

21

OBJECTIVES

After reading this chapter, you will be able to:

- 1 Explain the advantages of leasing.
- 2 Understand key terms related to leasing.
- 3 Explain how to classify leases of personal property.
- 4 Account for a lessee's operating and capital leases.
- 5 Understand disclosures by the lessee.
- 6 Account for a lessor's operating, direct financing, and sales-type leases.
- 7 Understand disclosures by the lessor.
- 8 Explain the conceptual issues regarding leases.
- 9 Understand lease issues related to real estate, sale-leaseback issues, leveraged leases, and changes in lease provisions. (Appendix).

Accounting for Leases

Leasing—An Important Driver of the Economy

Leasing is an increasingly popular form of capital investment. Businesses lease many different assets including office equipment, medical equipment, and manufacturing machinery. Without the ability to lease, companies would find it more difficult to acquire the necessary capital and equipment which, in turn, would adversely affect business and economic growth. Attempting to capture the impact of equipment leasing on the U.S. economy, a 2004 study prepared for the Equipment Leasing Association estimates that equipment leasing contributed between \$100 billion and \$300 billion in real gross domestic product (GDP) annually. Furthermore, the study estimates that the equipment leasing industry is responsible for between 3 million and 5 million jobs. Clearly, the impact of leasing on our economy is significant.

One industry in which leasing has historically been used to make major capital investments is the airline industry. For example, **Southwest Airlines** leases approximately 21% of its aircraft through operating leases and paid over \$400 million in rental expense in 2004. Why would a company choose to enter into an operating lease? First, the leased asset and the related obligation do not appear on the balance sheet. For Southwest, this unrecorded liability related to operating leases was over \$2.6 billion. By not recording the leased property and the related obligation, Southwest was

Credit: Sandy Huffaker/Bloomberg News/Landov



able to show a more favorable debt ratio than it otherwise would have shown. Second, even though Southwest had to record rental expense related to the leased airplanes, in general, companies with operating leases report less interest, higher income, and more favorable returns on equity than companies with capital leases. These financial reporting advantages are considered critical to many companies.

However, airlines are not the only industry in which leasing is popular. As many companies make large investments in information technology, they are faced with a decision to lease or buy. To avoid expensive, long-term commitments in an industry for which rapid obsolescence is a problem, many companies are taking a conservative approach to information technology expenditures and turning to leasing. According to the Equipment Leasing Association, the market for leased information technology equipment will grow to \$28 billion by 2005.

FOR FURTHER INVESTIGATION

For a discussion of leases, consult the Business & Company Resource Center (BCRC):

- New SEC Lease Accounting Rule Roils Books Again: 2nd Wave of Adjustments Snares Big Players, Poses Stock Delisting Threats for Some. Susan Spielberg, *Nation's Restaurant News*, 0028-0518, April 18, 2005.
- Crackdown on accounting for leases hits earnings. *Miami Daily Business Review*, 1070-6437, March 29, 2005.

Many companies choose to lease an asset rather than to purchase it. **FASB Statement No. 13 as Amended**, defines a lease as “an agreement conveying the right to use property, plant, or equipment (land or depreciable assets or both) usually for a stated period of time.”¹ A lease involves a lessee and a lessor. **A lessee acquires the right to use the property, plant, and equipment; a lessor gives up the right.**

There are many kinds of leases: short-term, long-term, personal property, real property, cancelable, noncancelable, two-party, three-party, and others. Since it is a contractual agreement, the parties can include in the lease contract any provision that they desire. Many kinds of assets are leased. Among the most popular are cars, photocopiers, computers, airplanes, railroad boxcars, and buildings.

This chapter focuses on long-term noncancelable leases involving depreciable personal property such as equipment, machinery, and trucks. We discuss the lease of real property (land, buildings, and other items attached to the land) and certain other specialized lease issues in the Appendix to this chapter.

ADVANTAGES OF LEASING

- 1 Explain the advantages of leasing.

The primary disadvantage of leasing is that it is usually more expensive in the long run to lease than to buy. However, for many companies the advantages of leasing outweigh the disadvantages.

Advantages of Leasing from Lessee's Viewpoint

From the lessee's point of view, the advantages may include:



1. *Financing benefits*
 - a. The lease provides 100% financing, so that the lessee acquires the asset without having to make a down payment.
 - b. The lease contract contains fewer restrictive provisions and is more flexible than other debt agreements.
 - c. The leasing arrangement creates a claim that is against only the leased equipment and not against all assets.
2. *Risk benefit.* The lease may reduce the risk of obsolescence, so that the risk is borne by the lessor.
3. *Tax benefit.* By deducting lease payments, the lessee can write off the full cost of the asset, including the part that relates to land. Also, the tax deduction may be accelerated, because it is often spread over the period of the lease rather than the actual economic life of the property.
4. *Financial reporting benefit.* For operating leases the lease does not add a liability or asset to the lessee's balance sheet. Therefore, it does not affect certain financial ratios, such as ratios using debt, and the rate of return. As a result, these ratios tend to be “better” because the leased asset and liability are omitted from the balance sheet. In particular, omitting the liability from the balance sheet may add to the perceived borrowing capacity of the lessee.
5. *Billing benefit.* For certain contract-type work, leasing may permit the contractor to charge more because the interest element contained in the rental payments is allowed as a contract charge, whereas interest on borrowed money to purchase assets usually is not.

Advantage number 4 is critical to some companies. Some leases (called “capital leases”) enable lessees to acquire substantially all the risks and benefits associated with asset ownership. If a company can, in substance, acquire an asset without recording it or the

1. “Accounting for Leases,” *FASB Statement No. 13 as Amended and Interpreted through January 1990* (Norwalk, Conn.: FASB, 1990), sec. L10.101.

liability in its accounts (an “operating” lease), it can greatly improve certain key ratios. The company would be using “off-balance-sheet financing.”

