32 REAL ESTATE INVESTMENTS

1. When calculating NAVPS, a real estate company's assets and liabilities are valued at their:
   (A) market value.
   (B) book value.
   (C) liquidation value.

2. Patricia Ly, CFA, is a portfolio manager who wishes to add diversification to her portfolio through the addition of a real estate investment. Ly finds the following data for a particular industrial REIT:
   Net operating income (NOI): $710,000
   Funds from operations (FFO): $630,000
   Assumed cap rate: 6%
   Shares outstanding: 90,000 shares
   Storage property average P/FFO multiple: 13x.
   Industrial property average P/FFO multiple: 10x.
   Ly decides to perform a valuation on this REIT. The value per share of this REIT using a price-to-FFO approach is closest to:
   (A) $91
   (B) $112
   (C) $70

3. A real estate investment is expected to have cash flows after taxes in each of the next three years equal to CAD70,000, CAD50,000, and CAD65,000, respectively. The initial equity investment in this property is CAD600,000 and the equity at the end of year three is estimated to be CAD500,000. The internal rate of return (IRR) for this investment is closest to:
   (A) 8.0%.
   (B) –7.8%.
   (C) 5.0%.

4. Which of the following most accurately identifies one of the advantages of investing in real estate through publicly traded securities?
   (A) Diversification by geography and property type is facilitated.
   (B) Publicly traded corporate structures cost less to maintain.
   (C) Structural conflicts of interest are eliminated.

5. Which of the following most accurately identifies a private equity investment in income-producing real estate?
   (A) Investment in a real estate investment trust (REIT).
   (B) Private market mortgage lending by an insurance company.
   (C) Direct ownership of real estate properties.

6. Suppose that a property has a gross annual income equal to $150,000, and that a comparable property has a gross annual income of $100,000 and a market value of $1,125,000. The gross income multiplier approach produces a market value for this property that is closest to:
   (A) $1,687,500.
   (B) $1,625,000.
   (C) $1,333,333.

7. A key difference between Funds From Operations (FFO) and Adjusted Funds From Operations (AFFO) is that AFFO excludes:
   (A) non-cash rent while FFO does not.
   (B) depreciation while FFO does not.
   (C) deferred tax charges while FFO does not.

8. Compared to transaction-based indices used to track the performance of private real estate, appraisal-based indices are most likely to exhibit an apparent:
   (A) higher volatility.
   (B) higher correlation with other asset classes.
   (C) time lag.

9. The most likely consequence of the high income distribution that REITs are required to make is:
   (A) frequent secondary equity offerings compared to other kinds of companies.
   (B) dividend yields that are nearly on-par with the yields of other publicly traded equities.
   (C) high volatility of reported income.

10. The levered internal rate of return for the apartment project is closest to:
    (A) 12.3%.
    (B) 19.2%.
    (C) 22.0%.

11. The best estimate for the real-estate project's value using the direct capitalization method is:
    (A) €2.40 billion.
    (B) €2.00 billion.
    (C) €2.60 billion.

12. What kind of transaction seems most suitable for:

	Belgarrique	KinderWerks
(A)	Buyout	Venture capital
(B)	Venture capital	Buyout
(C)	Venture capital	Venture capital

13. Which of the following least accurately describes a major category of due diligence factors that should be investigated in determining the value of a property?
    (A) Structural integrity.
    (B) Operating expenses.
    (C) Pipeline analysis.

14. Based on Exhibit 1, the estimated NAV per share of the Healthcare REIT is closest to:
    (A) $140.
    (B) $144.
    (C) $154.

15. Based on Exhibits 1 and 2, the estimated value per share of the Healthcare REIT using the method suggested by Ko is closest to:
    (A) $137.
    (B) $140.
    (C) $148.

16. Based on Exhibits 1 and 2, the estimated value per share of the Multi-family REIT using the method suggested by Meethong is closest to:
    (A) $116.
    (B) $120.
    (C) $144.

17. How do you evaluate the comments made by the two analysts?
    (A) Both analysts are correct.
    (B) Only Ko is correct.
    (C) Only Meethong is correct.

18. Suppose you have collected the information in the table below for four comparable properties.

Property	Net Operating Income (NOI)	Selling Price
A	$200,000	$2,250,000
B	$220,000	$2,000,000
C	$250,000	$2,500,000
D	$230,000	?

Using the market extraction method in conjunction with an average capitalization rate, the market value (MV) for Property D is estimated to be closest to:
    (A) $2,309,237.
    (B) $2,090,909.
    (C) $2,300,000.

