

### Question #1 of 114

Big Sky Ranches reported the following for the end of its fiscal year:

- Revenues = \$40.8 million.
- Pretax income = \$8.6 million.
- Assets = \$53.2 million.
- Liabilities = \$27.8 million.
- Dividends per share = \$0.35.
- Shares outstanding = 8 million.
- Tax rate = 35%.

The beta for Big Sky Ranches is 1.2, the current risk-free rate is 4.5%, and the expected return on the market is 12.5%. What is the value of the shares using a single-stage residual income model?

- A) \$8.10.
  - B) \$23.23.
  - C) \$11.28.
- 

### Question #2 of 114

Market value added is calculated as:

- A) net operating profit after taxes minus a charge for total capital.
  - B) market value of the company minus total capital.
  - C) market value of the company minus a charge for equity capital.
- 

### Question #3 of 114

Using the following information, calculate the required return on equity using the expanded CAPM.

<i>Income return on bonds</i>	6.0%
<i>Capital return on bonds</i>	2.0%
<i>Long-term Treasury yield</i>	3.5%
<i>Beta</i>	1.4
<i>Equity risk premium</i>	6.0%
<i>Small stock premium</i>	4.0%
<i>Company-specific risk premium</i>	3.0%
<i>Industry risk-premium</i>	2.0%
<i>Pretax cost of debt</i>	11.0%
<i>Optimal Debt/Total Cap</i>	16%
<i>Current Debt/Total</i>	7%
<i>Debt/Total Cap for public firms in industry</i>	33%
<i>Tax Rate</i>	30%

A) 15.9%.

B) 11.9%.

C) 18.9%.

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### Question #4 of 114

Which of the following *best* describes the use of FCFF and FCFE when used in private firm valuation?

- A) FCFE is usually favored if the firm is going to change its capital structure because the cost of equity is less sensitive to leverage changes than the WACC.
- B) FCFE is usually favored if the firm is going to change its capital structure because the equityholders are usually the investors requesting the valuation.

- C) FCFF is usually favored if the firm is going to change its capital structure because the WACC is less sensitive to leverage changes than the cost of equity.
- 

### Question #5 of 114

An investor is considering the purchase of Robust Econometrics, Inc., which has a price-to-book (P/B) value ratio of 4.50. Return on equity (ROE) is expected to be 14%, the current book value per share (BVPS) is \$22.50, and the cost of equity is 12%. The growth rate implied by the current P/B ratio is *closest* to:

- A) 11.43%.
  - B) 12.57%.
  - C) 8.00%.
- 

### Question #6 of 114

The present value of Raver Industries' projected residual income (RI) for the next five years is £60 per share. Beyond that time horizon, a key analyst projects that the firm will sustain a RI of £11 per share, which is the RI for year 5. Given a cost of equity of 12%, what is the terminal value of the stock as of year 5?

- A) £91.67.
  - B) £560.00.
  - C) £500.00.
- 

### Question #7 of 114

Which of the following *best* describes the implementation of private company valuation standards?

- A) Industry groups mandate compliance.
- B) Compliance is usually at the discretion of the appraiser.

C) The federal government mandates compliance.

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### Question #8 of 114

A common adjustment in calculating economic value added (EVA®) is to:

- A) capitalize and amortize research and development expenses.
  - B) add back deferred taxes.
  - C) treat capital leases as operating leases.
- 

Paul Smith is an analyst performing valuations for Lumber Limited. Smith has been given a project to value Timber Industries, a firm that Lumber Limited is considering acquiring. Smith is aware that a number of characteristics distinguish private and public companies, and that these characteristics must be considered during his process of valuing Timber Industries. A number of issues complicate Smith's valuation: Timber Industries pays its CEO well below a market-based compensation figure, leases a warehouse at an above-market rate, and owns a vacant office building that is not needed for core operations. Smith is also aware that discounts and premiums based on control and marketability must be considered in his valuation of Timber Industries.

### Question #9 of 114

Compared to a public company, it is *most likely* that as a private company Timber Industries will have greater:

- A) concerns related to taxes.
  - B) quality and depth of management.
  - C) focus on the short-term.
- 

### Question #10 of 114

Which of the following is the *most accurate* statement related to estimating the discount rate for Smith's valuation of Timber Industries:

- A) Timber Industries should be valued using the WACC for Timber Industries, not the WACC of the acquirer Lumber Limited.
  - B) It is more straightforward to estimate the discount rate for early stage firm than a mature firm like Timber Industries.
  - C) As a private firm, Timber Industries can more easily obtain cheap debt financing than a public firm.
- 

### Question #11 of 114

One valuation method that Smith is considering for Timber Industries involves using a growing perpetuity formula to estimate the value of intangible assets, and then adding this value to the values of working capital and fixed assets. This method is *most accurately* described as the:

- A) free cash flow method.
  - B) capitalized cash flow method.
  - C) excess earnings method.
- 

### Question #12 of 114

The asset-based approach to private company valuation that Smith is considering for Timber Industries is *most likely* to be appropriate in the case of a:

- A) mature company with many intangible assets.
  - B) finance firm such as a bank.
  - C) firm with strong profits and growth potential.
- 

### Question #13 of 114



In order to estimate normalized earnings for Timber Industries, which of the follow items is *most likely* to require Smith to make an upward adjustment to SG&A? The fact that Timber Industries:

- A) owns a vacant office building that is not needed for core operations.
  - B) leases a warehouse at an above-market rate.
  - C) pays its CEO well below a market-based compensation figure.
- 

### Question #14 of 114

Which of the following statements related to discounts and premiums to benchmark for Smith's private company valuation of Timber Industries is *most accurate*:

- A) A discount for lack of control should be applied when the comparable company values are for public shares, and the target company valuation is for a controlling interest.
  - B) A control premium should be added when the comparable values are for the sale of an entire company, and the valuation is being done for a minority interest in the target
  - C) A discount for lack of marketability should be applied when the comparables are based on public shares, and the interest in the target company is a minority interest in a
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### Question #15 of 114

The asset-based approach values a firm based on:

- A) fair values.
  - B) investment values.
  - C) book values.
- 

### Question #16 of 114

An analyst is considering the purchase of Rylinks, Inc., which has a price to book value (P/B) ratio of 6.00. Return on equity (ROE) is expected to be 13%, current book value per share is \$13.00, and the cost of equity is 11%. What growth rate is implied by the current P/B rate?

