



Following are multiple choice questions recently released by the AICPA. These questions were released by the AICPA with letter answers only. Our editorial board has provided the accompanying explanations.

Please note that the AICPA generally releases questions that it does NOT intend to use again. These questions and content may or may not be representative of questions you may see on any upcoming exams.

1.

Which of the following statement(s) is(are) true regarding the relationship between absorption costing net income and variable costing income?

- I. When production exceeds sales, variable costing income exceeds absorption costing net income.
 - II. When sales exceed production, absorption costing income exceeds variable costing net income.
- a. I only.
 - b. II only.
 - c. Both I and II.
 - d. Neither I nor II.

Solution:

Choice "d" is correct. Neither I nor II are correct. When production exceeds sales, inventory increases. As inventory increases, net income under absorption costing benefits from fixed manufacturing overhead that is recorded in inventory instead of recognition in cost of goods sold. Variable costing, however, bears the full cost of all fixed costs. Variable costing is less than absorption costing when inventory increased. Conversely, when sales exceeds production, inventory fall. As inventory falls, net income under absorption costing is reduced by cost of goods sold that includes fixed manufacturing overhead from prior periods that had been recorded in inventory. Absorption costing net income is less than variable costing net income.

Choice "a" is incorrect. I only is not correct. When production exceeds sales, inventory increases. As inventory increases, net income under absorption costing benefits from fixed manufacturing overhead that is recorded in inventory instead of recognition in cost of goods sold. Variable costing, however, bears the full cost of all fixed costs. Variable costing is less than absorption costing when inventory

Choice "b" is incorrect. II only is not correct. When sales exceeds production, inventory fall. As inventory falls, net income under absorption costing is reduced by cost of goods sold that includes fixed manufacturing overhead from prior periods that had been recorded in inventory. Absorption costing net income is less than variable costing net income.

Choice "c" is incorrect. "Both I and II" is not correct. See the explanations above.

2.

Which of the following statements is (are) correct regarding corporate debt and equity securities?

- I. Both debt and equity security holders have an ownership interest in the corporation.
 - II. Both debt and equity securities have an obligation to pay income.
-
- a. I only.
 - b. II only.
 - c. Both I and II.
 - d. Neither I nor II.

Solution:

Choice "d" is correct. Neither I nor II is correct. Equity security holders have ownership interest while debt holders do not. Debt obligations require a periodic interest payment while equity securities only pay income to their holders when dividends are declared at the discretion of the Board of Directors.

Choice "a" is incorrect. Equity security holders have ownership interest while debt holders do not.

Choice "b" is incorrect. Debt obligations require a periodic interest payment while equity securities only pay income to their holders when dividends are declared at the discretion of the Board of Directors.

Choice "c" is incorrect. "Both I and II" is not correct. See explanations above.

3.

Selected information concerning the operations of a company for the year ended December 31 is as follows:

Units produced	20,000
Units sold	18,000
Direct materials used	\$80,000
Direct labor incurred	\$40,000
Fixed factory overhead	\$50,000
Variable factory overhead	\$24,000
Fixed selling and administrative expenses	\$60,000
Variable selling and administrative expenses	\$9,000

Work-in-process inventories at the beginning and end of the year were zero. What was the company's finished goods inventory cost at December 31 under the variable (direct) costing method?

- a. \$23,900
- b. \$19,400
- c. \$17,000
- d. \$14,400

Solution:

Choice "d" is correct. The ending finished goods inventory computed using direct costing is calculated by allocating the total costs capitalized in inventory under direct costing (variable costs) to ending inventory as follows:

	<u>Amount</u>	<u>Units</u>	<u>Ending Inventory</u>
Direct Material	80,000		
Direct Labor	40,000		
Variable Factory Overhead	24,000		
Total Production	144,000	÷ 20,000 =	\$7.20
Ending Inventory (20,000 - 18,000)			x 2,000
Ending Inventory			14.400

Choices "a", "b" and "c" are incorrect, per the above.

4.

Which of the following circumstances may permit the piercing of the corporate veil of a closely held corporation and thus may cause its shareholders to be held personally liable?

- I. The corporation is thinly capitalized.
 - II. The corporation borrows money from a shareholder without giving the shareholder a security interest in corporate assets
- a. I only.
 - b. II only
 - c. Both I and II
 - d. Neither I nor II.

Solution:

Choice "a" is correct. I. is a correct statement. The corporate veil of limited liability may be pierced and the personal assets of the shareholders may be reached to satisfy corporate obligations if the corporation was inadequately (thinly) capitalized at the time of its formation. II., however, is incorrect. That a shareholder has corporation has borrowed money from a shareholder and not given the shareholder security is not a ground for piercing.

Choices "b", "c" and "d" are incorrect because they do not reflect that; I and only I is a correct statement.

5.

The principle that protects corporate directors from personal liability for acts performed in good faith on behalf of the corporation is known as:

- a. The clean hands doctrine.
- b. The full disclosure rule.
- c. The responsible person doctrine.
- d. The business judgment rule.

Solution:

Choice "d" is correct. If a director acts in good faith and in a manner the director believes is in the best interest of the corporation, and the director exercises the care that a reasonably prudent person would exercise in a similar position, the director is protected against liability for decisions the director makes that turn out poorly for the corporation. This is commonly known as the business judgment rule.

Choice "a" is incorrect. The clean hands doctrine (better known as the unclean hands doctrine) is a defense in actions brought in cases seeking equitable relief. If a person seeking equitable relief has acted improperly in the transaction before the court, he is said to have unclean hands and the court will not grant equitable relief. The doctrine has nothing to do with releasing directors from liability for acting in good faith and is outside the scope of the CPA Exam topics.

Choices "b" and "c" are incorrect. There are no such rules. Full disclosure may be required in certain situations under corporate law, but such disclosure requirement is not the described doctrine.

6.

What type of business organization may generally be formed without filing an organizational document or certificate with a state government agency or office?

- a. A corporation.
- b. A limited liability company.
- c. A general partnership.
- d. A limited partnership.

Solution:

Choice "c" is correct. A general partnership may be formed without filing any organizational documents with the state. All that is needed to form a partnership is an agreement between at least two competent persons to carry on as co-owners a business for profit.

Choice "a" is incorrect. In order to form a corporation, a document, called the articles of incorporation in most states, must be filed with the state.

Choice "b" is incorrect. In order to form a limited liability company, a document, called the articles of organization in most states, must be filed with the state.

Choice "d" is incorrect. In order to form a limited partnership, a document, called the "certificate of limited partnership" in most states, must be filed with the state.

7.

Which of the following is usually a benefit of using electronic funds transfer for international cash transactions?

- a. Creation of multilingual disaster recovery plans.
- b. Reduction in the frequency of data entry errors.
- c. Off-site storage of foreign source documents.
- d. Improvement in the audit trail for cash transactions.

