d

Activity-based budgeting concentrates on the budgeted cost of activities necessary to produce and sell products and services (outputs). This, in turn, will increase the identification of resource needs and budgetary slack. However, activity-based budgeting does not necessarily reduce planning uncertainty.

10. Key = b

The pro forma statement of cash flows is usually one of the last steps in preparing a master budget. The process of creating a master budget usually has the following sequence: sales budget, production budget, selling and administrative expenses budget, cash budget, and pro forma financial statements.

11. Key = d

Top managers determine and significantly influence how budgets are perceived in their companies. Top management initiates the planning and budgeting process and approves policies and procedures regulating it, which makes its support a crucial success factor for the budgeting process.

12. Key = a

13. Key = b

Net income	\$100,000
Capital expenditures	(50,000)
Increase in working capital	(25,000)
Depreciation	<u>15,000</u>
Increase in cash	<u>\$ 40,000</u>

14. Key = d

Beginning cash balance	\$ 36,000
Cash collections	1,300,000
Decrease in accounts payable	(25,000)
Costs and expenses	(1,200,000)
Add back depreciation included in expenses	60,000
Cash purchase of equipment	(50,000)
Cash received from sale of asset (\$35,000 + \$5,000)	40,000
Repayment of notes payable	<u>(66,000)</u>
Ending cash balance	<u>\$ 95,000</u>

15. Key = d

Accounts payable at 12/31 = 75% of December and 15% of November
 $\$207,000 / .90 = \$230,000$ for month; \$690,000 for the quarter

16. Key = d

To determine the budgeted cost of purchases, the number of units to be produced should be adjusted by the change in inventory and then multiplied by the budgeted purchase cost.

17. Key = b

The master budget always begins with the forecast of sales. Tuition from students is the revenue source in a proprietary school.

18. Key = a

- July's collections in September + August's collections in September.
- The balance of July's sales is uncollectible.

$$\begin{array}{ll} 36\% \times \$120,000 = \$ 43,200 & \text{July sales on account collected in September} \\ 60\% \times \$211,000 = \underline{126,600} & \text{August sales on account collected in September} \\ & \underline{\underline{\$169,800}} \end{array}$$

19. Key = c

Cost of goods sold = Sales – Gross profit = \$160,000 - \$48,000 = \$112,000.
Available for sale finished goods = Cost of goods sold + Ending finished goods inventory = \$112,000 + \$58,300 = \$170,300.
Cost of goods manufactured = Available for Sale finished goods - Opening finished goods inventory = \$170,300 – \$60,190 = \$110,110.

20. Key = a

$$(10,000 \text{ hrs.} - 9900 \text{ hrs.}) \times (400,000/10,000)$$

21. Key = c

$$(\text{Standard price} - \text{actual price}) \times \text{number of pounds purchased} \\ (\$0.72 - \$0.75) \times 4,500 \text{ pounds} = \$135 \text{ unfavorable}$$

22. Key = c

In a profit center the manager is responsible for both revenues and costs, but not investments.

23. Key = d

24. Key = a

A direct cost can be traced directly to a cost object. Salary does not vary over a set period of time and is therefore a fixed direct labor cost. The other items are either variable or indirect.

25. Key = b

Cost of goods manufactured + Ending work-in-process = Direct manufacturing labor + Manufacturing overhead + Raw materials used in production + Work in process at the beginning of the fiscal year

$$\text{Work-in-process at the beginning of the fiscal year} = \text{Cost of goods manufactured} + \\ \text{Ending work in process} - \text{direct manufacturing labor} - \text{Manufacturing overhead} - \text{Raw} \\ \text{materials used in production} = \$1,125,000 + \$230,000 - \$280,000 - \$375,000 - \\ \$450,000$$

26. Key = c

27. Key = c

28. Key = b

$$(\$3,000 + \$2,000) \times 200/1,000 = \$1,000$$

29. Key = b

Applied overhead - actual = amount over/underapplied
 $\$448,000/\$320,000 =$ budgeted application rate of 1.4
 $\$345,000$ direct labor actual $\times 1.4 = \$483,000$ applied
 $\$483,000$ applied - $\$459,000$ total not traceable = $\$24,000$ overapplied

30. Key = b

The cost of salaries will increase by exactly 5%. The cost of commissions paid (a variable cost) will increase by the level of activity, which is 10%. Because total compensation is a blend of these two costs, total compensation will increase by some amount between 5% and 10%.