- A) 10.60%.
  - B) 0.40%.
  - C) 11.00%.
- 

### Question #17 of 114

An argument against using the residual income (RI) valuation approach is that:

- A) the models focus on economic rather than just on accounting profitability.
  - B) terminal value does not dominate total present value as is the case in dividend and free cash flow valuation models.
  - C) the models rely on accounting data that can be manipulated by management.
- 

### Question #18 of 114

Using the following figures, calculate the value of the firm using the excess earnings method (EEM).

<i>Working capital</i>	\$600,000
<i>Fixed assets</i>	\$2,300,000
<i>Normalized earnings</i>	\$340,000
<i>Required return for working capital</i>	5%
<i>Required return for fixed assets</i>	13%
<i>Growth rate of residual income</i>	4%
<i>Discount rate for intangible assets</i>	18%

- A) \$3,073,199.
  - B) \$3,027,111.
  - C) \$2,981,714.
- 

### Question #19 of 114

The present value of GB Industries' projected residual income (RI) for the next five years is 70 per share. Beyond that time horizon, a key analyst projects that the firm will sustain a RI of 15 per share, which is the RI for year 5. Given a cost of equity of 12%, what is the terminal value of the stock as of year 5?

- A) £500.00.
  - B) £125.00.
  - C) £560.00.
- 

### Question #20 of 114

Cognitive Products (CP) designs decision-making software. The book value of its assets is \$3.2 billion, which is financed with \$2.0 billion in equity and \$1.2 billion in debt. Its before-tax cost of debt is 6.5%, while its relevant tax rate is 34%. CP has a cost of equity of 12.46%. Its abbreviated income statement is:

Earnings before interest and taxes (EBIT)	\$213,000,000
Interest expense	(30,000,000)
Pretax income	183,000,000
Income tax expense	(62,220,000)
Net income	\$120,780,000

The residual income (RI) for CP is *closest* to:

- A) – \$128,420,000.
- B) – \$128,369,000.



C) – \$128,471,000.

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### Question #21 of 114

An argument for using the residual income (RI) valuation approach is that residual income valuation:

- A) reduces the problem of terminal value dominating total value.
  - B) encourages company managers to maximize ROI.
  - C) facilitates comparisons between divisions.
- 

### Question #22 of 114

Which of the following approaches to private company valuation uses discounted cash flow analysis?

- A) The income approach.
  - B) The asset-based approach.
  - C) The market approach.
- 

### Question #23 of 114

A private business is being valued for the purpose of determining the appropriate level of performance-based managerial compensation. This private company valuation would be *best* described as a:

- A) Litigation-related valuation
  - B) Transaction-related valuation
  - C) Compliance-related valuation
-

### Question #24 of 114

An analyst is considering the purchase of Delphos Machinery, which has a price-to-book value (P/B) ratio of 8.00. Return on equity (ROE) is expected to be 14%, current book value per share is \$12.00, and the cost of equity is 11%. What growth rate is implied by the current P/B rate?

- A) 11.00%.
- B) 10.57%.
- C) 8.43%.

### Question #25 of 114

Given the following figures, calculate the normalized EBITDA for a financial and strategic buyer.

<i>Reported EBITDA</i>	\$4,500,000
<i>Current Executive Compensation</i>	\$700,000
<i>Market-Based Executive Compensation</i>	\$620,000
<i>Current SG&amp;A expenses</i>	\$6,300,000
<i>SG&amp;A expenses after synergistic savings</i>	\$5,600,000
<i>Current Lease Rate</i>	\$300,000
<i>Market-Based Lease Rate</i>	\$390,000

The normalized EBITDA for each type of buyer is:

- |    | <u>Financial<br/>Buyer</u> | <u>Strategic<br/>Buyer</u> |
|----|----------------------------|----------------------------|
| A) | \$4,670,000                | \$5,370,000                |
| B) | \$4,190,000                | \$4,890,000                |
| C) | \$4,490,000                | \$5,190,000                |

### Question #26 of 114

Analyst Brett Melton, CFA, is looking at two companies. Happy Cow Dairies has volatile cash flows, and its free cash flow is often negative. The company pays no dividends. Glitter and Gold, a maker of girls' clothing, has a fairly steady stream of earnings and cash flows but takes a lot of charges against equity. Is the residual income model suitable for valuing the two companies?

	<u>Happy Cow Dairies</u>	<u>Glitter and Gold</u>
A) No	No	
B) No	Yes	
C) Yes	No	

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### Question #27 of 114

Continuing residual income is defined as the:

- A) permanent as opposed to the transitory part of residual income.
  - B) residual income that is expected beyond the initial forecast time horizon.
  - C) residual income that forces the net present value to zero.
- 

### Question #28 of 114

An analyst values a private company using a price multiple based on recent sales of comparable assets. This approach to private company valuation is *best* described as the:

- A) asset-based approach
  - B) market approach
  - C) income approach
-

Geremiah Analytics provides litigation consulting services to the intellectual property industry. They specialize in patent infringement liability and software valuation. Mariah Hofstedt, CFO of Geremiah, projects that the firm will earn \$3 million pre-tax income this year. Additional selected financial data on Geremiah are presented below.