Solution:

Choice "b" is correct. EFT (electronic funds transfers), either international or non-international, will normally result in reduced data entry errors because the data transfers are system-to-system transfers with less data entry and thus fewer "people" errors.

Choice "a" is incorrect. The "creation of multilingual disaster recovery plans" is a pure distracter. Disaster recovery plans do not have to be multilingual and, even if they are, that does nothing to affect international cash transactions one way or the other.

Choice "c" is incorrect. Off-site storage of foreign source documents has nothing to do with electronic funds transfer for international cash transactions. If it is good to store foreign source documents off-site, it would also be good to store non-foreign source documents off-site. Either way, where source documents are stored has nothing to do with electronic funds transfer, either international or non-international.

Choice "d" is incorrect. There is not anything about electronic funds transfer, international or non-international, which will necessarily improve, or necessarily damage, the audit trail for cash transactions.

8.

Which of the following acts is most likely to cause a court to pierce the corporate veil?

- a. Failure to designate a registered agent in the articles of incorporation (Charter).
- b. Retention of excess capital.
- c. Failure to conduct a significant portion of business in the chartering state.
- d. Using corporate assets for the owner's personal purposes.

Solution:

Choice "d" is correct. The corporate veil of limited liability may be pierced and the personal assets of the shareholders may be reached to satisfy corporate obligations if the shareholder commingles personal assets with his own. This includes using corporate assets to pay personal debts.

Choice "a" is incorrect. Failure to designate a registered agent in the articles makes the articles faulty in most states and is a ground for seeking dissolution of the corporation, but in and of itself, it is not a ground for piercing the corporate veil to reach shareholders' personal assets to satisfy corporate obligations.

Choice "b" is incorrect. Retention of excess capital may be a ground for imposing extra taxes on the corporation, but it is not a ground for piercing the corporate veil.

Choice "c" is incorrect. Failure to conduct a significant portion of business in the chartering state has absolutely no impact on corporate obligations. Many corporations are incorporated in states with favorable tax structures and corporate laws (e.g., Delaware) even though they carry on little or no business in the state of incorporation.

9. (Adapted)

What business entity can be voluntarily dissolved and terminated only by filing a dissolution document with the state of organization?

- a. A corporation.
- b. A general partnership.
- c. A limited liability limited partnership.
- d. A limited partnership.

Solution:

Choice "a" is correct. Voluntary dissolution of a corporation requires the filing of articles of dissolution with the state.

Choice "b" is incorrect. A general partnership does not file a document with the state in order to be formed and does not need to file a document with the state in order to be dissolved. A partnership will be considered to be dissolved upon the happening of a number of events, including upon the agreement of the partners.

Choices "c" and "d" are incorrect. Although a limited partnership and a limited liability limited partnership may be formed only by filing with the state, dissolution of such entities does not require a filing with the state. It is sufficient merely to give creditors and persons with whom the limited partnership dealt notice of the dissolution. (However, such entities also have the option to file a statement of dissolution.)

10.

JackKue Co. plans to produce 200,000 pairs of roller skates during January of next year. Planned production for February is 250,000 pairs. Sales are forecasted at 180,000 pairs for January and 240,000 pairs for February. Each pair of roller skates has eight wheels. JackKue's policy is to maintain 10% of the next month's production in inventory at the end of a month. How many wheels should JackKue purchase during January?

- a. 195,000
- b. 205,000
- c. 1,560,000
- d. 1,640,000

Solution:

Choice "d" is correct. JackKue should anticipate purchasing 1,640,000 wheels in January. JackKue would purchase enough wheels for 200,000 skates planned for production as adjusted for 20,000 already on hand in anticipation of January production plus 25,000 purchased in anticipation of February production as follows:

January production (skates)	200,000	
Less beginning inventory (10% x 200,000)	(20,000)	
Plus ending inventory (10% x 250,000)	<u>25,000</u>	
January purchases		205,000
Wheels per skate		<u> x 8</u>
Total January purchases		<u>1,640,000</u>

Choice "a" is incorrect. The amount computed does not convert skates to wheels and does not properly compute the impact of prior and subsequent month inventory safety stock.

Choice "b" is incorrect. Although the amount properly considers the impact of prior and subsequent month inventory safety stock, it does not convert skates to wheels.

Choice "c" is incorrect. Although the amount properly converts skates to wheels, it does not properly compute the impact of prior and subsequent month safety stock.

11.

The following information is available on Crain Co.'s two product lines:

	<u>Chairs</u>	<u>Tables</u>
Sales	\$180,000	\$48,000
Variable costs	(96,000)	(30,000)
Contribution margin	84,000	18,000
Fixed costs:		
Avoidable	(36,000)	(12,000)
Unavoidable	(18,000)	(10,800)
Operating income (loss)	\$30,000	(\$4,800)

Assuming the tables line is discontinued, and the factory space previously used to make tables is rented for \$24,000 per year, operating income will increase by what amount?

- a. 13,200
- b. \$18,000
- c. \$24,000
- d. \$28,800

Solution:

Choice "b" is correct. The elimination of the tables line will eliminate unavoidable costs to the extent that they do not produce an operating loss. The rental income net of the reduced costs is the amount by which operating income will increase computed as follows:

Rental income	24,000
Tables line unavoidable costs	10,800
Operating loss	<u>4,800</u>
Unabsorbed costs	<u>(6,000)</u>
Increase in net income	18,000

Choice "a" is incorrect. The net income in this answer does not consider the operating loss incurred as part of the table line. The difference, 13,200 (24,000 - 10,800), understates the income

Choice "c" is incorrect. The increase in net income is not the total amount of rental income.

Choice "d" is incorrect. The increase in net income is not the amount of rental income plus the eliminated operating loss before adjusting for unavoidable costs.

12.

Which of the following decision-making models equates the initial investment with the present value of the future cash inflows?

- a. Accounting rate of return.
- b. Payback period.
- c. Internal rate of return.
- d. Cost-benefit ratio.

Solution:

Choice "c" is correct. The internal rate of return method computes the rate of return where net present value equals zero. The method equates the initial investment with the present value of the future cash inflows.

Choice "a" is incorrect. The accounting rate of return anticipates changes in net income and does not consider present value.

Choice "b" is incorrect. The payback period computes the period of time necessary to recover an initial investment generally based on undiscounted cash flows.

Choice "d" is incorrect. The cost benefit ratio does not equate investment and the present value of cash flow.

13.

Hughes and Brody start a business as a closely-held corporation. Hughes owns 51 of the 100 shares of stock issued by the firm and Brody owns 49. One year later, the corporation decides to sell another 200 shares. Which of the following types of rights would give Hughes and Brody a preference over other purchasers to buy shares to maintain control of the firm?

- a. Shareholder derivative rights.
- b. Pre-emptive rights.
- c. Cumulative voting rights.
- d. Inspection rights.

Solution:

Choice "b" is correct. The right to purchase new issuances of additional stock in order to maintain current proportional ownership is known as a pre-emptive right.