Example: Purchasing versus Leasing Assume that in 2007, two identical companies, A and B, have the following financial data prior to any new acquisitions:

Current assets	\$2,100,000
Noncurrent assets	2,900,000
Current liabilities	1,000,000
Noncurrent liabilities	1,600,000
Stockholders’ equity	2,400,000

On December 31, 2007 Company A purchases equipment with a 10-year life, at a cost of \$2,825,112. The company signs a 10-year, 12% note requiring \$500,000 to be paid at the end of each year, starting on December 31, 2008. The payments include interest at 12% on the beginning-of-year principal balance. The remainder of each annual payment reduces the principal. Since this transaction is a purchase by the issuance of debt, Company A records the asset purchased and the note payable (part of which is a current liability). Company A’s financial data show these changes:

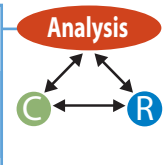
- noncurrent assets increase to \$5,725,112 (\$2,900,000 + \$2,825,112);
- current liabilities increase to \$1,446,429 (\$1,000,000 + the present value of \$500,000 discounted for one year at 12%); and
- noncurrent liabilities increase to \$3,978,683 (\$1,600,000 + \$2,825,112 – current amount of \$446,429).

The remaining items do not change. Considering these changes, note the effect on two balance sheet ratios of Company A:

	<u>Before Acquisition</u>	<u>After Acquisition</u>
Current ratio (ratio of current assets to current liabilities)	2.10	1.45 ^a
Ratio of debt to stockholders’ equity	1.08	2.26 ^b

- a. Current assets of \$2,100,000 divided by current liabilities of \$1,446,429 (\$1,000,000 + \$446,429)
 b. Debt of \$5,425,112 (\$1,446,429 + \$3,978,683) divided by stockholders’ equity of \$2,400,000

The current ratio falls significantly, thus perhaps affecting the willingness of a bank to make a short-term loan. The ratio of debt to stockholders’ equity more than doubles. This may affect the perceptions of long-term creditors or stockholders as to the risk of the company. These adverse changes, coupled with the impact that the purchase has on the rate of return on investment in 2008, might impair Company A’s borrowing capacity or its ability to sell stock.



Next assume that at the end of 2007, Company B leases identical equipment, agreeing to pay \$500,000 rent each year for the next 10 years. If the interest rate is 12%, then the present value of 10 payments of \$500,000 discounted at 12% is \$2,825,112 (\$500,000 × 5.650223).² If Company B classifies the lease as a capital lease, it records an asset and a liability and the effects on its balance sheet are the same as the effects of the purchase on Company A’s balance sheet. However, if the lease is classified as an operating lease, Company B does not record an asset or a liability. The current ratio after the lease remains at 2.10-to-1 and the ratio of debt to stockholders’ equity remains at 1.08-to-1. Also, the rate of return on investment in 2008 (assuming that plant expansion was profitable) is significantly higher than for Company A, even though Company B acquires equipment identical to that acquired by Company A.

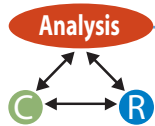
In summary, two virtually identical economic events are reported very differently in the financial statements of the two companies. Today, many companies lease certain

2. The present value calculations in this chapter use factors from the tables in the Time Value of Money module.

assets, but some prefer to structure the lease agreement to avoid capitalizing the lease payments (where required by *FASB Statement No. 13 as Amended*) because of the impact that reporting the asset and liability on the balance sheet has on key ratios. ♦

The preceding discussion is based on the lessee's point of view. The opposite effect occurs in regard to the lessor. Thus, for an operating lease, the asset remains on the lessor's balance sheet. The lessor also recognizes rent revenue periodically, usually at an amount equal to the amount of the rent receipts. For a capital lease, the lessor treats the asset as "sold" and records the related receivable. These alternatives affect significant ratios of the lessor.

Advantages of Leasing from Lessor's Viewpoint



From the lessor's point of view, the chief advantages are that leasing provides (1) a way of indirectly making a sale, and (2) an alternative means of obtaining a profit opportunity in a transaction that enables the lessor company to transfer an asset by the lease agreement. This transfer also permits the lessor to earn a rate of return in the form of interest on the selling price of the leased asset.

KEY TERMS RELATED TO LEASING

- 2 Understand key terms related to leasing.

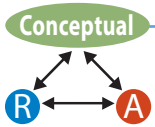
FASB Statement No. 13 as Amended defines a number of terms that are used in leasing arrangements. We list these terms in Exhibit 21-1 because they are necessary for an understanding of accounting for leases.³ You should study the terms now and carefully review each one as we introduce it in the chapter.

CLASSIFICATION OF PERSONAL PROPERTY LEASES

- 3 Explain how to classify leases of personal property.

We discuss the classification and accounting for leasing of personal property (mostly for equipment) here. We summarize the variations involving real property (land, buildings, and other property attached to the land) in the Appendix to this chapter.

The basic concept of *FASB Statement No. 13 as Amended* is that **a lease that transfers substantially all the risks and benefits of ownership is in substance a purchase by the lessee and a sale by the lessor and is a capital lease.** A lease that does *not* transfer substantially all the risks and benefits of ownership is an **operating lease**. Using the concept of economic substance over legal form (as we discussed in Chapters 5 and 18), a transaction that transfers substantially all the risks and benefits of ownership is an asset acquisition and a liability incurrence by the lessee. For the lessor, it is either a sale of an asset and the creation of a financing instrument (a sales-type lease) or just the creation of a financing instrument (a direct financing lease). The *Statement* provides criteria for determining the classification of leases by both the lessee and the lessor, as we show in Exhibit 21-2. We list the criteria that relate to the transfer of the risks and benefits of ownership in Column A. We list the criteria that relate to revenue recognition in Column B.



By using the criteria we show in Exhibit 21-2, a **lessee** classifies a lease as one of two types: (1) capital lease, or (2) operating lease. A lease that meets any *one* of the four criteria listed in Column A of Exhibit 21-2 is a *capital lease* for the lessee. Since the transfer of substantially all the risks and benefits of ownership is considered to have occurred, the lessee treats the lease as, in substance, a purchase of an asset and the creation of an accompanying liability. If the lease meets *none* of the four criteria, a transfer of the risks and benefits is considered *not* to have occurred, making the lease an *operating lease*. In this case, the lessee does *not* recognize an asset or a liability.

