Financial

CMA

Certified Management Accountant (CMA)

($17,200,000 of plant and equipment+ $1,800,000 of working capital), a 15% imputed interest charge equals $2,850,000. Adding $2,000,000 of residual income to the imputed interest results in a target profit of $4,850,000. This profit can be achieved if costs are $25,150,000 ($30,000,000 revenue —$4,850,000 profit).

QUESTION: 621
The following information relates to Cinder Co.'s Northeast Division
Sales $600,000
Variable costs 360,000
Traceable fixed costs 60,000
Average invested capital 120,000
Imputed interest rate 8%
Cinders residual income was

A. $170,400
B. $180,000
C. $189,600
D. $230,400

Answer: A
Residual income is income of an investment center minus an imputed interest charge for invested capital. Accordingly, Cinder's residual income is $170,400 [($600,000 sales—$360,000 variable costs —$60,000 traceable fixed costs) net income —($120,000 average invested capital x 8%) imputed interest].

QUESTION: 622
REB Service Co. is a computer service center. For the month, REB had the following operating statistics:

Sales	$450,000
Operating income	25,000
Net profit after taxes	8,000
Total assets	500,000
Shareholders' equity	200,000
Cost of capital	6%

Based on the above information, which one of the following statements is true? REB has a

A. Return on investment of 4%.
B. Residual income of $(5,000).

C. Return on investment of 1.6%.
D. Residual income of $(22,000).

Answer: B
Return on investment is commonly calculated by dividing pretax income by total assets available Residual income is the excess of the return on investment over a targeted amount equal to an imputed interest charge on invested capital. The rate used is ordinarily the weighted-average cost of capital. Some companies measure managerial performance in terms of the amount of residual income rather than the percentage return on investment. Because REB has assets of $500,000 and a cost of capital of 6%, it must earn $30,000 on those assets to cover the cost of capital. Given that operating income was only $25,000, it had a negative residual income of $5,000.

QUESTION: 623
Charli&s Service Co. is a service center. For the month of June, Charlie’s had the following operating statistics:

Sales	$750,000
Operating income	25,000
Net profit after taxes	8,000
Total assets available	500,000
Shareholders' equity	200,000
Cost of capital	6%

Charlie’s has a

A. Return on investment of 3.33%.
B. Residual income of $(5,000).
C. Return on investment of 6%.
D. Residual income of $(20,000).

Answer: B
Residual income is the excess of the actual ROl in dollars over a targeted amount equal to an imputed interest charge on invested capital. The rate used is ordinarily the weighted-average cost of capital. Some entities measure managerial performance in terms of the amount of residual income ratherthan the percentage ROl. Assuming the investment base is defined as total assets available, Charlie’s targeted amount is $30,000 ($500,000 total assets x 6% cost of capital). Assuming that operating income of $25,000 is the ROI in dollars, residual income was $(5,000). This result is consistent with defining the numerator of the ROl calculation (Income ÷ Investment) as operating income. However, it might also be defined as net profit aftertaxes (net income). Moreover, the ROl denominator may be defined variously, e.g., total

assets available, total assets employed, working capital plus other assets, or shareholders' equity. Edith Carolina, president of the Deed Corporation, requires a minimum return on investment of 8% for any projectto be undertaken by her company. The company is decentralized, and leaves investment decisions up to the discretion of the division managers as long as the 8% return is expected to be realized. Michael Sanders, manager of the Cosmetics Division, has had a return on investment of 14% for his division for the past 3 years and expects the division to have the same return in the coming year. Sanders has the opportunity to invest in a new line of cosmetics which is expected to have a return on investment of 12%.