Choice "a" is incorrect. A shareholder's derivative right is the right of a shareholder to enforce a legal obligation—for example, by filing a lawsuit—owed to the corporation by a third party when the corporation does not seek to vindicate its own rights.

Choice "c" is incorrect. Cumulative voting rights refers to the right of a shareholder to cast votes in the election of directors equal to the product of the number of shares the shareholder owns times the number of directors being elected (e.g., if a shareholder owns 100 shares and three directors are being elected, the shareholder may cast 300 votes). Cumulative voting is often used to help assure representation of minority shareholders.

Choice "d" is incorrect. A shareholder's inspection rights refer to the right of a shareholder to inspect and copy certain shareholder records (e.g., minutes of shareholder meetings, list of shareholders, etc.).

14.

Which of the following listings correctly describes the order in which the four types of budgets must be prepared?

- a. Production, direct materials purchases, sales, cash disbursements.
- b. Sales, production, direct materials purchases, cash disbursements.
- c. Cash disbursements, direct materials purchases, production, sales.
- d. Sales, direct materials purchases, production, cash disbursements.

Solution:

Choice "b" is correct. The order of budget preparation begins with the sales budget which logically drives the production budget (to support sales), which, in turn, drives the direct materials purchases (to support production) from which the cash disbursements budget is derived.

Choice "a" is incorrect. Budgets are driven by sales forecasts. To begin with the production budget is illogical and presumes that the budget preparer can mandate sales levels based on production or is not constrained by inventory levels.

Choice "c" is incorrect. Budgets are driven by sales forecasts that ultimately determine cash flows. Beginning with cash disbursements is incorrect.

Choice "d" is incorrect. Although the order presented in this selection properly begins with sales, it does not logically support anticipated sales with production. The placement of direct materials before production appears to indicate that direct material purchases are determined independently of production as determined by sales. That relationship is generally not logical.

15.

Which of the following statements is correct regarding financial decision making?

- a. Opportunity cost is recorded as a normal business expense.
- b. The accounting rate of return considers the time value of money.
- c. A strength of the payback method is that it is based on profitability.
- d. Capital budgeting is based on predictions of an uncertain future.

Solution:

Choice "d" is correct. Capital budgeting involves the management's evaluation of an uncertain future since it involves long term commitments for asset acquisition and, often involves long term financing decisions as well. Management's decisions on the increased requirement for capital investment and the required return and the cost of capital require evaluation of an uncertain future.

Choice "a" is incorrect. Opportunity cost, while relevant in decision making, is not recorded as a normal business expense.

Choice "b" is incorrect. The accounting rate of return is based on GAAP basis net income and not cash flows and does not consider the time value of money.

Choice "c" is incorrect. The payback method measures risk (return of capital). A significant weakness of the payback method is that it does not consider profitability.

16.

A company purchases an item for \$43,000. The salvage value of the item is \$3,000. The cost of capital is 8%. Pertinent information related to this purchase is as follows:

	<u>Net cash flows</u>	<u>Present value factor at 8%</u>
Year 1	\$10,000	0.926
Year 2	5,000	0.857
Year 3	20,000	0.794
Year 4	27,000	0.735

What is the discounted payback period in years?

- a. 3.10
- b. 3.25
- c. 2.90
- d. 3.14

Solution:

Choice "b" is correct. The discounted payback period of 3.25 years is computed as follows:

	<u>Net cash flows</u>		<u>Present value factor at 8%</u>		<u>Product</u>	<u>Cumulative</u>
Year 1	\$10,000	x	0.926	=	9,260	9,260
Year 2	15,000	x	0.857	=	12,855	12,855
Year 3	20,000	x	0.794	=	15,880	37,955
Year 4	27,000	x	0.735	=	19,845	

The cumulative payback after three years is \$37,955. The portion of the fourth year needed to fully pay back the investment is computed as the ratio of the amount remaining to be recovered to the amount collected in the fourth year as follows:

$$(43,000 - 37,955) \div 19,845 = .252$$

The discounted payback period is, therefore:

Years 1–3	3.00 years
Year 4	<u>.25 years</u>
Total	3.25 years

Choice "a" is incorrect. This solution only anticipates payback of the capital investment net of salvage.

Choice "c" is incorrect. This solution does not apply the discount factors

Choice "d" is incorrect. This solution is incorrect per above.

17.

What is an internal rate of return?

- a. A net present value.
- b. An accounting rate of return.
- c. A payback period expected from an investment.
- d. A time-adjusted rate of return from an investment.

Solution:

Choice "d" is correct. The internal rate of return is one of many capital budgeting techniques that utilize present value concepts to value both the investment and the related cash flows. These methods are generally referred to as using a time adjusted rate of return.

Choice "a" is incorrect. Although the internal rate of return is the rate that yields a net present value of zero, the internal rate of return is not a net present value.

Choice "b" is incorrect. The accounting rate of return uses GAAP basis income to determine rate of return. It is not synonymous with internal rate of return.

Choice "c" is incorrect. The internal rate of return is not synonymous with the payback period of an investment. Payback measures return of capital in years on either a discounted or undiscounted basis.

18.

For the current period production levels, Woodwork Co. budgeted 11,000 board feet of production and purchased 15,000 board feet. The material cost was budgeted at \$7 per foot. The actual cost for the period was \$8.50 per foot. What was Woodwork's material price variance for the period?

- a. \$6,000 unfavorable.
- b. \$16,500 unfavorable.
- c. \$19,500 unfavorable.
- d. \$22,500 unfavorable.

Solution:

Choice "d" is correct. Woodwork Co. experienced a \$22,500 unfavorable direct materials price variance for the current period. The materials price variance formula calculates out as follows:

$$\text{Materials price variance} = \text{Actual Quantity} \times (\text{Actual} - \text{Standard Price})$$

$$\text{Materials price variance} = 15,000 \times (8.50 - 7.00)$$

$$\text{Materials price variance} = (22,500)$$

The materials price variance is unfavorable since we spent more than standard.

The trough method is computed as follows:

Actual Quantity x <u>Actual Price</u> 15,000 x \$8.50 = <u>\$127,500</u>	Actual Quantity x <u>Standard Price</u> 15,000 x \$7.00 = <u>\$105,000</u>
Price Variance (22,500)	

Choice "a" is incorrect. The proposed solution incorrectly calculates the variance as the difference in quantities times the difference in rates.

Choice "b" is incorrect. The proposed solution incorrectly calculates the variance as the difference in rates times the standard quantity. The materials price variance uses actual quantity purchased.

Choice "c" is incorrect, per computations above.

19.

Snyder Co. manufactures fans with direct material costs of \$10 per unit and direct labor of \$7 per unit. A local carrier charges Snyder \$5 per unit to make deliveries. Sales commissions are paid at 10% of the selling price. Fans are sold for \$100 each. Indirect factory costs and administrative costs are \$6,800 and \$37,200 per month, respectively. How many fans must Snyder produce to break even?