By using the criteria listed in Exhibit 21-2, a **lessor** classifies a lease as one of three types: (1) sales-type lease, (2) direct financing lease, or (3) operating lease. A lease that meets any *one* of the four criteria listed in Column A and *both* criteria in Column B of Exhibit 21-2 is either a sales-type or a direct financing lease for the lessor. The lease is a

3. Adapted from *FASB Statement No. 13 as Amended and Interpreted through January 1990, op. cit.*, sec. L10.401-.424.

EXHIBIT 21-1 Key Terms Related to Leasing

Bargain purchase option. A provision allowing the lessee to purchase the leased property at the end of the life of the lease at a price so favorable that the exercise of the option appears, at the inception of the lease, to be reasonably assured.

Bargain renewal option. A provision allowing the lessee to renew the lease for a rental that is so favorable that the exercise of the option by the lessee appears, at the inception of the lease, to be reasonably assured.

Estimated economic life of leased property. Regardless of the lease term, the estimated remaining period during which the property is expected to be usable for the purpose that was intended at the inception of the lease, with normal repairs and maintenance.

Estimated residual value of leased property. The estimated fair value of the leased property at the end of the lease term. (Note that this value is a different concept from the estimated residual value at the end of the *economic* life of the property.)

Executory costs. Ownership-type costs, such as insurance, maintenance, and property taxes. These costs may be paid either by the lessor or the lessee. Normally, it is expected that the cost should be borne by the party to the contract who controls the asset essentially in the manner of an owner.

Fair value of leased property. The price for which the property could be sold in an arm's length transaction between unrelated parties. If the lessor is a manufacturer or dealer, the fair value of the property at the inception of the lease is normally the selling price. If the lessor is not a manufacturer or dealer, the fair value is usually the cost of the asset to the lessor.

Guaranteed residual value. The portion of the estimated residual value of the leased property that is guaranteed by the lessee or by a third party unrelated to the lessor.

Inception of the lease. The date of the lease agreement; or, if the leased property is being constructed, the date that title passes to the lessor.

Initial direct costs. Costs incurred by the lessor to originate a lease that (1) result directly from acquiring that lease, and (2) would not have been incurred had that leasing transaction not occurred. These costs also include costs directly related to specified activities performed by the lessor for that lease, such as evaluating the lessee's financial condition, negotiating lease terms, preparing and processing lease documents, and closing the transaction.

Interest rate implicit in the lease. The interest (discount) rate that, when applied on a present value basis to the sum of the minimum lease payments and any unguaranteed residual value accruing to the lessor, causes the resulting total present value to be equal to the fair value of the leased property to the lessor.

Lease receivable. The sum of the undiscounted (1) *minimum lease payments* plus (2) any unguaranteed residual value accruing to the benefit of the lessor at the end of the lease. Sometimes called *gross investment in the lease*.

Lease term. The fixed, noncancelable term of the lease plus (1) any periods covered by bargain renewal options, (2) any periods for which failure to renew the lease imposes a significant penalty on the lessee, (3) any periods covered by ordinary renewal options preceding the exercise date of a bargain purchase option, and (4) any periods during which the lessor has the option to renew or to extend the lease. The lease term, however, in no case extends beyond the date a bargain purchase option becomes exercisable.

Lessee's incremental borrowing rate. The rate that, at the inception of the lease, the lessee would have incurred to borrow, over a similar term, the cash necessary to purchase the leased property.

Manufacturer's or dealer's profit or loss. This profit or loss is the difference between the following two items: (1) the fair value of the property at the inception of the lease, and (2) the cost or carrying amount of the leased asset.

Minimum lease payments. These are the payments that are required to be paid by the lessee to the lessor over the life of the lease. Specifically, for a lease that contains a *bargain purchase option*, the minimum lease payments include (1) the minimum periodic payments required by the lease over the lease term, and (2) the payment required by the bargain purchase option. Otherwise, the minimum lease payments include (1) the minimum periodic payments plus (2) any guaranteed residual value, and (3) any payments on failure to renew or extend the lease. Executory costs are *not* included in minimum lease payments.

Unguaranteed residual value. The portion of the estimated residual value of the leased property that is not guaranteed by the lessee or by a third party unrelated to the lessor.

Unreimbursable cost. These costs may include commitments by the lessor to guarantee performance of the leased property that is more extensive than the typical product warranty, or to effectively protect the lessee from obsolescence of the leased property. However, estimating executory costs such as insurance, maintenance, and taxes to be paid by the lessor does not by itself constitute an important uncertainty.

sales-type lease if it results in a manufacturer's or dealer's profit (or loss). Otherwise, it is a *direct financing lease*. Since the transfer of the risks and benefits of ownership has occurred and the revenue recognition criteria are met, the lessor treats the lease as a sale of an asset and the creation of an accompanying receivable. The lease is an *operating lease* only if the lease meets *none* of the four criteria *or* fails *one* of the revenue recognition criteria. In this

case, the lessor does *not* recognize a sale or a receivable, and the leased asset remains on its balance sheet along with the related depreciation on its income statement. We summarize the criteria and alternative classifications in Exhibit 21-3 using a flow chart. Exhibit 21-7 includes a summary of the accounting principles used by the lessee and lessor.

EXHIBIT 21-2 Classification of Leases Involving Personal Property

I. General criteria for classifying leases

Column A Criteria Applicable to Both Lessee and Lessor	Column B Criteria Applicable to Lessor Only
A. The lease transfers ownership of the property to the lessee by the end of the lease term.	A. The collectibility of the minimum lease payments is reasonably assured (i.e., predictable).
B. The lease contains a bargain purchase option.	B. No important uncertainties surround the amount of unreimbursable costs yet to be incurred by the lessor under the the lease.
C. The lease term is equal to 75% or more of estimated economic life of the leased property. ^a	
D. The present value of the minimum lease payments is equal to 90% or more of the fair value of the leased property to the lessor. ^a	

II. Classification by the lessee

- A. *Capital lease*. Lease that meets *one or more* of the criteria in Column A (Part I).
- B. *Operating lease*. Lease that does *not* meet any of the criteria in Column A (Part I). In other words, all leases other than capital leases are operating leases.