31. Key = a

Total spoilage = beginning units + units started and completed – units transferred out – ending units = $2,200 + 4,000 - 3,000 - 1,500 = 1,700$
Abnormal spoilage = Total spoilage – Normal spoilage = $1,700 - 1,000 = 700$

32. Key = c

Variable costing is a method of inventory costing in which all variable manufacturing costs are included as inventoriable costs. Fixed manufacturing costs are considered period expenses; consequently, fixed costs are not allocated to the units of production in a cost-volume analysis. Thus, with variable costing the analysis is more apparent; the per-unit cost stays constant as the volume of production changes.

33. Key = c

All of the listed actions are targeted to increase operating income; however, cutting \$2.3 million of advertising and marketing costs is beyond the control of the production manager. In addition, stepping up production to defer manufacturing costs into inventory would work only under absorption costing. Finally, ABC and ABM systems implementation is beneficial in the long-run, but would have little effect in the current short-term period. Thus, postponing equipment maintenance until the next reporting period is the only action that would affect operating income and the production managers' year-end bonus.

34. Key = d

	<u>Physical Units</u>	<u>Equivalent Units</u>
Started and completed during month (100%)	65,000	65,000
Normal spoilage (30%)	2,000	600
Abnormal spoilage (100%)	150	150
Ending work-in-process inventory (60%)	<u>15,000</u>	<u>9,000</u>
	<u>82,150</u>	<u>74,750</u>

35. Key = b

The units should be processed after the splitoff point only if the additional cost is less than the additional revenue. Only J-60 units warrant further processing:

	<u>B-40</u>	<u>J-60</u>	<u>H102</u>
Additional revenue	\$2.25	\$1.70	\$2.50
Additional cost	\$3.05	\$1.00	\$2.50

36. Key = c

The underapplied overhead should be prorated on the basis of the percentage of production activity of the period included in work-in-process, finished goods, and cost of goods sold.

Thus, overhead should be allocated to cost of goods sold in the amount of:
 $\$1,120,000 / (\$128,000 + \$272,000 + \$1,120,000) \times \$133,000 = \$98,000$

Since the overhead was underapplied, we should add this amount to cost of goods sold account to reach the appropriate amount to the cost of goods sold account:
 $\$98,000 + \$1,120,000 = \$1,218,000$

37. Key = d

38. Key = a

39. Key = d

In a just-in-time system, the goal is to minimize the amount of inventory at the plant. Accordingly, lot size is based on the immediate need of the manufacturing units. In contrast, in a traditional system, raw material inventory lot size purchases are often determined on the basis of formulas, such as EOQ.

40. Key = b

41. Key = b

42. Key = d

Control environment includes attitude of management toward the concept of controls.

43. Key = c

A compliance audit is a review of controls to see how they conform with established laws, standards, and procedures.

44. Key = b

Effective segregation of duties means that no single employee has control over authorization, recording and custody. If two or more employees are in collusion, these controls can be overridden.

45. Key = d

Product X needed to fill the order: $(100-20)=80$. Product B needed to fill the order: $80*5=400$. Product B to be manufactured: $400-100=300$. Product E needed to fill the order: $300*2=600$. Product E to be purchased: $600-50=550$.

46. Key = c

Operational audit includes by definition an internal review of the operating performance of specific activities in comparison to organizational goals and/or other specific criteria focused on the economical and efficient use of resources.

47. Key = a

Maximum capacity would occur if there were no interruptions, which is virtually impossible. Normal and master-budget capacity focus on output demand. Thus, practical capacity, which is the maximum production output the firm can reach at the usual level of interruptions, will produce the best overhead allocation rate given the circumstances.

48. Key = c

49. Key = b

A validity test compares data against a master file for accuracy. Data that cannot possibly be correct (e.g., a nonexistent zip code) would be discovered at that time.

50. Key = a

Data encryption, which uses secret codes, ensures that data transmissions are protected from unauthorized tampering or electronic eavesdropping.

51. Key = c

Storing all files in one location undermines the concept of multiple backups inherent in the grandfather-father-son principle.

52. Key = b

- a. Incorrect. Confidentiality is not violated: such disclosure is required.
- b. Correct. Smith has not “communicate(d) information fairly and objectively.”
- c. Incorrect. FTC does not have jurisdiction in this area.
- d. Incorrect. Unauthorized charge-backs violate the Statement’s standard on Credibility.