- a. 1,375
- b. **648**
- c. 564
- d. 530

Solution:

Choice "b" is correct. The break even point in units (fans) is computed as fixed costs divided by contribution margin per unit.

Contribution margin is computed as the difference between selling price and variable costs. Variable costs are comprised of the following:

Direct material	10.00
Direct labor	7.00
Delivery charges	5.00
Commission (\$100 x 10%)	<u>10.00</u>
Total	32.00

Contribution margin = \$100 - \$32.00 = \$68.00

Fixed costs are comprised of the following:

Indirect factory costs	\$ 6,800
Administrative costs	<u>37,200</u>
Total	\$44,000

Breakeven point in units is computed as follows:	FC	\$44,000
	÷ CM per unit	<u>68</u>
	Fans	<u><u>647</u></u>

Choice "a" is incorrect. The proposed solution divides fixed costs by variable costs per unit rather than contribution margin per unit.

Choices "c" and "d" are incorrect, per computations above

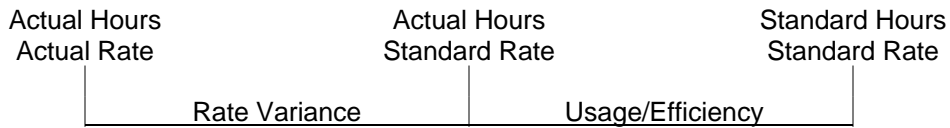
20.

The difference between standard hours at standard wage rates and actual hours at standard wage rates is referred to as which of the following types of variances?

- a. Labor rate.
- b. Labor usage.
- c. Direct labor spending.
- d. Indirect labor spending.

Solution:

Rule: The two-way direct labor variances are computed as follows:



Choice "b" is correct. The difference between standard hours at standard wage rates and actual hours at standard rates is the labor usage/ efficiency variance

Choice "a" is incorrect. The direct labor rate variance is the difference between actual hours at standard rate and actual hours at actual rate.

Choice "c" is incorrect. Spending variances are typically associated with three way overhead variances, not labor wage variances.

Choice "d" is incorrect. Spending variances are typically associated with three way overhead variances, not labor wage variances.

21.

Which of the following events would decrease the internal rate of return of a proposed asset purchase?

- a. Decrease tax credits on the asset.
- b. Decrease related working capital requirements.
- c. Shorten the payback period.
- d. Use accelerated, instead of straight-line depreciation.

Solution:

Rule: The internal rate of return is computed as follows:

$$\text{Investment/Cash Flows} = \text{Present Value Factor}$$

The higher the present value factor, the lower the computed rate (internal rate of return). Increases to the investment or decreases to the cash flows serve to increase the present value factor.

Choice "a" is correct. A decrease in tax credits associated with an asset would increase the initial investment, that increase would cause the present value to increase and would cause the resulting rate, internal rate of return, to decline.

Choice "b" is incorrect. A decrease in working capital requirements decreases the initial investment amount thereby decreasing the present value factor and, by extension, increasing the internal rate of return.

Choice "c" is incorrect. A reduced payback period correlates to decrease in the present value factor. Decreases in the present value factor is in an increase in the internal rate of return.

Choice "d" is incorrect. An accelerated depreciation method would initially increase the tax shield and, by extension, the cash flows. The increase in cash flow serves to reduce the present value factor which indicates an increase in the internal rate of return. *[Please note that, while this was the exact wording of the released question from the AICPA, it does not appear to be perfectly worded, as the IRR cannot typically be calculated with uneven cash flows (as in accelerated depreciation). We have provided the best explanation of the question considering the provided wording.]*

22. (Adapted)

Which of the following changes would result in the highest present value for a series of cash flows?

- a. A \$100 decrease in taxes each year for four years.
- b. A \$100 decrease in the cash outflow each year for three years.
- c. A \$100 increase in disposal value at the end of four years.
- d. A \$100 increase in cash inflow each year for three years.

Solution:

Choice "a" is correct. A decrease in taxes for each year for four years causes the greatest increases in cash flow and, therefore, present value of any of the alternatives.

Choice "b" is incorrect. A decrease in cash outflow would improve present value but this alternative suggest a three rather than four year benefit. Choice "b" is not as beneficial to present value as choice "a".

Choice "c" is incorrect. A \$100 increase in disposal value at the end of four years would increase present value but it would not increase present value as much as choice "a", a four-year annuity in the same amount each year.

Choice "d" is incorrect. An increase in cash inflow would improve present value but this alternative suggests a three, rather than four, year benefit. Choice "d" is not as beneficial to present value as choice "a".

23.

Which of the following internal control procedures would prevent an employee from being paid an inappropriate hourly wage?

- a. Having the supervisor of the data entry clerk verify that each employee's hours worked are correctly entered into the system.
- b. Using real-time posting of payroll so there can be **no** after-the-fact data manipulation of the payroll register.
- c. Giving payroll data entry clerks the ability to change any suspicious hourly pay rates to a reasonable rate.
- d. Limiting access to employee master files to authorized employees in the personnel department.

Solution:

Choice "d" is correct. Limiting access to employee master files to authorized employees in the personnel department will minimize the entry of and thus the processing with an inappropriate hourly wage (rate).

Choice "a" is incorrect. Having the supervisor of the data entry (or somebody else) verify that each employee's hours are correctly entered will minimize processing with an inappropriate number of hours but has nothing to do with the hourly wage (rate).

Choice "b" is incorrect. Real-time posting of payroll does nothing to eliminate any after-the-fact manipulation of the payroll register. If the payroll register can be manipulated after-the-fact, it can be manipulated after-the-fact regardless of whether it is updated online or in batch.

Choice "c" is incorrect. Giving payroll data entry clerks the ability to change any suspicious hourly pay rates to a reasonable rate is an absolutely terrible internal control practice. The data entry clerks would normally have no idea what a reasonable wage rate might be. Hourly rates should be reviewed by employees in the personnel department, and the rate used should be the correct rate, not a "reasonable" rate.

24.

ABC, Inc. assessed overall risks of MIS systems projects on two standard criteria: technology used and design structure. The following systems projects have been assessed on these risk criteria. Which of the following projects holds the highest risk to ABC?

	<u>Technology</u>	<u>Structure</u>
a.	Current	Sketchy
b.	New	Sketchy
c.	Current	Well defined
d.	New	Well defined

Solution:

Choice "b" is correct. Although it is not completely clear what "design structure" means, the use of the word "sketchy" gives the answer away. The question is asking about the highest risk. Certainly a new technology and a sketchy design structure would present the highest risk. This question really does not require any real knowledge of IT, just a little common sense.

Choice "a" is incorrect. A current technology is always going to have a lower, not a higher, risk than a new technology. The design structure could then almost be considered to be irrelevant, because the choice is already incorrect.

Choice "c" is incorrect. A current technology is always going to have a lower, not a higher, risk than a new technology. The design structure could then almost be considered to be irrelevant, because the choice is already incorrect.

