Selected End-of-Chapter Concept Questions ("Q" Questions)

Question 1-1

What is the difference between real property and personal property?

Real property refers to the ownership rights associated with realty. Realty refers to land and all things permanently attached. Personal property refers to ownership rights associated with personality. Personality are all things, tangible, intangible that are movable. This includes all things that are not realty.

Question 1-3

How can a leased fee estate have a value that could be transferred to another party?

The original fee owner can give up some property rights to a lessee. The value of the leased fee estate will depend on the amount of lease payments expected during the term of the lease plus the value of the property when the lease terminates and the original owner receives the reversionary interest.

Question 2-1

Distinguish between a mortgage and a note.

A note admits the debt and generally makes the borrower personally liable for the obligation. A mortgage is usually a separate document which pledges the designated property as security for the debt.

Question 2-6

What does non-recourse financing mean?

The borrower is not personally liable on the note. The lender may look only to the property (security) to satisfy the loan in the event of default.

Question 2-10

What does deficiency judgment mean?

If default occurs and the property is sold, if the dollars from the sale are not enough to pay off the loan balance, the borrower is liable for the difference. This can occur in a "recourse" loan circumstance.

Question 2-12

How can mechanics' liens achieve priority over first mortgages that were recorded prior to the mechanics' lien?

Mechanics' liens are permitted to be recorded after the fact. State laws generally give contractors, laborers, or suppliers of materials a certain period of time following the completion of work or delivery of materials during which to file their lien. When the lien is filed it relates back and takes priority over all liens filed after the time when materials were first delivered or work was first performed on real estate.

Question 2-17

What special advantages does a mortgagee have in bidding at the foreclosure sale where the mortgagee is the foreclosing party? How much will the mortgagee normally bid at the sale?

The mortgagee can use his/her claims as a medium of exchange in the purchase, except for costs, which must be paid in cash. Others must pay cash for their purchases or by obtaining a new loan.

Lenders will normally bid the full amount of their claim only where it is less than or equal to the market value of the security less foreclosure, resale, and holding costs.

Question 3-4

What does the time value of money (TVM) mean?

Time value simply means that if an investor is offered the choice between receiving $1 today or receiving $1 in the future, the proper choice will always be to receive the $1 today, because that $1 can be invested in some opportunity that will earn interest. Present value introduces the problem of knowing the future cash receipts for an investment and trying to determine how much should be paid for the investment at present. When determining how much should be paid today for an investment that is expected to produce income in the future, we must apply an adjustment called discounting to income received in the future to reflect the time value of money.

Question 3-10

What is an internal rate of return? How is it used? How does it relate to the concept of compound interest?

The internal rate of return integrates the concepts of compounding and present value. It represents a way of measuring a return on investment over the entire investment period, expressed as a compound rate of

interest. It tells the investor what compound interest rate the return on an investment being considered is equivalent to.

Question 4-3

Why do the monthly payments in the beginning months of a CPM (Constant Payment Mortgage) loan contain a higher proportion of interest than principal repayment?

The reason for such a high interest component in early monthly payments is that interest is applied on the outstanding monthly loan balance. Because the loan is being repaid over time, the loan balance is being reduced each payment. Early in the payment schedule, there is a higher loan amount, thus interest portion.

Question 4-6

Why do lenders charge origination fees, especially loan discount fees?

A few reasons. Lenders charge these costs/fees to borrowers when the loan is made, or "closed", rather than charging higher interest rates over the term. They do this because if the loan is repaid soon after closing, the additional earned by the lender as of the repayment date may not be enough to offset the fixed costs of loan origination. There are other reasons as well such as "buying down" the interest rate and/or simply providing the lender another mechanism to increase yield.

Question 4-9

What is meant by the "nominal rate" on a mortgage loan?

This rate is usually quoted as an annual rate, however the time intervals used to accrue interest (compounding) is generally not quoted explicitly. Further, the rate generally does not specify the extent of any origination fees and/or discount points. It is likely the lender's yield is higher than the nominal rate. In residential (and most consumer) loans, truth in lending laws require disclosure of an alternate rate called the APR (annual percentage rate).

Question 4-10

What is the accrual rate and payment rate on a mortgage loan?