**Table 1: Selected Financial Data for Geremiah Analytics**

Total assets	\$40 million
Debt/assets	60%
Average coupon on debt	8%
Cost of equity	12%
Tax rate	40%

Hofstedt has not been happy with the firm's financial performance. She would like to increase return on equity (ROE) and improve revenue growth, and is considering various ways to deploy Geremiah's cash flow in order to meet these two goals. One possibility is using some of Geremiah's cash flow to make a strategic acquisition.

Hofstedt has been looking at a smaller boutique firm, Logiciels LaMarre, which provides consulting services to the software industry. Hofstedt and a Geremiah Analytics valuation team have performed a preliminary valuation on Logiciels LaMarre using a free cash flow to equity (FCFE) model. However, Theodore LaMarre, CEO of Logiciels LaMarre, is not pleased with the resultant valuation that Geremiah has placed on his firm.

Rather than argue about the inputs of the free cash flow (FCF) model, LaMarre takes the position that FCFE is an inappropriate model for valuing Logiciels LaMarre. He cites the firm's rapid growth and resultant need for capital investment as reasons that valuing the firm on projections of FCFE is not reliable.

LaMarre wants Geremiah to value Logiciels LaMarre using the residual income approach. LaMarre tells Hofstedt, "Valuation with residual income models is less sensitive to forecast error than valuation with FCFE models because residual income valuations rely on current book value."

Hofstedt feels substantial disagreement with LaMarre's approach on a variety of grounds. She views his arguments as negotiating ploys to raise the acquisition price of his firm, and does not agree with his assessment of the FCF valuation her team has developed. On a theoretical basis, Hofstedt considers the residual income approach an inappropriate tool for valuing a firm like

Logiciels LaMarre. Hofstedt tells LaMarre, "It's not appropriate to use a residual income model to value Logiciels LaMarre because the impact of your currency translation gains and losses in shareholder equity causes the clean surplus accounting relation to be violated."

LaMarre ignores her concern and persists in his argument. He asserts, "The fact that our terminal value can be calculated with a high degree of certainty makes the use of a residual value model more appropriate than use of a FCFE model." Hofstedt counters that the residual income approach is not in LaMarre's interest. She points out, "Value tends to be recognized later in a residual income approach than in a FCFE approach."

There is, however, one point on which LaMarre and Hofstedt agree. They both recognize that competitive forces in the industry will drive the current high ROE of Logiciels LaMarre down to the cost of equity capital over time. Hofstedt concludes, "Given the assumption of a decline in ROE, we should use a persistence factor between zero and one." LaMarre disagrees, saying, "The assumption about ROE means that the present value of the continuing residual income at Logiciels LaMarre is the current residual income divided by the cost of equity capital."

### Question #29 of 114

Regarding their statements about the impact of the clean surplus accounting relation and terminal value on when it is appropriate to use a residual income model, who is correct?

- |              | <u>LaMarre</u> | <u>Hofstedt</u> |
|--------------|----------------|-----------------|
| A) Correct   |                | Incorrect       |
| B) Correct   |                | Correct         |
| C) Incorrect |                | Correct         |

### Question #30 of 114

A higher dividend payout ratio and higher ROE would *most likely* have what impact on Logiciels LaMarre's persistence factor?

- | <u>ROE</u> | <u>Dividend<br/>payout ratio</u> |
|------------|----------------------------------|
|------------|----------------------------------|



- A) Lower                  Lower
  - B) Lower                  Higher
  - C) Higher                Lower
- 

### Question #31 of 114

Regarding their statements about the forecast error in residual income models and when they recognize value, who is correct?

LaMarre                  Hofstedt

- A) Correct                Correct
  - B) Correct                Incorrect
  - C) Incorrect              Incorrect
- 

### Question #32 of 114

Which of the following is *least likely* to characterize the difference between a residual income model and a FCFE model?

- A) Terminal value represents a higher proportion of intrinsic value in a residual income model than in a dividend discount model (DDM).
  - B) Inputs to a residual income model are more easily manipulated by management.
  - C) A residual income model is applicable to a firm that does not have FCF.
- 

### Question #33 of 114

The residual income of Geremiah Analytics is *closest* to:

- A) \$120,000.

- B) -\$120,000.
- C) \$1,080,000.00
- 

### Question #34 of 114

Regarding their statements about ROE and residual income, who is correct?

<u>LaMarre</u>	<u>Hofstedt</u>
----------------	-----------------

- |              |           |
|--------------|-----------|
| A) Correct   | Incorrect |
| B) Correct   | Correct   |
| C) Incorrect | Correct   |
- 

### Question #35 of 114

The present value of Forman Electronics' projected residual income (RI) for the next five years is £80 per share. Beyond that time horizon a key analyst projects that the firm will sustain a RI of £17 per share, which is the RI for year 5. Given a cost of equity of 13%, what is the terminal value of the stock as of year 5?

- A) £500.00.
- B) £19.96.
- C) £130.77.
- 

### Question #36 of 114

Which statement *best* describes the relationship between the residual income model and the free cash flow to equity model?

- A) They both discount a future stream of cash flows.
- B) Intrinsic value calculated by both should be the same if the assumptions are the same.

C) They do not rely on accounting assumptions.