III. Classification by the lessor^b

- A. *Sales-type lease*. Lease that meets these three criteria:
 1. *One or more* of the four criteria listed in Column A (Part I), *and*
 2. *Both* of the criteria listed in Column B (Part I), *and*
 3. It must result in a manufacturer's or dealer's profit (or loss) to the lessor. A profit (loss) exists when the fair value of the leased property at the inception of the lease is greater (less) than its cost or carrying value.
- B. *Direct financing lease*. Lease that meets these three criteria:
 1. *One or more* of the four criteria listed in Column A (Part I), *and*
 2. *Both* of the criteria listed in Column B (Part I), *and*
 3. It must *not* result in a manufacturer's or dealer's profit (or loss) to the lessor.
- C. *Operating lease*. Lease that meets none of the criteria in Column A (Part I) or that does *not* meet both of the criteria in Column B. In other words, all leases other than sales-type or direct financing leases are operating leases.

- a. Items C and D do not apply if the beginning of the lease term falls within the last 25% of the total estimated economic life. This qualification was added by the FASB to prevent the possible manipulation of the kinds of leases that may result from renewal options. For example, without this qualification, for a tank car having an estimated useful life of 25 years and placed under five successive 5-year leases, the first four leases would be classified as operating leases and the last lease would be classified as a capital lease.
- b. A fourth type of lease, from the lessor's viewpoint, is the leveraged lease. This type of lease is a special three-party lease which we discuss in the Appendix to this chapter.



SECURE YOUR KNOWLEDGE 21-1

- Compared to buying, leasing is usually more expensive in the long run; however, many companies choose to lease because of benefits related to less costly financing, reduced risk, lower taxes, off-balance-sheet financing, or higher billing rates.

(continued)

- From the lessor's viewpoint, the benefits of leasing may be the ability to indirectly make a sale and earn additional profit (interest) on the leased asset.
- The underlying concept used in classifying leases is based on substance over form:
 - A lease that transfers substantially all the risks and benefits of ownership is a capital lease and is accounted for as a purchase by the lessee and as a sale by the lessor.
 - A lease that does not transfer substantially all of the risks and benefits of ownership is an operating lease and is accounted for as a rental agreement.
- If a lease meets one of the four criteria in column A of Exhibit 21-2, the lessee classifies the lease as a capital lease and records an asset and a related liability; otherwise the lessee classifies the lease as an operating lease.
- If the lease meets one of the four criteria in column A of Exhibit 21-2 and both criteria in column B of Exhibit 21-2, the lessor classifies the lease as a:
 - Sales-type lease if the fair value of the leased property at the inception of the lease differs from its cost or carrying value (profit or loss exists), or a
 - Direct financing lease if there is no manufacturer's or dealer's profit or loss at the inception of the lease.

Otherwise, the lessor classifies the lease as an operating lease.