The accrual rate is usually the nominal rate divided by the number of periods within a year that will be used to calculate interest. For example, if interest is to be accrued monthly, the nominal rate is divided by 12; if daily, the nominal rate is divided by 365. The payment rate, or "pay rate", is the % of the loan to be paid at time intervals specified in the loan agreement. This rate is used to calculate payments which are usually made monthly (but could be quarterly, semi-annual, etc.) If the pay rate exceeds the accrual rate, this indicates that some loan repayment (amortization) is occurring. When it is equal to the accrual rate, amortization is not occurring – thus "interest only loan". If the accrual rate is lower than the interest rate there will be negative amortization.

Question 4-13

What is *negative amortization*?

Negative amortization means that the loan balance owed <u>increases</u> over time because payments are less than interest due. (The payment rate < the accrual rate).

Question 5-6

What is the difference between interest rate risk and default risk? How do combinations of terms in ARMs affect the allocation of risk between borrowers and lenders?

Interest rate risk is the risk that the interest rates will change at some time during the life of the loan. Obvious example is when a lender makes a fixed rate loan – then interest rates rise and he cannot adjust. Default risk is the risk to the lender that the borrower will not carry out the full terms of the loan agreement – mainly paying back the loan. The fact that ARMs shift all or part of the interest rate risk to the borrower, the risk of default will generally increase to the lender, thereby reducing some of the benefits gained from shifting interest rate risk to borrowers.

Question 5-7

Which of the following two ARMs is likely to be priced higher, that is, offered with a higher <u>initial</u> interest rate? ARM A has a margin of 3 percent and is tied to a one-year index with payments adjustable every two years; payments cannot increase by more than 10 percent from the preceding period; the term is 30 years. ARM B has a margin of 3 percent and is tied to a one-year index with payments to be adjusted each year; payments cannot increase by more than 10 percent from the preceding period; the term is 30 years.

ARM A is likely to be priced higher, because it has a longer adjustment period. Thus, the lender bears more interest-rate risk and can expect a higher return. Other loan factors are the same.

Question 8-6

For what items do lenders typically require escrow accounts from a borrower?

Property taxes, hazard insurance and mortgage default insurance premiums.

Question 9-1

How does the use of leases shift the risk of rising operating expenses from lessor to the lessee?

Leases determine how much risk will be borne by the lessor versus the lessee. Future increases in market rent may be compensated for by including an inflationary adjustment, such as a CPI adjustment. In the case of a CPI adjustment, the risk is shifted to the lessee, because the change in rents is not known in advance. As the lessee is responsible for any unexpected increases in the level of inflation, the lessor is insured that the real value of the lease will be preserved. The lessor can shift additional risk to the lessee by including "net lease" or expense stop provisions in the lease.

Question 9-2

What is the difference between base rents and effective rents?

Base rents reflect rent what will be paid per rentable square foot of leased space. It does not include additional items such as finish out costs, expense pass throughs and other costs that are included when calculating effective rents.

Question 9-3

What is meant by usable vs. rentable space?

Usable space is the area actually occupied by the tenant. Rentable space is usable space plus a share of common area in a property which is included in the load factor. Most often referenced in office type leases.

Question 10-3

What is a capitalization rate? What are the different ways of arriving at an overall rate to use for an appraisal?

A cap rate is the relationship between the property's operating income (expressed as NOI) and its value (or most recent sales price). It is an unleveraged as it uses the full property value ignoring financing structure. The rate can be determined by market data or various finance derivation methods.

Question 10-4

If investors buy properties based on expected future benefits, what is the rationale for appraising a property without making any income or resale price projections?

Using the direct capitalization approach, this technique is a very simple approach to the valuation of income producing property. The rationale is based on the idea that at any given point in time, the current NOI produced by a property is related to its current market value.

A survey of other transactions including sales prices and NOI (NOI ÷ sales prices) indicates the cap rate that competitive investments have traded for. This survey provides cap rates that indicate what investors are currently paying relative to current income being produced. A parallel in equity securities markets would be earnings yield (or earnings per share ÷ price) or price earnings multiples (Price ÷ earnings per share).

Question 10-10

When may a "terminal" cap rate be lower than a "going in" cap rate? When may it be higher?

A terminal cap rate might be lower than the going in cap rate if, between the present time and the end of a holding period, interest rates are expected to fall, risk is expected to decline, or demand is expected to increase (thereby producing higher rents and/or appreciation). A higher terminal cap rate would result if the opposite changes in the three situations stated above occurred. In general however, all else equal and for modelling purposes, older properties are in less demand compared to new properties and terminal cap rates are usually slightly higher than the going in cap rates.