QUESTION: 624
Residual income is a better measure for performance evaluation of an investment center manager than return on investment because

A. The problems associated with measuring the asset base are eliminated.
B. Desirable investment decisions will not be neglected by high-return divisions.
C. Onlythe gross bookvalue of assets needs to be calculated.
D. The arguments about the implicit cost of interest are eliminated

Answer: B
Residual income is the excess of the amount of the ROI over a targeted amount equal to an imputed interest charge on invested capital. The advantage of using residual income ratherthan percentage ROI is thatthe former emphasizes maximizing a dollar amount instead of a percentage. Managers of divisions with a high ROI are encouraged to accept projects with returns exceeding the cost of capital even if those projects reduce the department's ROI. Edith Carolina, president of the Deed Corporation, requires a minimum return on investment of 8% for any projectto be undertaken by her company. The company is decentralized, and leaves investment decisions up to the discretion of the division managers as long as the 8% return is expected to be realized. Michael Sanders, manager of the Cosmetics Division, has had a return on investment of 14% for his division for the past 3 years and expects the division to have the same return in the coming year. Sanders has the opportunityto invest in a new line of cosmetics which is expected to have a return on investment of 12%.

QUESTION: 625
If the Deed Corporation evaluates managerial performance using return on investment, what will be the preference for taking on the proposed cosmetics line by Edith Carolina and Michael Sanders?
Carolina Sanders

A. Accept Reject

B. Reject Accept
C. Accept Accept
D. Reject Reject

Answer: A
A company with an 8% ROl threshold should obviously accept a projectyielding 12% because the company's overall ROI would increase. The manager being evaluated on the basis of ROI who is already earning 14% will be unwilling to accept a 12% return on a new project because the overall ROl for the division would decline slightly. This absence of goal congruence suggests a weakness in ROl-based performance evaluation.

QUESTION: 626
Managerial performance can be measured in many differentways, including return on investment (ROD and residual income (RI). A good reason for using RI instead of ROl is that

A. RI can be computed without regard to identifying an investment base.
B. Goalcongruence is more likelyto be promoted by using RI.
C. RI is well understood and often used in the financial press.
D. ROl does not take into consideration both the investment turnover ratio and return-on-sales percentage.

Answer: B
The residual income method calculates the excess of the return on an investment over a targeted amount equal to an imputed interest charge on invested capital. The rate used is usually the weighted average cost of capital. Residual income may be preferable to ROl because an enterprise will benefit from expansion as long as residual income is earned. Using a ROl, expansion might be rejected if it lowered ROl even though residual income would increase. Thus, the residual income method promotes the congruence of a manager's goal with those of the enterprise. Actions that tend to benefit the company will also tend to improve the measure of the manager's performance.

QUESTION: 627
The balanced scorecard provides an action plan for achieving competitive success byfocusing management attention on critical success factors. Which one of the following is not one of the perspectives on the business into which critical success factors are commonly grouped in the balanced scorecard?

A. Competitor business strategies.
B. Financial performance.

C. Internal business processes.
D. Employee innovation and learning.

Answer: A
A typical balanced scorecard classifies critical success factors and measures into one of four perspectives on the business: financial, customer satisfaction, internal business processes, and learning and growth.

QUESTION: 628
Using the balanced scorecard approach, an organization evaluates managerial performance based on

A. A single ultimate measure of operating results, such as residual income.
B. Multiple financial and nonfinancial measures.
C. Multiple nonfinancial measures only.
D. Multiple financial measures only.

Answer: B
The trend in managerial performance evaluation is the balanced scorecard approach. Multiple measures of performance permit a determination as to whether a manager is achieving certain objectives at the expense of others that may be equally or more important. These measures may be financial or nonfinancial and usually include items in four categories: profitability; customer satisfaction; innovation; and efficiency, qualify, and time.

QUESTION: 629
On a balanced scorecard, which of the following would not be an example of a customer satisfaction measure?

A. Market share.
B. Economic value added.
C. Response time
D. Customer retention.

Answer: B
Customer satisfaction measures include market share, retention, response time, delivery performance, number of defects, and lead time. Economic value added, or EVA®, is a profitabilit/ measure.

QUESTION: 630

On a balanced scorecard, which is more of an internal process measure than an external-based measure?

A. Cycle time.
B. Profitability.
C. Customer satisfaction.
D. Market share.

Answer: A

Cycle time is the manufacturing time to complete an order. Thus, cycle time is strictly related to internal processes Profitability is a combination of internal and external considerations. Customer satisfaction and market share are related to how customers perceive a product and how competitors react.