Choice "d" is incorrect. A new technology is always going to have a higher, not a lower, risk than a current technology. However, a well-defined structure can be assumed to lower the risk.

25.

A lender and a borrower signed a contract for a \$1,000 loan for one year. The lender asked the borrower to pay 3% interest. Inflation occurred and prices rose by 2% over the next year. The borrower repaid \$1,030. What is the amount worth in real terms, after inflation?

- a. \$1,060.90
- b. \$1,050.60
- c. \$1,019.80
- d. \$1,009.80

Solution:

Choice "d" is correct. The \$1,030 amount repaid is readily adjusted for the 2% inflation by dividing it by a factor of 1.02 ($\$1,030 / 1.02 = \1009.80), which is 1 plus the 2% inflation rate.

Choice "a" is incorrect. The \$1060.90 is produced by multiplying the \$1,030 final payment by 1.03, not by dividing it by 1.02. The 2% reflects the inflation. The 3% is the interest rate.

Choice "b" is incorrect. The \$1,050.60 is produced by multiplying, not dividing, the \$1,030 final payment by 1.02.

Choice "c" is incorrect. The \$1,019.80 is produced by dividing the \$1,030 final payment by 1.01. The 1% is apparently produced by subtracting the 2% inflation rate from the 3% interest rate.

26.

Which of the following is an advantage of net present value modeling?

- a. It is measured in time, **not** dollars.
- b. It uses accrual basis, **not** cash basis accounting for a project.
- c. It uses the accounting rate of return.
- d. It accounts for compounding of returns.

Solution:

Choice "d" is correct. The net present value method assumes that positive cash flows are reinvested at the hurdle rate thereby considering compounding.

Choice "a" is incorrect. The net present value method measures the value of capital investments in dollars and considers the time value of money.

Choice "b" is incorrect. Net present value uses the cash basis not the accrual basis.

Choice "c" is incorrect. The accounting rate of return is a method of capital budgeting evaluation separate and apart from the net present value method.

27.

Which of the following individuals would be most hurt by an unanticipated increase in inflation?

- a. A retiree living on a fixed income.
- b. A borrower whose debt has a fixed interest rate.
- c. A union worker whose contract includes a provision for regular cost-of-living adjustments.
- d. A saver whose savings was placed in a variable rate savings account.

Solution:

Choice "a" is correct. Inflation is the sustained increase in the general price of goods and services. A retiree living on a fixed income would be most hurt by an unanticipated increase in inflation because the retiree's income would not increase to offset the effects of the inflation.

Choice "b" is incorrect. A borrower whose debt has a fixed interest rate would benefit from inflation because the borrower would be paying back the debt in cheaper dollars.

Choice "c" is incorrect. A union worker whose contract includes a provision for regular cost-of-living adjustments theoretically would have cost of living increases to offset the effects of the inflation. There would be a lag since the cost-of-living adjustments would be after-the-fact, but at least there would be some protection.

Choice "d" is incorrect. A saver whose savings were placed in a variable rate savings account would have the same kind of protection as the union worker (in "c", above). The interest rate on the savings accounts would theoretically increase with the inflation. Again, there would probably be a lag, but at least there would be some protection.

28.

An accounts payable clerk is accused of making unauthorized changes to previous payments to a vendor. Proof could be uncovered in which of the following places?

- a. Transaction logs.
- b. Error reports.
- c. Error files.
- d. Validated data file.

Solution:

Choice "a" is correct. Transaction logs would reflect transactions, including payments made to a vendor, whether those payments were current or previous payments. Although this choice is the one selected by the examiners, a good argument can be made for choice "d" also. Depending on the amount of audit trail information included with the transactions, a transaction log and a validated data file could be almost identical.

Choice "b" is incorrect. Error reports normally indicate transactions that contained some kind of error. If the accounts payable clerk were careful and made no errors, nothing about the unauthorized transactions would show up on error reports.

Choice "c" is incorrect. Errors are not always maintained on files and thus there are often no error files. Errors are meant to be corrected and then the correct transactions processed. If error reports are produced, they are often discarded once the errors have been corrected. Again, if the accounts payable clerk were careful, nothing about the unauthorized transactions would show up on any error files that were actually generated or maintained.

Choice "d" is incorrect. This choice is a close second. In batch processing, there is/was often a file of validated transactions that was applied to the beginning of the cycle master file. It is unclear what the distinction is between a validated data file and a transaction log. The wording "log" is most often used for something that the system itself would generate; for example, to indicate what transactions had updated a data base of some kind. The wording is only sometimes used in an application context. You pretty much have to assume that the accounts payable clerk was making changes that would pass any of the system validations and that those transactions would show up on the validated data file.

29.

A client wants to know how many years it will take before the accumulated cash flows from an investment exceed the initial investment, without taking the time value of money into account. Which of the following financial models should be used?

- a. Payback period.
- b. Discounted payback period.
- c. Internal rate of return.
- d. Net present value.

Solution:

Choice "a" is correct. The payback method typically ignores the time value of money and computes the number of years it will take for cash flows to equal (pay back) the initial investment.

Choice "b" is incorrect. The discounted payback method would take the time value of money into account.

Choice "c" is incorrect. The internal rate of return computes an interest rate of return and considers the time value of money.

Choice "d" is incorrect. The net present value method computes the amount by which an investment exceeds discounted cash flows or vice versa. The net present value method measures dollars, not years, and considers the time value of money.

30.

If the dollar price of the euro rises, which of the following will occur?

- a. The dollar depreciates against the euro.
- b. The euro depreciates against the dollar.
- c. The euro will buy fewer European goods.
- d. The euro will buy fewer U.S. goods.

Solution:

Choice "a" is correct. Foreign currencies are like anything else: the value of a currency can go up or down. If the dollar price of the euro rises, then the euro is getting more expensive. That means that the dollar is getting less expensive. Another way to say the same thing is that the dollar is depreciating against the euro.

Choice "b" is incorrect. This choice is backwards.

Choice "c" is incorrect. The euro is the currency of Europe (or at least a large portion of Europe). If the price of the euro increases, it will not buy fewer European goods. When the price of the euro rises, the price of European goods will also increase, and the euro will buy the same amount of European goods, but more U.S. goods.

Choice "d" is incorrect. When the price of the euro rises, the euro will buy more, not fewer, U.S. goods.

31.

The calculation of depreciation is used in the determination of the net present value of an investment for which of the following reasons?

- a. The decline in the value of the investment should be reflected in the determination of net present value.
- b. Depreciation adjusts the book value of the investment.
- c. Depreciation represents cash outflow that must be added back to net income.
- d. Depreciation increases cash flow by reducing income taxes.

Solution:

Choice "d" is correct. Although depreciation is not directly relevant to net present value computations, the depreciation tax shield (reduced income taxes) results in increased cash flows from an investment and is used in the determination of net present value.

Choice "a" is incorrect. Depreciation is an accounting method of cost allocation, not a method of valuation that would be considered in determining the initial investment.