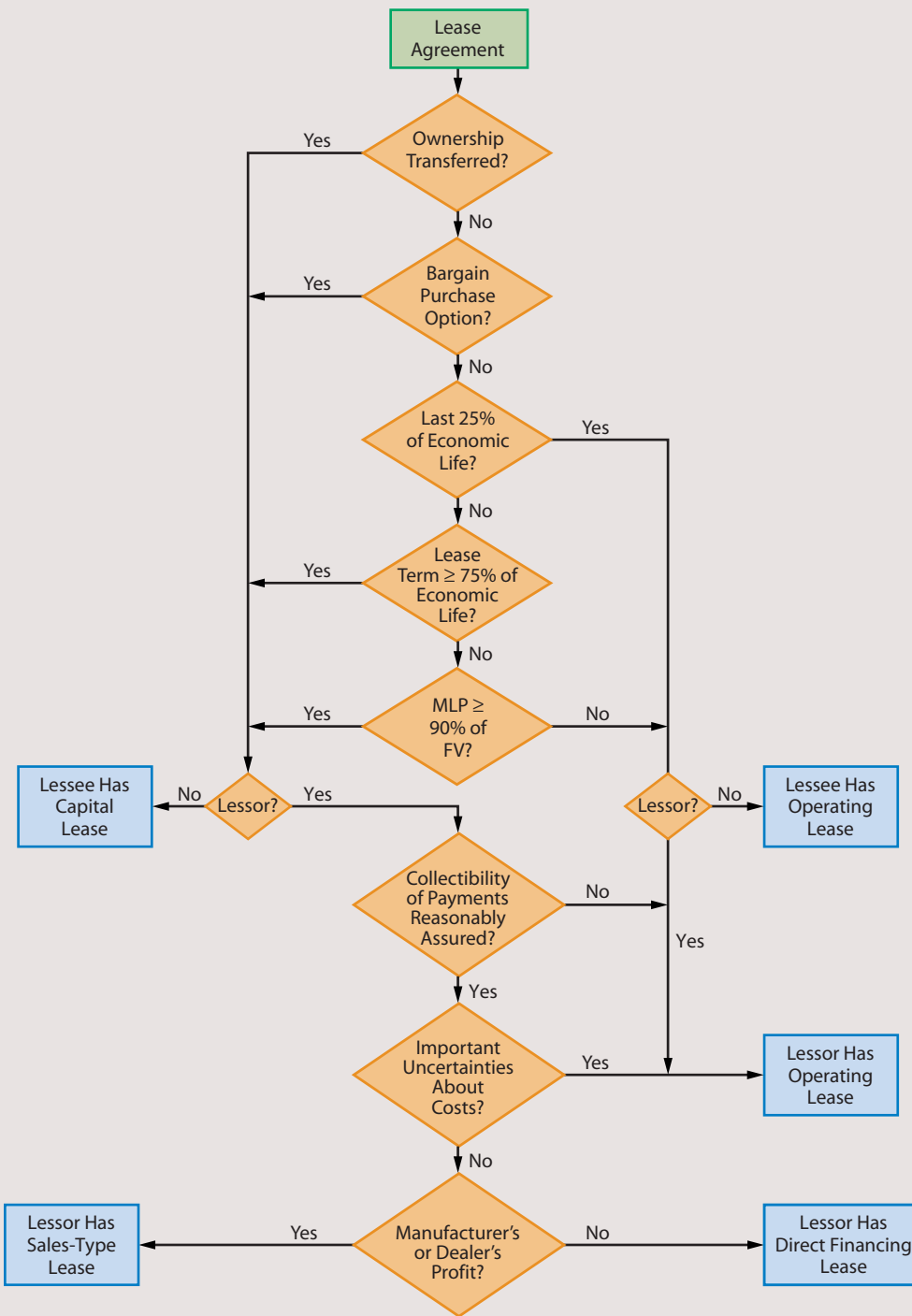


LINK TO ETHICAL DILEMMA

Save-A-Lot, Inc. is a national retailer that specializes in selling a variety of household products at low cost. As a former auditor assigned to the Save-A-Lot audit, you were recently approached to become the controller for the company. After accepting the position, you began a review of several areas of operating risk faced by the company. During this review you noted that the company made extensive use of operating leases for its 3,000 retail stores as well as the majority of its property, plant, and equipment. During a meeting with the CFO to discuss this issue, the CFO stated that the company, like many retailers, has chosen to lease many of its assets due to the advantages of leasing. In particular, the CFO stated that the financial reporting benefits are particularly attractive. If the company were forced to record an asset and liability for the assets currently under operating leases, its debt ratio would be so adversely affected that the company would face considerable difficulty in attempting to obtain debt financing, putting the future of the company in considerable doubt. While you understand these benefits, you are particularly concerned that many of Save-A-Lot's operating leases for its more profitable stores will soon expire. Based on your knowledge of the real estate markets in these areas, you question whether the company will be successful in renewing the leases. The CFO stated that the renewals will not be a problem because she has personally executed side agreements for all of the company's operating leases that will require Save-A-Lot to renew the leases indefinitely. If these side agreements were included in the original lease agreements, the company would be forced to classify the leases as capital leases. However, by having the renewal option contained in a separate contract, the company is able to classify the leases as operating leases.

You are shocked by this admission. When you audited Save-A-Lot, you personally reviewed the lease documents and were never made aware of the side agreements. If you had been aware of their existence, you certainly would have insisted that the two contracts were, in substance, one contract and demanded that the company reclassify the leases as capital leases. To insist at this point that the company reclassify the leases would most certainly cost you your current job with Save-A-Lot, and the fact that you never discovered these side agreements may lead others to perceive you as an incompetent auditor which would make finding another job extremely difficult. What course of action do you take?

EXHIBIT 21-3 Lease Criteria and Classifications



Notes:
 MLP = Present value of minimum lease payments
 FV = Fair value of leased properties to the lessor
 Lessor may also have a leveraged lease

Source: Adapted from "Accounting for Leases: Decisions Flowcharts Supplement," FASB Statement No. 13 as Amended and Interpreted through January 1990 (Norwalk, Conn.: FASB, 1990), pp. 5 and 15.

ACCOUNTING AND REPORTING BY A LESSEE

We include examples of accounting for leases by the lessee in this section. We will discuss accounting for leases by the lessor later in the chapter.

Example: Operating Lease (Lessee)

Assume that a lease agreement signed between the User Company and the Owner Company contains the terms and provisions we list in Example 21-1. The lease does not transfer ownership or provide a bargain purchase option, and the lease term is 50% of the economic life. In addition, the present value of the minimum lease payments is \$201,867, as we show in Example 21-1, which is only 67% of the fair value of the property. Therefore, this lease is an operating lease for the lessee because it does not meet any of the four criteria from Exhibit 21-2 (column A) (i.e., the risks and benefits are not transferred to the lessee), as we summarize in Example 21-2.

4 Account for a lessee's operating and capital leases.

EXAMPLE 21-1 Terms and Provisions of Lease Agreement Between Owner Company (Lessor) and User Company (Lessee) Dated January 1, 2007

1. The lease term is five years. The lease is noncancelable and requires equal payments of \$50,000 at the beginning of each year.
2. The cost, and also fair value, of the equipment to the Owner Company at the inception of the lease is \$300,000. The equipment has an estimated economic life of 10 years and has a zero estimated residual value at the end of this time.
3. There is no guarantee of the residual value by the User Company.
4. The Owner Company agrees to pay all executory costs.
5. The equipment reverts to the Owner Company at the end of the five years. That is, the lease contains no bargain purchase option and no agreement to transfer ownership at the end of the lease.
6. The User Company's incremental borrowing rate is 12.5% per year.
7. For the Owner Company, the interest rate implicit in the lease is 12%.
8. The present value of an annuity due (in advance) of five payments of \$50,000 each at 12% is \$201,867 ($4.037349 \times \$50,000 = \$201,867.45$).

EXAMPLE 21-2 Application of Lease Classification Criteria by User (Lessee)

Classification Criteria	Criteria Met?	Remarks
1. Transfer of ownership at end of lease	No	
2. Bargain purchase option	No	
3. Lease term is 75% or more of economic life	No	It is 50% (5 years \div 10 years)
4. Present value of minimum lease payments is 90% or more of fair value	No	The present value is \$201,867.45, or 67% of the \$300,000 fair value

Decision: A capital lease must meet one or more of the classification criteria; otherwise the lease is an operating lease.

Conclusion: The lease is an operating lease. It does not meet any of the criteria.

The only journal entry recorded by the User Company is the following, which it makes each year on January 1, 2007 through 2011.

Rent Expense	50,000	
Cash		50,000



If the company prepares monthly or quarterly interim statements, it reports the unexpired portion of the expense as an asset, Prepaid Rent. A lessee does not report the rented equipment in its balance sheet; however, it discloses the future minimum rental payments and other information in the notes to its financial statements, as we discuss at the end of this section. ♦

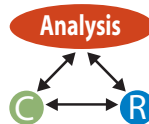
Capital Lease (Lessee)

When equipment is leased under a capital lease (i.e., the risks and benefits are transferred to the lessee), **the lessee records an asset and a liability equal to the sum of the present value, at the beginning of the lease term, of the minimum lease payments during the lease term.**⁴ In accounting for the asset and liability, the lessee must consider the executory costs, the discount rate, amortization of the leased asset, and reduction of the lease obligation.