Question 11-5

How do you think expense stops and CPI adjustments in leases affect the riskiness of the lease from the lessor's point of view?

There is less risk for the lessor with expense stops (or other expense pass-through provisions) and CPI adjustments in leases.

CPI Adjustments: The risk of unexpected inflation is shifted to the lessee.

Expense Stops: The risk of increases in expenses is shifted to the lessee while allowing the lessor to retain the benefit of any decrease in expenses.

Question 11-6

Why should investors be concerned about market rents if they are purchasing a property subject to leases?
Even if the investment is an existing building that has already been leased, the income can be affected when the existing leases expire and are renewed at the market rent at that time.

Question 11-7

What is meant by equity?
The investor's initial equity in the project is equal to the purchase price less the amount borrowed. The amount of equity an investor has in a property may change over time if the property value and loan balance changes. E.g., if the property value increases and/or the loan balance is reduced through amortization, the investor's equity increases.

Question 11-9

What is the significance of a debt coverage ratio?(DCR, or sometimes DServiceCR)
DCR is a ratio of the NOI to the mortgage payment and indicates the riskiness of a loan. It is the degree to which the NOI from the property is expected to exceed the mortgage payment. Lenders typically want a debt coverage ratio (DCR) to be at least 1.2.

Question 11-11

How is the gain from the sale of real estate taxed?
The entire taxable gain from the sale of real estate is taxed, but rates vary depending on concepts such as depreciation recapture and long-term capital gain rules. Special rules (1031 exchange) may allow certain otherwise taxable gains to be deferred to a "replacement" property.

Question 12-1

What is positive financial leverage? Why is a one-year measure of return on investment inadequate in determining whether positive or negative financial leverage exists?
Positive financial leverage is defined as benefits that may result to an investor by borrowing money at a rate of interest that is lower than the expected rate of return on total funds invested in a property.
To determine whether leverage is positive (favorable) or negative (unfavorable), the investor needs to determine whether the IRR (calculated over the entire holding period) is greater than the cost of borrowed funds. A first-year measure of return such as the overall capitalization rate cannot be used because it does not explicitly consider the benefits that accrue to the investor over time from changes in income and value that do not affect the cost of debt.

Question 12-3

What is positive and negative financial leverage? How are returns or losses magnified as the degree of leverage increases? How does leverage on a before-tax basis differ from leverage on an after-tax basis?
When the before-tax or after-tax IRR are higher with debt than without debt, we say that the investment has positive or favorable financial leverage. When returns are lower with debt than without debt we say that the investment has negative or unfavorable financial leverage.
Positive leverage occurs when the unlevered IRR is greater than the interest rate paid on the debt. Negative leverage occurs when the unlevered IRR is less than the interest rate paid on the debt.
Returns and losses are magnified by the greater the amount of debt, the greater the return or loss to the equity investor.
Leverage on a before-tax basis differs from leverage on an after-tax basis because interest is tax deductible. Therefore, we must consider the after-tax cost of debt which is different than the before-tax cost of debt.

Question 12-4

In what way does leverage increase the riskiness of a loan?
In general, higher leverage means higher debt service which means higher possibility of default and potential loss of equity. Theoretically, leverage increases the standard deviation of returns regardless of whether it is positive or negative. This means the investment is clearly riskier when leverage is used.
Because the NOI does not change when more debt is used, increasing the amount of debt increases the debt service relative to NOI. Therefore, the debt coverage ratio (DCR) may exceed the lender's limits. With higher loan-to-value ratios and declining debt coverage ratios, risk to the lender increases. As a result, the interest rate on additional debt will also increase.

Question 12-5

What is meant by a participation loan? What does the lender participate in? Why would a lender want to make a participation loan? Why would an investor want to obtain a participation loan?

A participation loan is where in return for a lower stated interest rate on the loan, the lender participates in some way in the income or cash flow from the property. The lender's rate of return depends, in part, on the performance of the property. Participations are highly negotiable and there is no standard way of structuring them.

A lender's motivation for making a participation loan includes a risk/reward assessment where the lender may give up some interest for upside. The lender does not participate in any losses and still receives some minimum interest rate (unless the borrower defaults). Additionally, the participation provides the lender with somewhat of a hedge against unanticipated inflation because the NOI and resale prices for an income property often increase as a result of inflation. To some extent this protects the lender's real rate of return.

Question 12-7

Why might an investor prefer a loan with a lower interest rate and a participation?