Choice "b" is incorrect. The reductions in the book value associated with depreciation expense are not relevant to net present value calculations.

Choice "c" is incorrect. Depreciation is not a cash outflow.

32.

Which of the following is a characteristic of a flexible budget?

- a. Provides budgeted numbers for various activity levels.
- b. Allows for modification during the budgeted period.
- c. Isolates the impact of variable costs on the overall budget.
- d. Can be utilized by several product divisions.

Solution:

Choice "a" is correct. A flexible budget adjusts the budget amounts for different levels of activity. The flexible budget identifies volume components of variances from planned activity.

Choice "b" is incorrect. The primary feature of flexible budgets is their ability to adjust to actual volume based upon established relationships between revenue and variable costs. They are not simply flexible in the sense that amounts or selected line items can be adjusted or modified during the budget period.

Choice "c" is incorrect. The flexible budget isolates the impact of changes in volume on sales and variable costs, not variable costs only.

Choice "d" is incorrect. Although a flexible budget can be used for several products or divisions, their primary feature is the adjustment of those budgets for different activity levels.

33.

Wilson and Thomas are partners. Wilson contributed \$150,000 to the partnership, and Thomas contributed \$50,000. Wilson does 40% of the work, and Thomas does 60%. They do not have a partnership agreement that addresses the sharing of profits and losses. By the end of the year, the partnership has earned a profit of \$200,000. What is Wilson's share of the profit under the Revised Uniform Partnership Act?

- a. \$80,000
- b. \$100,000
- c. \$115,000
- d. \$150,000

Solution:

Choice "b" is correct. In a general partnership, absent an agreement to the contrary, partners' share equally in profits regardless of how much work they perform on behalf of the partnership and regardless of the relative amounts of contributions to capital made by each partner. Here, the partnership earned a \$200,000 profit and there were two partners. Thus, each is entitled to \$100,000.

Choice "a" is incorrect because it seeks to allocate profits on the basis of the work performed.

Choice "c" is incorrect because it does not allocate profits equally.

Choice "d" is incorrect because it seeks to allocate profits on the basis of contributions.

34.

A fast-growing service company is developing its information technology internally. What is the first step in the company's systems development life cycle?

- a. Analysis.
- b. Implementation.
- c. Testing.
- d. Design.

Solution:

Choice "a" is correct. This question requires (and can be answered with) some common sense, even if you don't know what a system development life cycle is. It is more than reasonable to assume that Analysis precedes everything else (although users sometimes feel, when they do not like the results of a new system, that no analysis of any kind has been done). Analysis is determining what the new system should do. It is sometimes called the gathering of system requirements.

Choice "b" is incorrect. Implementation should come at the end, assuming that implementation means actually putting the new system into operation, which it normally does, and not programming. If implementation in this question means programming (which it probably does), it would still come after design and before testing. Either way, it should not be the first step.

Choice "c" is incorrect. Design should come after analysis. It is hard to design a system when you don't know what the system is supposed to do.

Choice "d" is incorrect. Testing should occur after programming (or before implementation if that is what implementation means in this question). Either way, it would not be the first step.

35.

Which of the following best describes a hot site?

- a. Location within the company that is most vulnerable to a disaster.
- b. Location where a company can install data processing equipment on short notice.
- c. Location that is equipped with a redundant hardware and software configuration.
- d. Location that is considered too close to a potential disaster area.

Solution:

Choice "c" is correct. While an argument may be made about the word "redundant," this choice is the only one that even comes close to being correct. A hot site will have hardware that, at the very least, can be configured to be the same as the company is using in its normal operations and system software that can similarly configured (not to forget a way for the company's telecommunications network to be connected to the hot site). The company will normally provide its own application software.

Choice "a" is incorrect. This choice is next to meaningless.

Choice "b" is incorrect. This choice is more like a cold site. A cold site is just empty floor space where the company can install whatever is needed. Of course, that will take time.

Choice "d" is incorrect. This choice is next to meaningless also. However, a disaster recovery center should not be too close to the company's normal operations center to make sure that they are not both involved in the same disaster. For example, if the company's normal operations center were located in Galveston, Texas, the disaster recovery center should be located somewhere else. It should not be located in Houston, for example, because the same "disaster" (hurricane) could affect both locations.

36.

Which of the following attributes of a management report has the greatest impact on management's ability to make effective decisions?

- a. Summarization.
- b. Exception orientation.
- c. Relevance.
- d. Conciseness.

Solution:

Choice "c" is correct. Relevance defines that quality of data and information that makes a difference in decision making. Relevance has the greatest impact on management's ability to make effective decisions.

Choice "a" is incorrect. Summarization purely represents the aggregation of data and does not, alone, create reporting value. Data not summarized may be relevant and important to decisions.

Choice "b" is incorrect. The exception orientation of reporting focuses management on unusual items but does not have the same impact as relevance. Relevant data may include information that does not constitute an exception.

Choice "d" is incorrect. Concise reporting should be faster to read, but concise reporting alone will not impact effective decisions to the same degree as presentation of relevant data.

37.

A company's controller is adjusting next year's budget to reflect the impact of an expected 5% inflation rate. Listed below are selected items from next year's budget before the adjustment:

Total salaries expense	\$250,000
Health costs	100,000
Depreciation expense	65,000
Interest expense on 10-year fixed-rate notes	37,750

After adjusting for the 5% inflation rate, what is the company's total budget for the selected items before taxes for next year?

- a. \$470,250
- b. \$472,138
- c. \$473,500
- d. \$475,388

Solution:

Choice "a" is correct. A 5% inflation rate would impact salary and health care costs but would not impact depreciation expense (based on historical cost) and would not impact interest expense (fixed based on amortization schedule). The budget would be computed as follows:

Salaries expense	$\$250,000 \times 1.05 =$	\$262,500
Health costs	$100,000 \times 1.05 =$	105,000
Depreciation expense	$65,000 \times 1.00 =$	65,000
Interest expense on 10-year fixed-rate notes	$37,750 \times 1.00 =$	<u>37,750</u>
Total Budget		<u>\$470,250</u>

Choice "b" is incorrect. The proposed solution improperly inflates interest expense.

Choice "c" is incorrect. The proposed solution improperly inflates depreciation expense.

Choice "d" is incorrect. The proposed solution improperly inflates all presented expenses.

38.

Compared to online real-time processing, batch processing has which of the following disadvantages?

- a. A greater level of control is necessary.
- b. Additional computing resources are required.
- c. Additional personnel are required.
- d. Stored data are current only after the update process.

Solution:

Choice "d" is correct. This choice is the only choice which is even remotely close to being correct. Batch processing means that transactions are processed in batches on a periodic basis. Because the transactions are processed on a periodic basis, the data that is being updated will not necessarily be "current" at any time other than just after the update. Of course, it "could" be current if no changes to it have been made since the batch update. The question is not necessarily well worded, but there are poorly worded questions on the exam and they can be answered correctly.