Executory Costs

Ownership-type costs such as insurance, maintenance, and property taxes are called **executory costs**. Executory costs may be *paid* by either the lessee or the lessor, depending on how the lease contract is written. However, since the risks and benefits of ownership have been transferred in a capital lease, the *lessee* usually *incurs* these costs. Many capital leases provide for the *lessee* to pay the executory costs directly. In these cases, the lessee expenses the executory costs as incurred. The lessee computes the values of the asset and liability by discounting the minimum lease payments without including the executory costs. Each lease payment includes the interest cost and the reduction of the lease liability.

Alternatively, the lessor may pay the executory costs and add the amount to determine the periodic lease amounts. Then the lessee *excludes* that portion of each lease payment that covers these executory costs from the minimum lease payments, and therefore from any present value calculations. That is, **the minimum lease payment is the lease payment minus the executory costs paid by the lessor.** The reason is that part of the lease payment is a reimbursement by the lessee of the executory costs paid by the lessor. The remainder of the payment is the interest cost and the reduction of the lease liability. If the executory costs are not specifically stated in the lease contract, the lessee estimates the amount of the executory costs included in each lease payment in order to determine the amount to subtract from each lease payment before computing the present value. The lessee expenses the portion of the total lease payment that is for the executory costs.



Discount Rate

The lessee computes the present value of the minimum lease payments by using the *lower* of:

1. *The lessee's incremental borrowing rate, or*
2. *The lessor's interest rate implicit in the lease, if known by the lessee (or if it is practicable for the lessee to learn).*⁵

Since the lessee is acquiring an asset, the rate it uses to borrow money to acquire an asset (the incremental borrowing rate) is appropriate. Alternatively, if it knows the rate in the contract (the implicit rate) and this rate is lower than the incremental borrowing rate, it is

4. *Ibid.*, sec. L10.106. Note also that the lessee must not record the asset at an amount that exceeds its fair value.

5. *Ibid.*, sec. L10.103.

a more relevant rate to use. The lessor may disclose its implicit rate. If it does not, the lessee can compute the implicit rate if there is a guaranteed residual value, a bargain purchase option, or if it knows the lessor's estimate of the unguaranteed residual value. If the lessee does not know any of these amounts, it does not have enough information to compute the implicit rate. If the lessor does not disclose the implicit rate and the lessee cannot compute it, the lessee would use its incremental borrowing rate.

Amortization (Depreciation) of Leased Asset

Since the lessee records an asset, it must compute amortization. The FASB uses the term *amortization* rather than *depreciation*, because the leased asset technically is an intangible asset. However, the lessee often includes the leased asset in the property, plant, and equipment section of its balance sheet. Either term can be used to name the expense. If the asset is written off over the estimated economic life of the property, the term that is usually used is *depreciation*. If the asset is written off over a shorter period of time (the term of the lease), the process is more often referred to as *amortization*. For simplicity, we use *depreciation* in this chapter.

Regardless of which term is used, if the capital lease agreement (1) transfers ownership of the asset to the lessee, or (2) contains a bargain purchase option, the lessee depreciates the asset over its estimated *economic* life to its estimated residual value. The lessee uses the estimated economic life because it expects to acquire ownership of the asset.

If the capital lease does not transfer ownership of the asset to the lessee or if it does not contain a bargain purchase option, the lessee depreciates the leased asset over the lease life because its rights to the use of the asset cease at the end of the lease. It depreciates the leased asset down to its guaranteed residual value at the end of the lease term.⁶ The lessee uses a depreciation method that is consistent with its normal policy for similar, owned assets. We summarize the depreciation of leased property by the lessee (or the lessor if there is an operating lease) in Exhibit 21-4 on page 1076, using a flow chart.

Reduction of the Lease Obligation

Since the lessee records a liability, it computes interest expense and the reduction of the principal for each lease payment using the effective interest method (also called the interest method). This method produces a constant rate of interest on the outstanding balance of the lease obligation at the beginning of each period.

Examples of Lessee's Capital Lease Method

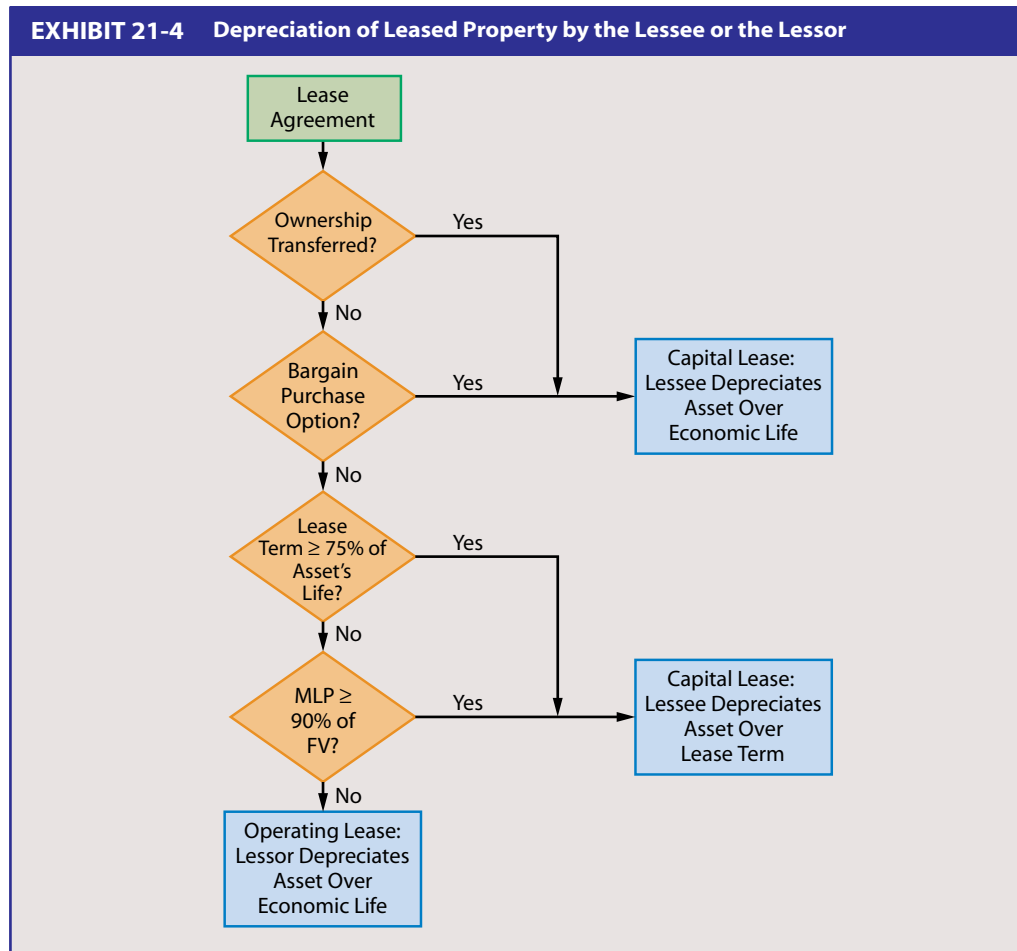
We provide several examples of capital lease transactions of the lessee in the following sections.