An investor's motivation is that the participation may be very little or zero for one or more years. This is because the loan is often structured so that the participation is based on income or cash flow above some specified break-even point. During this time period, the borrower will be paying less than would have been paid with a straight loan. This may be quite desirable for the investor since NOI may be lower during the first couple of years of ownership, especially on a new project that is not fully rented.

Question 13-2

What is a risk premium? Why does such a premium differential exist between interest rates on mortgages and rates of return earned on equity invested in real estate?

A risk premium is a higher expected rate of return paid to an investor as compensation for incurring additional risk on a higher risk investment. In general, investors are considered risk averse and must be compensated more for the higher risk of riskier investments.

This premium differential exists between mortgage interest rates and returns on equity invested in real estate because the equity investor is assuming more risk than the mortgage lender. The lender assumes less risk because a lender would have first claim on the property should there be a default. If this were not the case, the investor would be better off lending on real estate than investing in it.

Question 13-3

What are some of the types of risk that should be considered when analyzing real estate and other categories of investment?

Business Risk
Financial Risk
Liquidity Risk
Inflation Risk
Management Risk
Interest Rate Risk
Legislative Risk
Environmental Risk

Question 13-4

What is the difference between business risk and financial risk?

Business risk is the risk of loss due to fluctuations in economic activity (including management) that affect the variability of income produced by a property.

Financial risk (or debt financing referred to as financial leverage) magnifies the business risk. Financial risk increases as the amount of debt increases.

Question 13-5

Why is the variance (and/or standard deviation) used as a measure of risk? What are the advantages and disadvantages of this risk measure?

Lower variability in returns is considered by many analysts to be associated with lower risk and vice versa. Therefore, by using a statistical measure of variance, one has an indication of the extent risk is present in an investment. The standard deviation gives us a specific range over which we can expect the actual return for each investment to fall in relation to its expected return. It has the advantage of being relatively easy to calculate and understand. It has the disadvantage of treating the both higher than expected returns and lower than expected returns the same. It could be argued that investors should be more concerned about returns being lower than expected or lower than some threshold return.

Question 13-7 (actually from an earlier chapter)

What is meant by the term 'overage' for retail space ?
Overage refers to the rent that is paid above the minimum rent in the lease where the rent is based on a percentage of the tenant's sales once these sales exceeds a specified breakpoint. The total rent is the minimum rent plus the overage rent.

Question 16-3

What contingencies are commonly found in permanent or take-out loan commitments? Why are they used? What happens if they are not met by the developer?
Contingencies commonly found in permanent or take-out loan commitments include: 1) a maximum amount of time to obtain a construction loan commitment, 2) a date for completion of construction, 3) minimum rent-up (leasing) requirements and an approval of major leases, 4) an expiration date of the permanent loan commitment and any provisions for extensions, and 5) an approval by the permanent lender of major design changes and substitution of any building materials. These simply protect the lender and insure the commitment will meet the underwriting standards they set – even though it is for a future funding.

Question 16-5

A presale agreement is said to be equivalent to a take-out commitment. What will the construction lender be concerned about if the developer plans to use such an agreement in lieu of a take-out?
A presale agreement differs from a take-out commitment in that proceeds from the sale of a property are used to repay the construction loan rather than a permanent loan. The construction lender must be sure that the agreement requires the buyer to purchase the property at an amount that is sufficient enough to pay off the construction loan and that there will be no contingencies in the agreement that allow the purchaser to cancel the agreement.

Question 16-11

What are holdbacks in construction lending? Why is the practice of "holdbacks" used?
Holdbacks are used by construction lenders to be sure that a developer has met all of his or her obligations before all of the funds from the construction loan are given to the developer and to match the developer's holdback on the contractors used.

Question 17-5

What are the unique risks of land development projects from the developer's and lender's point of view?
Land development can be quite risky for both the developer and the lender, especially when compared to existing projects. During the development period, a developer must be concerned about changing market conditions that subsequently affects the price and rate at which parcels are sold. The cost to develop the site can also be greater than anticipated. Ultimately, the same factors affect the lender's risks because proceeds from the sale of parcels are used to repay the loan. Lenders get paid as lots are sold. As a result, the rate at which lots sell affects the lender's, as well as, the developer's rate of return. A higher release price per lot might reduce this risk to the lender. However, if the release price is too high, the developer may not have sufficient funds to successfully develop the project.