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### Question #37 of 114

Which of the following characteristics of a company would make it unsuitable for residual income valuation analysis?

- A) Free cash flows are negative and likely to remain so for some time.
  - B) Book-value estimates are not reliable.
  - C) The forecast of terminal value is not reliable.
- 

### Question #38 of 114

An investor is considering the purchase of Microscopics, which has a price to book value (P/B) ratio of 4.00. Return on equity (ROE) is expected to be 12%, current book value per share is \$12.00, and the cost of equity is 10%. What growth rate is implied by the current P/B rate?

- A) 9.33%.
  - B) 0.67%.
  - C) 10.00%.
- 

### Question #39 of 114

An appraiser must determine the value of an asset for tax purposes. Which of the following is the *most likely* standard of value the appraiser will use?

- A) Fair value for financial reporting.
  - B) Fair market value.
  - C) Market value.
-

**Question #40 of 114**

An analyst is examining the stock of three companies. Given the information below, which of them is *most likely* to be the stock of a private firm?

<b>Firm</b>	<b>Restrictions on Sale of Stock?</b>	<b>DLOM</b>	<b>Stock Ownership of 5 Largest Owners</b>
A	Yes	0%	28%
B	No	5%	35%
C	Yes	15%	64%

A) Firm C.

B) Firm B.

C) Firm A.

**Question #41 of 114**

Assume a minority shareholder holds 10% of a private firm's equity, with the CEO holding the other 90%. Using normalized earnings, the value of the firm's equity is estimated at \$20 million. The CEO refuses to sell the firm and the minority shareholder cannot sell their interest easily. A discount for lack of marketability (DLOM) of 15% will be applied. A discount for lack of control (DLOC) will also be estimated. Using reported earnings instead of normalized earnings provides an estimated firm equity value of \$19 million. Which of the following is *closest* to the value of the minority shareholder's equity interest?

A) \$1,700,000.

B) \$1,615,000.

C) \$1,900,000.

**Question #42 of 114**

Which of the following statements related to the market approaches to private company valuation is *most accurate*:

- A) The prior transaction method (PTM) is based on price multiples from the sale of whole public and private companies.
  - B) The guideline transactions method (GTM) is based on historical stock sales of the actual subject company.
  - C) The guideline public company method (GPCM) is based on price multiples from comparable traded firms.
- 

### Question #43 of 114

Which of the following *best* describes the use of size premiums when estimating the discount rate for private company valuations?

- A) The treatment is similar to that for public firms.
  - B) When using data from comparable public firms, a distress premium may be inadvertently added in.
  - C) A size premium is subtracted when calculating the discount rate.
- 

### Question #44 of 114

Assuming that the growth rate is less than the required rate of return ( $r$ ), an increase in return on equity (ROE) will cause value in a residual income (RI) model to:

- A) there is insufficient information to derive the effects of increasing ROE on RI.
  - B) decrease if ROE is greater than the required rate of return.
  - C) increase if ROE is greater than the required rate of return.
- 

### Question #45 of 114



Krieger String & Twine expects to generate a return on equity (ROE) of 13.6% in each of the next five years. The required ROE is 8.7%. Current book value is \$12.40 per share and the firm pays no dividends. Krieger previously assumed residual income falls to zero immediately after five years, but has now decided to recalculate its estimated value using a persistence factor of 35%. The difference between the new valuation and the old one is *closest* to:

- A) \$0.32 per share.
  - B) \$0.16 per share.
  - C) \$0.64 per share.
- 

### Question #46 of 114

An analyst values a private firm by using price multiples from the sale of whole companies, with adjustments for risk differences. Which of the following best describes the valuation method that the analyst is using?

- A) The prior transaction method.
  - B) The guideline public company method.
  - C) The guideline transactions method.
- 

### Question #47 of 114

The single-stage residual income model values a company at:

- A) book value plus the present value of the firm's expected economic profits.
  - B) book value times a factor determined by the discount rate.
  - C) book value plus the terminal value discounted at the weighted average cost of capital.
- 

### Question #48 of 114

Creative Gardening is expected to have a return on equity (ROE) of 13% for the next five years and slightly lower thereafter. Its current book value per share as of the *beginning* of year 1 (i.e., the end of year 0) is \$7.50 per share and its required rate of return is 10%. The premium over book value at the end of five years is expected to be 30%. All earnings are reinvested. The sum of the present values of the residual income estimates over the next five years is \$1.10. The projected ending book value in year 5 is \$13.83. What is the value of Creative Gardening using these inputs?

- A) \$11.18.
  - B) \$8.60.
  - C) \$13.83.
- 

### Question #49 of 114

Travel Advisors has earnings before interest and taxes (EBIT) of \$200 million, interest expense of \$83 million, taxes of \$46.8 million, and total debt of \$125 million. It is also financed with total equity of \$850 million, which has a required rate of return of 12%. What is Travel Advisors' residual income?

- A) A profit of \$70.2 million.
  - B) A profit of \$31.8 million.
  - C) A loss of \$31.8 million.
- 

### Question #50 of 114

Which description of the relationship among residual income, dividend discount (DDM) and free cash flow to equity (FCFE) models is *least* accurate?

- A) Residual income differs from DDM and FCFE in that it discounts income rather than cash.
- B) The different models should result in different intrinsic values because of the theoretical differences in the models.

- C) Residual income differs from DDM and FCFE in that residual income starts with book value.
- 

### Question #51 of 114

Which of the following is *most* accurate regarding the asset-based approach? Of the three valuation methods for private firms, it usually:

- A) results in the lowest valuation.
  - B) is not difficult to apply.
  - C) is the most appropriate for going concerns.
- 

### Question #52 of 114

Which of the following *best* describes the implementation of private company valuation standards?