Example: Equipment Is Leased Without a Transfer of Ownership or Bargain Purchase Option

Assume that the Martin Company (the lessee) and the Gardner Leasing Company (the lessor) sign a lease agreement dated January 1, 2007 in which the Martin Company leases a piece of equipment from the Gardner Leasing Company beginning January 1, 2007. The lease contains the terms and provisions we show in Example 21-3 on page 1077.

First, Martin Company (the lessee) determines that the lease is a capital lease, as we show in Example 21-4 on page 1077. Since it is a capital lease, the lessee records the leased asset at the present value of the minimum lease payments (the lessee pays the executory costs). This amount does not exceed the fair value. The discount rate is 12%, the interest rate implicit in the lease. We assume that the lessee knows this rate and the rate is lower than its incremental borrowing rate of 12.5%.

6. *Ibid.*, sec. L10.107.



The Martin Company (the lessee) records the acquisition of the leased asset, the depreciation, and the minimum lease payments for two years as follows:

1. *Initial Recording of Capital Lease on January 1, 2007*

Leased Equipment	100,000.00	
Capital Lease Obligation		100,000.00

The accounting methods we use in this chapter are those recommended by *FASB Statement No. 13 as Amended*. The *Statement* uses the \$100,000 “net” present value for both the asset and the liability rather than the “gross” value of \$131,693.80 (4 × \$32,923.45). It is acceptable, however, for the lessee to record the liability at the gross amount with an accompanying debit to a contra-liability account, Discount on Capital Lease Obligation, for \$31,693.80. This alternative procedure may be useful when the lessee prepares the required disclosures that we discuss later.

2. *First Annual Payment and Recognition of Interest Expense on Capital Lease on December 31, 2007*

Interest Expense	12,000.00	
Capital Lease Obligation	20,923.45	
Cash		32,923.45

The annual payment is \$32,923.45. This amount is

- a payment of interest of \$12,000 (12% × \$100,000), and
- a reduction of the lease obligation liability of \$20,923.45 (\$32,923.45 – \$12,000).

Note that this lease requires the payment to be made at the end of the year. Thus, the annuity is an ordinary annuity. If the lease requires the payments to be made at

EXAMPLE 21-3 Terms and Provisions of Lease Agreement Between Gardner Leasing Company (Lessor) and Martin Company (Lessee) Dated January 1, 2007

1. The lease term is four years. The lease is noncancelable and requires equal payments of \$32,923.45 at the end of each year.
2. The cost, and also fair value, of the equipment to the Gardner Leasing Company at the inception of the lease is \$100,000. The equipment has an estimated economic life of four years and has a zero estimated residual value at the end of this time.
3. There is no guarantee of the residual value by the Martin Company.
4. The Martin Company agrees to pay all executory costs.
5. The equipment reverts to the Gardner Leasing Company at the end of the four years; that is, the lease contains no transfer of ownership or bargain purchase option.
6. The Martin Company's incremental borrowing rate is 12.5% per year.
7. The Martin Company uses the straight-line method to record depreciation on similar equipment.
8. For the Gardner Leasing Company, the interest rate implicit in the lease is 12%. The Martin Company knows this rate.
9. The present value of an ordinary annuity of four payments of \$32,923.45 each at 12% is \$100,000 ($3.037349 \times \$32,923.45 = \$100,000$). (This is the only present value calculation necessary, since there is no guaranteed residual value or bargain purchase option.)

EXAMPLE 21-4 Application of Lease Classification Criteria by Martin Company (Lessee)

Classification Criteria	Criteria Met?	Remarks
1. Transfer of ownership at end of lease	No	Title reverts to lessor
2. Bargain purchase option	No	
3. Lease term is 75% or more of economic life	Yes	100% of estimated life
4. Present value of minimum lease payments is 90% or more of fair value	Yes	The present value is \$100,000, or 100% of fair value

Decision: A capital lease must meet one or more of the classification criteria; otherwise, the lease is an operating lease.

Conclusion: The lease is a capital lease. It meets two of the four criteria.

the beginning of the year, the annuity is an annuity due (which we show later in this chapter).

3. *Recognition of Annual Depreciation of Leased Equipment on December 31, 2007*

Depreciation Expense: Leased Equipment	25,000.00
Accumulated Depreciation: Leased Equipment	25,000.00

The lessee depreciates the asset over the lease term because the lease does not include a transfer of ownership or a bargain purchase option. The lessee uses the straight-line method, and the annual depreciation is \$25,000 ($\$100,000 \div 4$). The lessee credits an Accumulated Depreciation account.

On the balance sheet of Martin Company (the lessee) for December 31, 2007, it includes the Leased Equipment less the Accumulated Depreciation in the property, plant, and equipment section of its assets. It divides the Capital Lease Obligation between current liabilities and long-term liabilities, as we discuss in the next section.

4. *Second Annual Payment and Recognition of Interest Expense on December 31, 2008*

Interest Expense	9,489.19
Capital Lease Obligation	23,434.26
Cash	32,923.45

The amount of the second payment is the same as that for 2007, but the payment for interest is the effective rate of 12% multiplied by the balance of the lease obligation at the beginning of 2008.

- The interest is $12\% \times \$79,076.55$ ($\$100,000 - \$20,923.45$), or $\$9,489.19$.
- The remainder of the annual payment is the reduction of the principal of $\$23,434.26$ ($\$32,923.45 - \$9,489.19$).

Example 21-5 shows the interest expense and the reduction of the capital lease obligation over the life of the lease.