19. If a REIT has assets with a current market value of $3,000,000, liabilities with a current market value of $2,000,000, and 100,000 shares outstanding, what is the NAVPS per share?
    (A) $10.00
    (B) $30.00
    (C) $50.00

20. Regarding valuation of private real estate investments, the cost approach is most likely to be used to value:
    (A) commercial properties.
    (B) unusual properties.
    (C) single-family homes.

21. Which one of the following is least likely an error in using DCF method of real estate valuation?
    (A) Income growth is equal to expense growth.
    (B) Terminal cap rate and going-in cap rate are not consistent
    (C) Terminal cap rate applied to atypical NOI.

22. Which of the following valuation approaches is only applicable in its application to income-generating properties?
    (A) Both the gross income multiplier approach and the direct income capitalization approach.
    (B) Only the direct income capitalization approach.
    (C) Only the gross income multiplier approach.

23. Which of the following most accurately identifies non-core real estate property types?
    (A) Hotel and hospitality.
    (B) Retail and multi-family residential.
    (C) Office and industrial.

24. Which of the following most accurately identifies one of the disadvantages of investing in real estate through publicly traded securities? Compared to other real estate investment vehicles, publicly traded securities expose investors to:
    (A) unlimited liability.
    (B) inferior liquidity.
    (C) more-volatile returns.

25. Based on projected real estate conditions and the partners' discussion given in the vignette, 3CC's top recommendation would most likely be:
    (A) public equity.
    (B) private equity.
    (C) public debt.

26. If the pension fund chooses to invest in hotels over apartments, one possible reason for this is that hotels:
    (A) are not affected by cost and availability of debt capital.
    (B) are commercial properties while apartments are residential properties.
    (C) may offer higher rates of returns because of higher operational risk.

27. Compared to Blue Ridge Apartments, Green Oaks Hotel has higher:
    (A) cap rate.
    (B) discount rate because the amount of principal owed is higher.
    (C) net operating income because of the higher debt service.

28. Which statement regarding issues with indices is least likely correct?
    (A) Clarkson's statement.
    (B) Chekov's statement.
    (C) Chanwit's statement.

29. Which of the following most accurately identifies one of the characteristics of a private equity investment in income-producing real estate?
    (A) Homogeneity.
    (B) Passive management.
    (C) Sensitivity to the credit market.

30. All of the following are limitations to the gross income multiplier approach for real estate valuation EXCEPT:
    (A) gross rental income may be inappropriate when building-to-land ratios are different among otherwise comparable properties.
    (B) sales prices for comparable properties may not be current.
    (C) it may be difficult to obtain the necessary data to determine the appropriate capitalization rate.

31. Which of the following statements is most accurate regarding real estate capitalization rates?
    (A) As the difference between the required return on equity capital and the growth rate in NOI (g) increases, value estimates will also increase.
    (B) If during periods of rising inflation, there is an increase in net operating income (NOI) and the growth rate of NOI, capitalization rates and value estimates will increase.
    (C) Generally, as interest rates increase, capitalization rates increase and value estimates decline.

32. Which of the following is an expense normally deducted from accounting net earnings but not from FFO?
    (A) Property operating expenses
    (B) Property taxes
    (C) Depreciation expense

33. Based on Anton's estimates, the net operating income for the multi-family property investment in Year 1 is closest to:
    (A) BGN 32,000.
    (B) BGN 35,000.
    (C) BGN 38,000.

34. Based on the direct capitalization approach, the value of the property is closest to:
    (A) BGN 770,000.
    (B) BGN 942,000.
    (C) BGN 1,110,000.

35. Based on the DCF approach, the value of the property is closest to:
    (A) BGN 798,000.
    (B) BGN 857,000.
    (C) BGN 973,000.

36. Based on Exhibit 1, the maximum loan that Beta Bank will extend is closest to:
    (A) BGN 465,000.
    (B) BGN 509,000.
    (C) BGN 540,000.

37. Which of the following is the most likely to represent an advantage of investing in publicly traded real estate securities over direct ownership of property? Publicly traded real estate securities offer:
    (A) greater liquidity.
    (B) more control over investment decisions.
    (C) lower price volatility.

38. Which of the following is most likely to represent a publicly traded real estate debt investment?
    (A) A mortgage real estate investment trust (Mortgage REIT).
    (B) Secured bank debt collateralized by real estate.
    (C) A real estate operating company (REOC).

39. An appraiser who wishes to value an unusual property is most likely to estimate the value of the property using the:
    (A) sales comparison approach.
    (B) cost approach.
    (C) income approach.