- A) Because most valuation reports are private, it is very difficult for appraisal organizations to ensure compliance to standards.
  - B) Appraisers are required to periodically submit their reports for review by the local appraisal board.
  - C) Appraisers voluntarily and periodically submit their reports for review by the local appraisal board.
- 

### Question #53 of 114

Travel Advisors has earnings before interest and taxes (EBIT) of \$200 million, interest expense of \$83 million, taxes of \$46.8 million, and total debt of \$125 million. It is also financed with total equity of \$650 million, which has a required rate of return of 12 percent. What is Travel Advisors' residual income? A:

- A) profit of \$70.2 million.

**B)** loss of \$7.8 million.

**C)** loss of \$70.2 million.

Sue Clifton, CFA, is a senior portfolio manager at Lewiston Investments, a small research firm. Clifton has been assigned to help new hire Ralph Rawls get acclimated to his new job as a stock analyst. She discovers early on that Rawls is not too familiar with residual income valuation, a tool for determining economic profitability.

Clifton explains the basics of the residual-income model and the clean surplus relationship that underpins the system. Clifton then offers Rawls some reasons why residual income is useful:

Reason 1:	"Residual-income valuation works even when cash flows are volatile or negative."
Reason 2:	"Terminal value, the most uncertain aspect of dividend discount models, is less important in residual-income valuation."
Reason 3:	"The models depend on data that is easy to obtain and requires minimal modification."
Reason 4:	"All residual-income models are dependent on assumptions about earnings growth."

Clifton explains to Rawls that analysts use assumptions to make the residual-income models easier to interpret. She goes on to identify four commonly used assumptions: Residual income can be expected to:

- disappear immediately
- decline gradually as return on equity (ROE) declines
- stay at the same level indefinitely
- decline to the market average

After her initial review of residual income, Clifton gives Rawls a test. The answers depend on the use of the following information about CR Industries in Year X (in \$ millions):

Invested capital	\$225
Market capitalization	\$231
Debt	\$130
Sales	\$90

Cost of goods sold (COGS)	\$26
Selling, general & administrative (SG&A) expense	\$10
Depreciation and amortization expense	\$25
Interest expense	\$6.5
Dividend expense	\$6
Tax rate	40.0%
Pretax cost of equity	11.4%
Pretax cost of debt	5.00%

### Question #54 of 114

When a company's ROE is the same as the return required by the market, the stock's justified market value is *closest* to the:

- A) book value plus residual income.
  - B) book value.
  - C) actual market value plus residual income.
- 

### Question #55 of 114

Which of the following assumptions is not commonly used to simplify the calculation of residual income? Continuing residual income is expected to:

- A) disappear immediately.
  - B) decline to the market average.
  - C) decline gradually as ROE declines.
- 

### Question #56 of 114



Which of the following regarding the statements Clifton made about the usefulness of residual-income valuation is *most* accurate? Clifton is correct in regard to:

- A) Reason 4, but incorrect in regard to Reasons 1, 2 and 3.
  - B) Reasons 1, 2, and 4, but incorrect in regard to Reason 3.
  - C) Reasons 1 and 2, but incorrect in regard to Reasons 3 and 4.
- 

### Question #57 of 114

Which of the following scenarios represents a violation of the clean surplus relationship?

- A) The market value of securities held for sale changes.
  - B) Unusual charges against income are not charged against equity.
  - C) A company stops paying dividends suddenly.
- 

### Question #58 of 114

The residual income of CR Industries is *closest* to:

- A) \$2.67 million.
  - B) -\$12.15 million.
  - C) -\$1.83 million.
- 

### Question #59 of 114

The economic value added (EVA) of CR Industries is *closest* to:

- A) \$2.67 million.
  - B) -\$8.13 million.
  - C) -\$4.53 million.
-

### Question #60 of 114

Midland Semiconductor has a book value of \$10.50 per share. The company's return on equity is 20%, and its required return on equity is 17%. The dividend payout ratio is 30%. What is the value of the shares using a single-stage residual income model?

- A) \$31.50.
  - B) \$21.00.
  - C) \$10.50.
- 

### Question #61 of 114

Which of the following *best* describes how debt is incorporated into the estimation of the discount rate for private company valuations, relative to that for public firms? In general, the cost of debt:

- A) is higher for private firms and debt capacity is lower for private firms.
  - B) and debt capacity is the same for both private and public firms.
  - C) is higher for private firms and debt capacity is the same for both private and public firms.
- 

### Question #62 of 114

Which of the following statements *most* accurately describes the difference between private and public firm managers?

- A) Although managers in a public firm are often paid with incentive compensation, public managers may take a shorter term view than private managers because shareholders
  - B) Because managers in a private firm are concerned with having the firm go public, private managers may take a shorter term view than public managers.
  - C) Because managers in a public firm are often paid with incentive compensation, public managers may take a longer term view than private managers.
-

### Question #63 of 114

The residual income approach is NOT appropriate when:

- A) a firm does not pay dividends or the stream of payments is too volatile to be sufficiently predictable.
  - B) expected free cash flows are negative for the foreseeable future.
  - C) the clean surplus accounting relation is violated significantly.
- 

### Question #64 of 114

An argument for using the residual income (RI) valuation approach is that residual income valuation:

- A) encourages company managers to maximize ROI.
  - B) reduces the problem of terminal value dominating total value.
  - C) facilitates comparisons between divisions.
- 

### Question #65 of 114

Which of the following *best* describes the estimation of discounts for lack of marketability (DLOM) in private company valuations? The primary advantage of using put prices to estimate the DLOM over the other two methods is:

- A) the Black-Scholes model has been shown to be valid for private firms.
  - B) exchange traded put prices are readily available.
  - C) the volatility of the firm can be incorporated into the analysis.
- 

### Question #66 of 114

An analyst is valuing a firm's equity using the price-to-book-value ratio of similar firms. Which of the following is the *most likely* valuation approach the analyst will use?