Question 18-4

Why is the Internal Revenue Service concerned with how partnership/LLC agreements in real estate are structured?
The IRS does not want the allocation of taxable income (or losses) to differ from the allocation of cash flow in an extreme manner such that there is no "substantial economic effect" of the allocations.

Question 18-5

What is the main difference between the way a partnership (or LLC) is taxed versus the way a corporation is taxed?
Corporations cannot allocate losses to shareholders. Also, corporations are taxed at the corporate level and shareholders are taxed on dividends they receive. Partnerships/LLC are not taxed at the entity level.

Question 18-8

What is the significance of capital accounts? What causes the balance in a capital account to change each year?

The capital accounts are used to keep track of allocations to each partner of cash flow and taxable income. They increase when the partner is allocated income and decrease if the partner is allocated losses. They also increase when the partner makes a cash contribution to the partnership and decrease when cash is distributed to the partner.

Question 18-13

Differentiate between public and private syndications? What is an accredited investor? Why is the distinction used?

Private partnerships are exempt from S.E.C. registration requirements under Regulation D of the Securities Act of 1933 which can substantially reduce the costs of setting up and funding a partnership. An accredited investor is one that meets certain criteria that, in general, apply to investors who can afford to invest in the partnership and who should understand the risks associated with the investment. If the securities are sold only to accredited investors, Regulation D provides an exemption from SEC securities filing requirements.

Question 19-6

What is a mortgage-related security? What are the similarities and differences between mortgage securities and corporate bonds?

Many corporate bonds are unsecured whereas mortgage securities are secured (sometimes "overcollateralized") by a pool of mortgages. Like bonds, they are often arranged by investment bankers and rated by an independent bond rating company. However, these pools may provide dramatically different payback provisions than corporate bonds. A "MPT" or Mortgage Pass Through security shifts certain risks to the investors.

Question 19-12

In general, would a falling rate of market interest cause the price of an MPT security to increase or decrease? Would the increase or decrease be greater if the security was issued at a discount? Would an increase in prepayment be likely or unlikely? Describe with an example.

The market value of an MPT security will increase as the market interest rate fells. An increase or decrease will affect MPTs in the same manner whether they are issued at a discount, a premium or par. As interest rates decrease below the rates of individual mortgages in a pool, borrowers will begin to refinance their loans assuming they are able to secure lower rates. Conversely, as interest rates rise above those of individual mortgages in a pool, borrowers will be less apt to prepay as their ability to secure rates below that of the market diminishes. Thus, future interest rates affect the prepayment rate on the mortgages and the paydown rates on an MPT.

Question 20-7

What is the major difference between a CMO and the other types of mortgage-related securities?

CMOs differ, because there are different classes or tranches of securities that are issued. The classes vary in terms of their priority of receipt of principal including prepayment; they hence differ in terms of maturity (and risk).

Question 20-11

What is the primary distinction between mortgage-related securities backed by residential mortgages and those backed by commercial mortgages?

The key risk with residential mortgage-related securities is prepayment – that affects the timing of the cash flows to the investor. Default risk is eliminated when the securities are backed by a federal agency such as FHA/VA. Commercial mortgages on the other hand are not backed by any federal agencies and therefore default risk must be incurred by investors. Prepayment risk is generally not as significant with commercial mortgage backed securities because these loans typically have significant prepayment penalties and "lock-out" provisions.

Question 21-4

What is the difference between earnings per share (EPS), funds from operations (FFO), adjusted funds from operations (AFFO), and dividends per share?

Earnings per share (EPS) is based on GAAP accounting income, which is reduced by depreciation and amortization which are non-cash deductions. EPS is calculated as GAAP net income minus preferred stock dividends divided by number of common shares outstanding. FFO is calculated adjusting net income by adding back depreciation and amortization (and other non-cash deductions to earnings, minus any capital

gains from property sales). Although subject to different methods of calculation, AFFO is usually calculated by subtracting from FFO (i) normalized recurring expenditures that are capitalized by the REIT and then amortized, and (ii) straight-lining of rents. The resulting AFFO calculation is sometimes referred to as the cash available for distribution (CAD) or funds available for distribution (FAD). Dividends per share is what the REIT actually distributes to shareholders and is calculated as dividends paid divided by number of common shares outstanding.

Question 21-5

Explain how an investor in an equity REIT may receive a current dividend, part of which may be tax-deferred.

Part of the dividend paid by a REIT may represent "return of capital." This can occur when the dividends per share exceed taxable income per share.