Choice "a" is incorrect. There is no greater level of control necessary for batch processing versus online real-time (online) processing.

Choice "b" is incorrect. There is nothing that says that additional computing resources are required for batch processing versus online processing. In fact, online processing normally requires more computing resources, which is one reason why online processing has become popular once computing resources became cheaper and thus more available.

Choice "c" is incorrect. There is nothing that says that additional personnel are required for batch processing versus online processing. Besides, a question could reasonably be asked, "Additional personnel to do what?"

39.

An economy is at the peak of the business cycle. Which of the following policy packages is the most effective way to dampen the economy and prevent inflation?

- a. Increase government spending, reduce taxes, increase money supply, and reduce interest rates.
- b. Reduce government spending, increase taxes, increase money supply, and increase interest rates.
- c. Reduce government spending, increase taxes, reduce money supply, and increase interest rates.
- d. Reduce government spending, reduce taxes, reduce money supply, and reduce interest rates.

Solution:

Choice "c" is correct. The economy can be dampened by reducing government spending and by increasing taxes (thus giving consumers less money to spend), both of which are fiscal policy. The economy can also be dampened by reducing the money supply (thus effectively increasing prices) and increasing interest rates (thus giving consumers less money to spend because they are spending more money on interest), both of which are monetary policy.

Choice "a" is incorrect. Increasing government spending will stimulate the economy, not dampen it.

Choice "b" is incorrect. Increasing money supply will stimulate the economy, not dampen it.

Choice "d" is incorrect. Reducing interest rates will stimulate the economy, not dampen it.

40.

Which of the following strategies would the Federal Reserve most likely pursue under an expansionary policy?

- a. Purchase federal securities and lower the discount rate.
- b. Reduce the reserve requirement while raising the discount rate.
- c. Raise the reserve requirement and lower the discount rate.
- d. Raise the reserve requirement and raise the discount rate.

Solution:

Choice "a" is correct. Under an expansionary policy, the Fed would most likely purchase federal securities. It will pay for the securities by providing money, which will expand the economy.

Choice "b" is incorrect. Raising the discount rate will dampen the economy, not expand it. Reducing the reserve requirement will expand the economy, not dampen it, because there will be more money to loan, but the reserve requirement is irrelevant because the choice is already incorrect.

Choices "c" and "d" are incorrect. Raising the reserve requirement will dampen the economy, not expand it, because there will be less money to loan. The discount rate is then irrelevant because the choice is already incorrect.

41.

Which of the following represents the procedure managers use to identify whether the company has information that unauthorized individuals want, how these individuals could obtain the information, the value of the information, and the probability of unauthorized access occurring?

- a. Disaster recovery plan assessment.
- b. Systems assessment.
- c. Risk assessment.
- d. Test of controls.

Solution:

Choice "c" is correct. The first step in risk assessment is to identify the risks. The question is asking about the risk of unauthorized access to information. The steps would certainly be to identify whether the company has information that unauthorized individuals might want (and what company does not have such information), the value of the information, how those individuals could obtain the information, and the probability of unauthorized access occurring. The steps here are not necessarily the same order as in the question; regardless, it is risk assessment.

Choice "a" is incorrect. It is not particularly clear exactly what "disaster recovery plan assessment" actually is. It probably means the review of a disaster recovery plan to determine if it will be effective. Regardless, it has nothing to do, per se, with the safeguarding of valuable information.

Choice "b" is incorrect. It is not particularly clear exactly what "system assessment" actually is. It probably means the review of a system to determine if it is operating effectively and efficiently. Regardless, it has nothing to do, per se, with the safeguarding of valuable information.

Choice "d" is incorrect. Test of controls are audit tests to determine if described controls have been placed in operation and are working effectively. Tests of controls have nothing to do with the above scenario, although there are controls involved in the safeguarding of information and those controls may be tested in the course of an audit. This terminology is just terminology that might sound good to an accountant/auditor but which has no real relevance to the question.

42.

A value-added network (VAN) is a privately owned network that performs which of the following functions?

- a. Route data transactions between trading partners.
- b. Route data within a company's multiple networks.
- c. Provide additional accuracy for data transmissions.
- d. Provide services to send marketing data to customers.

Solution:

Choice "a" is correct. VANs are often used to route data transactions between trading partners.

Choice "b" is incorrect. Routing data "within" a company's multiple networks would normally not require a VAN. Routing data "outside" the company's multiple networks would sometimes use a VAN.

Choice "c" is incorrect. A VAN can possibly provide additional accuracy for data transmissions because a VAN may provide additional (transmission) error correction. However, data transmission has become much more dependable these days and this additional error correction has become less important.

Choice "d" is incorrect. A VAN would seldom be used to send marketing data to customers. VANs are expensive, and a cheaper means (e.g., the Internet) would most likely be used for marketing data.

43.

The Business Judgment Rule is a rule that immunizes corporate:

- a. Management from liability for actions that result in corporate losses or damages if the actions are undertaken in good faith but are **not** within the power of the corporation or the authority of management to make.
- b. Management from liability for actions that result in corporate losses or damages if the actions are undertaken in good faith and are within both the power of the corporation and the authority of management to make.
- c. Shareholders from liability for actions that result in corporate losses or damages if the actions are undertaken in good faith and are within both the power of the corporation and the authority of shareholders to make.
- d. Shareholders from liability for actions that result in corporate losses or damages if the actions are undertaken in good faith but are **not** within the power of the corporation or the authority of shareholders to make.

Solution:

Choice "b" is correct. Under the business judgment rule, a director is protected from liability for decisions made on behalf of the corporation if the director acts in good faith and in a manner that the director believes is in the best interest of the corporation, exercising the care that a reasonably prudent person would exercise in a similar position. The action must also ostensibly be within the power of the corporation to undertake and ostensibly within the authority of management to make.

Choice "a" is incorrect. A director will not be protected under the business judgment rule if he knowingly causes the corporation to undertake action that is not within the power of the corporation to take and not within the authority of management.

Choice "c" and "d" are incorrect. The business judgment rule protects directors; it is not applicable to the shareholders (except perhaps in the case of a closely held corporation being run by the shareholders).

44.

A company uses a standard costing system. At the end of the current year, the company provides the following overhead information:

Actual overhead incurred	
Variable	\$90,000
Fixed	\$62,000
Budgeted fixed overhead	\$65,000
Variable overhead rate (per direct labor hour)	\$8
Standard hours allowed for actual production	12,000
Actual labor hours used	11,000

What amount is the variable overhead efficiency variance?

- a. \$8,000 favorable.
- b. \$8,000 unfavorable.
- c. \$6,000 favorable.
- d. \$2,000 unfavorable.

Solution:

Choice "a" is correct. The efficiency variance compares the amount of the variable overhead applied (at standard) to the amount of variable overhead that would have been applied at actual. If more was applied than would have been incurred, the results are favorable.