- A) The income approach.
  - B) The market approach.
  - C) The asset-based approach.
- 

### Question #67 of 114

Which of the following definitions of value refers to the value of an asset given a hypothetically complete understanding of the asset's investment characteristics?

- A) Fair value.
  - B) Investment value.
  - C) Intrinsic value.
- 

### Question #68 of 114

Midland Semiconductor has a book value of \$10.50 per share. The company's return on equity is 20%, and its required return on equity is 17%. The dividend payout ratio is 30%. The current share price is \$21.00 per share. The shares (relative to a single-stage residual income model) are *most likely*:

- A) correctly valued.
  - B) overvalued.
  - C) undervalued.
- 

### Question #69 of 114

SmallCo has the following characteristics:

- Long-term debt = \$55 million
- Equity = \$45 million
- WACC = 11%
- EBIT = \$10 million
- Marginal tax rate = 30%

SmallCo's economic value added is *closest* to:

- A) -\$4 million.
  - B) +\$1 million.
  - C) -\$1 million.
- 

### Question #70 of 114

The residual income approach is appropriate when:

- A) expected free cash flows are negative for the foreseeable future.
  - B) the clean surplus accounting relation is violated significantly.
  - C) a firm pays high dividends that are quite stable.
- 

### Question #71 of 114

An analyst calculates a control premium of 15% and discount for lack of marketability (DLOM) of 20%. Which of the following is *closest* to the total discount for valuing minority equity interests in the private firm?

- A) 35.7%.
  - B) 35.0%.
  - C) 30.4%.
-



### Question #72 of 114

Big Sky Ranches reported the following for the end of its fiscal year:

- Book Value = \$3.18
- ROE = 22%
- Retention Ratio = 50%
- Required Return = 14.1%

The current share price is \$11.28 per share. The shares (relative to a single-stage residual income model) are *most likely*:

- A) overvalued.
  - B) correctly valued.
  - C) undervalued.
- 

### Question #73 of 114

A common assumption regarding continuing residual income (RI) is that RI:

- A) manifests a generally increasing trend indefinitely.
  - B) falls to the average industry level.
  - C) declines to zero as return on equity (ROE) drops to the cost of equity over time.
- 

### Question #74 of 114

The residual income approach is appropriate when:

- A) the clean surplus accounting relation is violated significantly.
  - B) a firm pays high dividends that are quite stable.
  - C) a firm does not pay dividends or the payments are too volatile to be sufficiently predictable.
-

### Question #75 of 114

An argument for using the residual income (RI) valuation approach is that:

- A) the models focus on economic rather than just on accounting profitability.
  - B) the models rely on accounting data that can be manipulated by management.
  - C) the clean surplus relation fails to hold.
- 

### Question #76 of 114

Which of the following statements related to the role of valuation standards in valuing private companies is *most accurate*:

- A) Business appraisers in the U.S. and most other countries are not required to adhere to government-authorized valuation standards.
  - B) No international valuation standards exist; countries generally each have their own standards for valuation.
  - C) Standards organizations provide technical guidance that ensures homogeneous valuations by those that use their standards.
- 

### Question #77 of 114

Which of the following *best* describes the guidance on the use of private company valuation standards provided by appraisal organizations?

- A) Guidance on the use of standards is not provided.
  - B) Guidance on the use of standards is necessarily limited due to the heterogeneity of valuations.
  - C) Technical guidance on the use of standards is widespread, as it is provided by both industry and consumer groups.
- 

### Question #78 of 114

Using the following figures, calculate the value of the equity using the capitalized cash flow method (CCM), assuming the firm will be acquired.

<i>Normalized FCFE in current year</i>	\$3,000,000
<i>Reported FCFE in current year</i>	\$2,400,000
<i>Growth rate of FCFE</i>	7.0%
<i>Equity discount rate</i>	16.0%
<i>WACC</i>	13.0%
<i>Risk-free rate</i>	3.5%
<i>Cost of debt</i>	10.5%
<i>Market value of debt</i>	\$3,000,000

The value of the equity is:

- A) \$32,666,667.
- B) \$28,533,333.
- C) \$35,666,667.

### Question #79 of 114

Which of the following *best* describes projection risk in the estimation of the discount rate for private company valuations?

- A) Management will always be overly optimistic to increase the acquisition price.
- B) If the availability of information from private firms is poor, the uncertainty of projected cash flows may increase.
- C) Projection risk results in higher discount rates.

### Question #80 of 114

Given the following figures, calculate the FCFF. Assume the earnings and expenses are normalized and that capital expenditures will cover depreciation plus 3 percent of the firm's incremental revenues.

<i>Current Revenues</i>	\$30,000,000
<i>Revenue growth</i>	6%
<i>Gross profit margin</i>	20%
<i>Depreciation expense as a percent of sales</i>	1%
<i>Working capital as a percent of sales</i>	15%
<i>SG&amp;A expenses</i>	\$3,800,000
<i>Tax rate</i>	30%

- A) \$927,400.
- B) \$1,785,400.
- C) \$1,245,400.

---

### Question #81 of 114

Which of the following is *least likely* an example of a compliance-related valuation for a private company?

- A) Financial reporting.
- B) Tax purposes.
- C) Bankruptcy proceeding.