40. Which of the following least accurately identifies a type of publicly traded real estate security?
    (A) Investment trusts.
    (B) Operating companies.
    (C) Direct mortgage lending.

41. Which of the following is least likely a difference between real estate investments and traditional asset classes like stocks and bonds?
    (A) Real estate tends to be homogenous
    (B) Real estate tends to be difficult to value
    (C) Real estate tends to be indivisible

42. Retail sales growth is most likely to be a top economic factor affecting the economic value of a(n):
   (A) industrial REIT.
   (B) health care REIT.
   (C) residential REIT.

43. A real estate investment is expected to have cash flows after taxes in each of the next three years equal to CAD70,000, CAD50,000, and CAD65,000, respectively. The initial equity investment in this property is CAD600,000 and the equity at the end of year-three is estimated to be CAD300,000. Assuming a required return on equity of 8 percent, the net present value (NPV) for this investment is closest to:
   (A) -CAD202,569.
   (B) -CAD238,150.
   (C) CAD220,360.

44. The net asset value approach to valuation makes sense for REITs because:
   (A) there exist active private markets for real estate assets.
   (B) the price at which a REIT trades very closely tracks NAV.
   (C) NAV equals the value that public equity investors attach to a REIT.

45. Leverage results in higher returns when:
   (A) Investment return exceeds cost of debt.
   (B) Asset prices are increasing.
   (C) Debt is cheap.

46. An investor in rental apartments is evaluating the acquisition of an older apartment building. The investor contacts a local builder for an estimate for constructing a property that would house a similar number of renters and generate an amount of rental income comparable to that of the subject property being appraised.
   In valuing the subject property, he is most likely using the:
   (A) Cost approach
   (B) Sales comparison approach
   (C) Income approach

47. Assume that a property has an estimated net operating income (NOI) equal to $150,000. Further assume that comparable properties have a capitalization rate of 11%. The direct income capitalization approach provides a market value for this property that is closest to:
   (A) $1,500,000.
   (B) $13,636,363.
   (C) $1,363,636.

48. A real estate investment is expected to have cash flows after taxes in each of the next four years equal to GBP90,000, GBP55,000, GBP35,000, and GBP25,000, respectively. The initial equity investment in this property is GBP200,000 and the equity at the end of year-four is estimated to be GBP100,000. Assuming an after tax return on equity of 8.5%, the net present value (NPV) internal rate of return (IRR) for this investment is closest to:

	NPV	IRR
(A)	GBP41,399	15%
(B)	GBP45,376	16%
(C)	GBP47,268	18%

49. Appropriate due diligence in a private real estate investment is most likely to:
   (A) lower existing operating costs.
   (B) review lease and rental history.
   (C) mitigate unforeseen potential problems.

50. A real estate market is characterized by frequent transactions. However, individual properties have long holding periods. Which real estate pricing index would be least suitable in such an environment?
   (A) Repeat sales index.
   (B) Appraisal based index.
   (C) Hedonic price index.

51. In appraising a commercial property, both the direct capitalization method and the discounted cash flow methods are most likely to use as a primary input the:
   (A) gross income multiplier.
   (B) terminal cap rate.
   (C) net operating income.

52. Which of the following statements most accurately describes the capitalization rate used for real estate valuation?
   (A) The capitalization rate is the rate of return that equity investors require on similar-risk real estate investments.
   (B) The capitalization rate is the rate of return that equity investors require on similar-risk real estate investments net of the expected constant growth rate of net operating income.
   (C) The capitalization rate is one plus the constant growth rate of net operating income.

53. 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) $2,190,000.
    (B) $2,415,000.
    (C) $2,303,000.

54. Compared with REITs, real estate operating companies (REOCs) are most likely to feature higher:
    (A) yields.
    (B) levels of income tax exemption.
    (C) operating flexibility.

55. All of the following statements accurately describe the real estate capitalization rate EXCEPT:
    (A) holding all else constant, market value estimates increase as the growth rate in net operating income increases.
    (B) there is an inverse relationship between estimated market values and capitalization rates.
    (C) holding all else constant, the risk of a real estate investment is directly related to its estimated value.

56. Which of the following most accurately describes an approach to REIT valuation?
    (A) The discounted cash flow approach typically consists of intermediate-term cash flow projections plus a terminal value based on cash flow multiples.
    (B) The P/AFFO approach avoids estimates and assumptions in its calculation.
    (C) The P/FFO approach adjusts for the impact of recurring capital expenditures needed to keep properties operating smoothly.