Standard hours allowed	12,000
Application rate	<u>\$8</u>
Total	96,000
Actual hours	11,000
Application rate	<u>\$8</u>
Total	<u>(88,000)</u>
Variable efficiency variance	<u><u>8,000</u></u>

Choice "b" is incorrect. Results are favorable, not unfavorable.

Choice "c" is incorrect. The proposed amount is the budget variance, the amount applied compared to the amount spent.

Choice "d" is incorrect. The proposed answer is the variable spending variance (the actual amount spent compared to the amount applied at actual).

45.

DJ Co. has a job-order cost system. The following debits (credits) appeared in the Work in Process account for the month of March:

March 1, balance	\$ 12,000
March 31, direct materials	40,000
March 31, direct labor	30,000
March 31, manufacturing overhead applied	27,000
March 31, to finished goods	(100,000)

DJ Co. applies overhead at a predetermined rate of 90% of direct labor cost. Job No. 101, the only job still in process at the end of March, has been charged with manufacturing overhead of \$2,250.

What was the amount of direct materials charged to Job No. 101?

- a. \$2,250
- b. \$2,500
- c. \$4,250
- d. \$4,725

Solution:

Choice "c" is correct. Direct materials charged to job 101 is \$4,250. Job 101 is the only incomplete job at the end of the month. First compute the ending balance in WIP for DJ Co. and note that the ending balance is the same as the ending balance for job 101. Other facts allow us to back into the direct materials for the job.

	<u>Total</u>	<u>Job 101</u>
Beg Balance	12,000	0
Direct Materials	40,000	4,250 (Squeeze)
Direct Labor	30,000	2,500 (2,250 ÷ 90%)
Overhead Applied	27,000	2,250
Issued	<u>(100,000)</u>	<u>0</u>
Ending Balance	<u>9,000</u>	→ <u>9,000</u>

Choice "a" is incorrect. The proposed answer is the applied overhead.

Choice "b" is incorrect. The proposed answer is the computed direct labor.

Choice "d" is incorrect, per the computations above.

46.

The owners of a limited liability company are known as which of the following?

- a. Partners.
- b. Members.
- c. Stockholders.
- d. Shareholders.

Solution:

Choice "b" is correct. The owners of a limited liability company are called members.

Choice "a" is incorrect. Partners are the owners of partnerships.

Choice "c" is incorrect. Stockholders are the owners of a corporation.

Choice "d" is incorrect. The term "shareholder" is synonymous with the term "stockholder" and is the name given to the owner of a corporation.

47.

ABC Co. had debt with a market value of \$1 million and an after-tax cost of financing of 8%. ABC also had equity with a market value of \$2 million and a cost of equity capital of 9%. ABC's weighted-average cost of capital would be:

- a. 8.0%
- b. 8.5%
- c. 8.7%
- d. 9.0%

Solution:

Choice "c" is correct. The weighted average cost of capital is computed as follows:

Debt	$\$1,000,000/\$3,000,000 \times 8.0\% =$	2.67%
Equity	$\$2,000,000/\$3,000,000 \times 9.0\% =$	<u>6.00%</u>
Weighted Average Cost of Capital		8.67%

Choice "a" is incorrect. The proposed answer incorrectly suggests that the weighted average cost of capital is the cost of debt.

Choice "b" is incorrect. The proposed answer incorrectly suggests that the weighted average cost of capital is the simple average $(8\% + 9\%) \div 2$.

Choice "d" is incorrect. The proposed answer incorrectly suggests that the weighted average cost of capital is the cost of equity.

48.

Which of the following is a key difference in controls when changing from a manual system to a computer system?

- a. Internal control principles change.
- b. Internal control objectives differ.
- c. Control objectives are more difficult to achieve.
- d. Methodologies for implementing controls change.

Solution:

Choice "d" is correct. When changing from a manual system to a computer system, the controls almost always are different. That does not mean that they are better or are worse, but they certainly are different.

Choice "a" is incorrect. When changing from a manual system to a computer system, internal control "principles" do not change. The principles remain the same; it is the implementation of the principles that is different.

Choice "b" is incorrect. When changing from a manual system to a computer system, internal control "objectives" do not change. The objectives remain the same.

Choice "c" is incorrect. When changing from a manual system to a computer system, control objectives are not necessarily more difficult to achieve. Some will be more difficult, and some will be easier. But, almost always, the specific controls will be different.

49.

Relevant information for material A follows:

Quantity purchased	6,500 lbs.
Standard quantity allowed	6,000 lbs.
Actual price	\$3.80
Standard price	\$4.00

What was the direct material price variance for material A?

- a. \$1,300 favorable.
- b. \$1,200 favorable.
- c. \$1,200 unfavorable.
- d. \$1,300 unfavorable.

Solution:

Choice "a" is correct. Material A experienced a \$1,300 favorable direct materials price variance for the current period. The materials price variance formula calculates out as follows:

$$\begin{aligned} \text{Materials price variance} &= \text{Actual Quantity} \times (\text{Actual} - \text{Standard Price}) \\ \text{Materials price variance} &= 6,500 \times (3.80 - 4.00) \\ \text{Materials price variance} &= (1,300) \end{aligned}$$

The materials price variance is favorable since we spent less than standard.

The trough method is computed as follows:

Actual Quantity x <u>Actual Price</u> 6,500 x \$3.80 = <u>\$24,700</u>		Actual Quantity x <u>Standard Price</u> 6,500 x \$4.00 = <u>\$26,000</u>
Price Variance 1,300		

Choice "b" is incorrect. The proposed answer uses standard vs. actual quantity.

Choice "c" is incorrect. The proposed answer uses standard vs. actual quantity and is inappropriately evaluates the variance as unfavorable.

Choice "d" is incorrect. The variance amount is correct; however, it is favorable, not unfavorable, per the above.

50.

Relevant information for product A follows:

Actual variable overhead cost per hour	\$8.00
Standard variable overhead cost per hour	\$7.50
Actual hours	4,500
Standard hours	5,000

What was the variable overhead spending variance for product A?

- a. \$2,250 favorable.
- b. \$4,000 favorable.
- c. \$2,250 unfavorable.
- d. \$4,000 unfavorable.

Solution:

Choice "c" is correct. The variable overhead spending variance compares the amount of actual variable overhead expense to the variable overhead that would have been applied at actual. If less was applied than was actually spent, the results are unfavorable.

Actual hours	4,500
Application rate	<u>\$8</u>
Total Actual	(36,000)
Actual hours	4,500
Application rate	<u>7.50</u>
Total Actual @ Std	<u>33,750</u>
Variable efficiency variance	<u><u>(2,250)</u></u>

Choice "a" is incorrect. The variance is unfavorable not favorable per the discussion above.

Choice "b" is incorrect. The proposed answer incorrectly takes the difference in hours times actual hours. In addition, the computation presumes a favorable rather than unfavorable result.

Choice "d" is incorrect. The proposed answer incorrectly takes the difference in hours times actual hours.