---

### Question #82 of 114

An argument for using the residual income (RI) valuation approach is that:

- A) the models rely on accounting data that can be manipulated by management.
- B) the clean surplus relation fails to hold.

C) the models focus on economic rather than just on accounting profitability.

---

### Question #83 of 114

In general, firms making aggressive accounting decisions will report book values that are:

- A) lower.
  - B) consistent with fair market value.
  - C) higher.
- 

### Question #84 of 114

Which of the following definitions of value is the value to a particular buyer?

- A) Fair market value.
  - B) Investment value.
  - C) Market value.
- 

### Question #85 of 114

Which of the following *best* describes the build-up method used for the estimation of the discount rate in private company valuations?

- A) Because it is not used in the calculation, beta is assumed to be zero.
  - B) An industry risk premium is not included because it is captured in the equity risk premium.
  - C) It is useful when there are no comparable public firms.
- 

### Question #86 of 114



Among the various price multiples, the residual income model is *most closely* linked to which of the following?

- A) Price to free cash flow (P/FCF).
  - B) Price to book value (P/B).
  - C) Price to earnings (P/E).
- 

### Question #87 of 114

Reported accounting data are *most likely* to bias an estimate of residual income when:

- A) standards allow charges directly to stockholders' equity that are also reflected on the income statement.
  - B) the clean surplus relation holds.
  - C) standards allow charges directly to stockholders' equity while bypassing the income statement.
- 

### Question #88 of 114

A use of the residual income (RI) valuation approach is:

- A) providing more reliable estimates of terminal value.
  - B) providing a check of consistency between competing approaches like free cash flow of equity (FCFE) and dividend discount model (DDM).
  - C) deferring value more than in competing valuation approaches.
- 

### Question #89 of 114

An analyst uses the financial statements of Advanced Instruments to generate the following estimates:

- Book Value per share = 4.00
- Retention ratio = 75%
- ROE = 17%

If the required rate of return is 15%, and the current share price is \$7.56 per share, the stock (using a single-stage residual income model) is *most likely*:

- A) correctly valued.
  - B) undervalued.
  - C) overvalued.
- 

### Question #90 of 114

Red Shoes's recent financial statements reported a book value of \$11.00 per share; its required rate of return is 9%. Analyst Tony Giancola, CFA, wants to calculate the company's intrinsic value using a multistage residual income with a high-growth RI for the next 5 years. Giancola creates the following estimates:

- PV of interim high-growth RI for the next 5 years is \$ 2.90
- At the end of year 5, the PV of continuing RI is \$7.00
- Estimated Book Value in 5 years is \$14.00

Which of the following is *closest to* the current intrinsic value of Red Shoes?

- A) \$9.90.
  - B) \$20.90.
  - C) \$18.45.
- 

### Question #91 of 114

Which of the following statements *least* accurately explains the relationship between the residual income (RI) model, the dividend discount model (DDM), and free cash flow to equity (FCFE):

- A) FCFE models use historical cash flows.
  - B) RI models use an equity value from the balance sheet plus the present value of expected future residual income.
  - C) All the models discount future cash flows or income at the required rate of return.
- 

### Question #92 of 114

Professor Cliff Webley made the following statements in his asset-valuation class:

- |              |  |
|--------------|--|
| Statement 1: | "Residual income approaches generally model ROE as approaching zero over time."  |
| Statement 2: | "If actual return on equity equals required return on equity, the residual income model sets the company's proper market value equal to its book value." |
| Statement 3: | "Using consistent assumptions, the single-stage residual income model should give you the same valuation as the Gordon Growth Dividend-discount model."  |

Which of Webley's statements is *least* accurate?

- A) Statement 3.
  - B) Statement 1.
  - C) Statement 2.
- 

### Question #93 of 114

In general, firms making aggressive accounting decisions will report *future* earnings that are:

- A) inflation-adjusted.
- B) higher.
- C) lower.

**Question #94 of 114**

Which of the following is *least likely* an example of a litigation-related valuation for a private company?

- A) Lost profits claims.
  - B) Divorce settlements.
  - C) Bankruptcy proceeding.
- 

**Question #95 of 114**

The capitalized cash flow method (CCM) used in private firm valuation is *most* appropriate when:

- A) stable growth is expected.
  - B) earnings are growing quickly in an initial period.
  - C) there are many intangible assets to value.
- 

**Question #96 of 114**

Which of the following statements related to the models used to estimate the required rate of return to private company equity is *most accurate*:

- A) The build-up method begins with betas for comparable public firms and adds risk premiums.
  - B) The expanded CAPM model adds premiums for size and firm-specific risk.
  - C) The CAPM model uses betas estimated from firm returns of other private firms.
- 

**Question #97 of 114**

Brown Manufacturing's recent financial statements reported a book value of \$9.50 per share; its required rate of return is 10%. Analyst Tony Giancola, CFA, wants to calculate the company's intrinsic value using a multistage residual income with a high-growth RI for the next 5 years.

Giancola creates the following estimates:

- PV of interim high-growth RI for the next 5 years is \$3.10
- At the end of year 5, the PV of continuing RI is \$10.00
- Estimated Book Value in 5 years is \$25.00

Which of the following is *closest* to the current intrinsic value of Brown Manufacturing?

- A) \$22.60.
  - B) \$13.10.
  - C) \$18.81.
- 

### Question #98 of 114

Assuming that the growth rate is less than the required rate of return ( $r$ ), a decrease in initial book value will cause value in a residual income (RI) model to:

- A) decrease.
  - B) increase.
  - C) there is insufficient information to determine the effect on RI.
- 

### Question #99 of 114

Which of the following is the *most* appropriate tool to measure managerial effectiveness, goodwill impairment, and equity value?

- A) Residual income.
  - B) Free cash flow to the firm.
  - C) Gordon growth model.
-



### Question #100 of 114

An analyst is valuing a small private firm that is still developing and has yet to generate any earnings. Which of the following *best* describes the approach that should be used?

- A) An asset-based approach would be used.
  - B) A market approach based on public comparables would be utilized.
  - C) Nonoperating assets are not crucial to the firm and should be excluded in any valuation.
- 

### Question #101 of 114

Economic value added (EVA<sup>®</sup>) is calculated as net operating profit after taxes minus:

- A) capital expenditures.
  - B) a charge for total capital.
  - C) a charge for equity capital.
- 

### Question #102 of 114

A residual income model would be *least appropriate* as a tool to measure which of the following?

- A) Goodwill impairment.
  - B) Economic income.
  - C) Operating leverage.
- 

### Question #103 of 114

Which of the following is *least likely* an example of a transaction-related valuation for a private company?

- A) Financial reporting.
  - B) Bankruptcy proceeding.
  - C) Performance-based managerial compensation.
- 

### Question #104 of 114

A private pharmaceutical firm is under consideration for acquisition where the financial buyer will pay with equity. Part of the payment to the sellers is based on FDA approval of the firm's drug. If the analyst uses a market approach and comparable data from public firms, which of the following would *most likely* result in a price-multiple that is too high? The comparable data is:

- A) for strategic buyers.
  - B) from transactions where the buyer used cash.
  - C) for transactions where the consideration was non-contingent.
- 

### Question #105 of 114

If a multistage residual income model incorporates a persistence factor of zero, the analyst is *most likely* assuming that residual income will:

- A) persist at the current level forever.
  - B) fall to zero immediately.
  - C) decline to zero over time.
- 

### Question #106 of 114

Advanced Instruments reported the following for the end of its fiscal year:

- Revenues = \$50.3 million.
- Assets = \$33.8 million.
- Liabilities = \$13.8 million.
- Earnings per share = \$0.68.
- Dividends per share = \$0.17.
- Shares outstanding = 5 million.
- Tax rate = 40%.

If the required rate of return is 15%, what is the value of the shares using a single-stage residual income model?

- A) \$4.78.
  - B) \$6.01.
  - C) \$7.56.
- 

### Question #107 of 114

When would the asset-based approach result in a higher valuation than its going concern value, in the case of private company valuation?

- A) When valuing pharmaceutical firms.
  - B) If the firm has minimal profits and poor prospects.
  - C) When valuing biotech firms.
- 

### Question #108 of 114

Using the following information, calculate the WACC using the build-up method, assuming the firm is being acquired.

<i>Income return on bonds</i>	6.0%
<i>Capital return on bonds</i>	2.0%
<i>Long-term Treasury yield</i>	3.5%
<i>Beta</i>	1.4
<i>Equity risk premium</i>	6.0%
<i>Small stock premium</i>	4.0%
<i>Company-specific risk premium</i>	3.0%
<i>Industry risk-premium</i>	2.0%
<i>Pretax cost of debt</i>	11.0%
<i>Optimal Debt/Total Cap</i>	20%
<i>Current Debt/Total</i>	7%
<i>Debt/Total Cap for public firms in industry</i>	33%
<i>Tax Rate</i>	30%

A) 16.3%.

B) 18.5%.

C) 17.7%.

### Question #109 of 114

Residual income is defined as:

A) net income less a charge for capital investment.

B) net income less a charge that measures stockholders' opportunity cost in generating that income.

C) operating income plus depreciation and amortization.

**Question #110 of 114**

An analyst is examining three companies. Given the information below, which of them is *most likely* to be a private firm?

Firm	Number of Years in Operation	Market Capitalization	Required Return for Common Stock
A	12 years	\$1,324.8 million	14.8%
B	4 years	\$1,313.9 million	18.3%
C	19 years	\$2,231.0 million	16.4%

- A) Firm C.
  - B) Firm B.
  - C) Firm A.
- 

**Question #111 of 114**

Assume that a property that you are evaluating has a gross annual income equal to \$230,000, and that comparable properties are selling for 10.5 times gross income. The gross income multiplier approach provides a market value for this property that is *closest* to:

- A) \$2,303,000.
  - B) \$2,415,000.
  - C) \$2,190,000
- 

**Question #112 of 114**

In a single-stage residual income model for a firm with return on equity (ROE) greater than the required rate of return, which statement is *least* accurate?



- A) Market value will be greater than book value.
  - B) Free cash flow to equity will be positive.
  - C) The justified price-to-book value (P/B) ratio will be greater than one.
- 

### Question #113 of 114

An analyst is valuing a private firm on the behalf of a strategic buyer and deflates the average public company multiple by 15% to account for the higher risk of the private firm. Given the following figures, calculate the value of firm equity using the guideline public company method (GPCM).

<i>Market value of debt</i>	\$4,100,000
<i>Normalized EBITDA</i>	\$42,800,000
<i>Average MVIC/EBITDA multiple</i>	8.5
<i>Control premium from past transaction</i>	25%

The value of the firm's equity is *closest* to:

- A) \$382,438,000.
  - B) \$304,060,000.
  - C) \$381,412,500.
- 

### Question #114 of 114

An argument against using the residual income (RI) valuation approach is that:

- A) the models focus on economic rather than just on accounting profitability.
- B) the models rely on accounting data that can be manipulated by management.
- C) terminal value does not dominate total present value as is the case in dividend and free cash flow valuation models.