EXAMPLE 21-5 Summary of Lease Payments in Arrears and Interest Expense of Martin Company (Lessee)

(1) Date	(2) Annual Lease Payment	(3) Interest at 12% on Unpaid Obligation ^a	(4) Reduction of Capital Lease Obligation ^b	(5) Balance of Capital Lease Obligation ^c
January 1, 2007	—	—	—	\$100,000.00
December 31, 2007	\$32,923.45	\$12,000.00	\$20,923.45	79,076.55
December 31, 2008	32,923.45	9,489.19	23,434.26	55,642.29
December 31, 2009	32,923.45	6,677.07	26,246.38	29,395.91
December 31, 2010	32,923.45	3,527.54 ^d	29,395.91	—

a. Column 5 at beginning of year \times 12%

b. Column 2 $-$ Column 3

c. Column 5 at beginning of year $-$ Column 4

d. Adjusted for rounding error of \$0.03

5. Recognition of Annual Depreciation on December 31, 2008

Depreciation Expense: Leased Equipment	25,000.00
Accumulated Depreciation: Leased Equipment	25,000.00

Under the straight-line method, the depreciation entry for 2008 is the same as that for 2007.

The journal entries through 2010 follow a pattern similar to those presented for 2007 and 2008. For simplicity, we did not include the journal entries to record the payment of executory costs such as insurance, maintenance, and property taxes. A lessee records these types of costs in regular operating expense accounts. For example, if the Martin Company pays \$3,000 for repairs on the leased equipment during 2007, it would record the payment as a debit to Repair Expense. ♦



Classification of Capital Lease Obligation

When a lessee classifies its capital lease obligation on its balance sheet, it considers the usual criteria for classifying the lease as current or noncurrent.⁷ Since the FASB provided no guidelines to measure the respective amounts, a lessee may use two approaches to measure the amount of the current liability: (1) the present value of next year's payments, and (2) the change in the present value.⁸

Present Value of Next Year's Payments

Under the present value of next year's payments approach, the amount of the lessee's current liability is the payment(s) the lessee will make in the next year discounted to the

7. *Ibid.*, sec. L10.112.

8. R. J. Swieringa, "When Current Is Noncurrent and Vice Versa!", *The Accounting Review* (January 1984), pp. 123–130.

balance sheet date. For the Martin Company, the current liability each year is \$29,395.93 ($0.892857 \times \$32,923.45$). The remaining portion of the obligation is classified as a noncurrent liability. This approach reports the same current liability each year for a given lease. It is conceptually sound and consistent with the theoretical measurement of liabilities in general. In this chapter we use the present value of next year's payments to determine the current liability portion of the lease obligation.

Change in the Present Value

The change in present value approach may be used by a lessee to measure the amount of its current liability. In this approach, the current liability is the amount by which the total balance of the lease liability will decrease in the next year. For the Martin Company the current portion of the liability on December 31, 2007 is \$23,434.26 ($\$79,076.55 - \$55,642.29$); on December 31, 2008 it is \$26,246.38 ($\$55,642.29 - \$29,395.91$). Note that the current liability on December 31, 2009 (the balance sheet preceding the final year's lease payment) is the same for each approach (with minor differences for rounding).

Example: Lease Payments Are Made at the Beginning of the Year

Assume that all the lease provisions described in Example 21-3 are the same *except* that the Martin Company (the lessee) is required to make the lease payments in advance, on January 1 of each year, and that the *cost* (and also fair value) of the equipment is \$112,000. The annuity calculation is now the present value of an *annuity due* rather than that of an ordinary annuity. The value of the asset and the liability is different, as we show in the following calculation:

$$\begin{aligned} \text{Present Value of Four Payments} \\ \text{of } \$32,923.45 \text{ in Advance at } 12\% &= \$32,923.45 \times 3.401831 \\ &= \$112,000 \text{ (rounded)} \end{aligned}$$

Example 21-6 shows the information for the interest expense and the reduction of the capital lease obligation for each period. The journal entries through January 1, 2008 are as follows:

1. *Initial Recording of Capital Lease on January 1, 2007*

Leased Equipment	112,000.00	
Capital Lease Obligation		112,000.00

Martin records both the asset and the obligation at the present value.

EXAMPLE 21-6 Summary of Lease Payments in Advance and Interest Expense of Martin Company (Lessee)

(1) Date	(2) Annual Lease Payment	(3) Interest at 12% on Unpaid Obligation ^a	(4) Balance of Capital Lease Obligation ^b
January 1, 2007	Before the initial lease payment		\$112,000.00
January 1, 2007	\$32,923.45		79,076.55
December 31, 2007		\$9,489.19	88,565.74 ^d
January 1, 2008	32,923.45 ^c		55,642.29
December 31, 2008		6,677.07	62,319.36 ^d
January 1, 2009	32,923.45		29,395.91
December 31, 2009		3,527.54 ^e	32,923.45 ^d
January 1, 2010	32,923.45		0

a. Column 4 at beginning of year \times 12%.

b. Column 4 at beginning of year $-$ Column 2 $+$ Column 3.

c. Each lease payment, after the initial payment, includes the accrued interest for the previous year.

d. \$32,923.45 of this amount is a current liability; it will be paid January 1 of the next year. The remaining amount is a noncurrent liability.

e. Adjusted for \$0.03 rounding error.

2. *First Annual Payment in Advance on January 1, 2007*

Capital Lease Obligation	32,923.45	
Cash		32,923.45

The first payment is entirely a reduction of principal, since no interest has accrued. (The preceding two journal entries could be made as one compound entry.)

3. *Recognition of Annual Depreciation of Leased Equipment on December 31, 2007*

Depreciation Expense: Leased Equipment	28,000.00	
Accumulated Depreciation:		
Leased Equipment		28,000.00

The straight-line depreciation is $\$112,000 \div 4$ years, or $\$28,000$.

4. *Recognition of Interest Expense on Capital Lease on December 31, 2007*

Interest Expense	9,489.19	
Accrued Interest on Capital		
Lease Obligation⁹		9,489.19

Even though Martin (the lessee) will not make the next payment until January 1, 2008, the accrual concept requires that the lessee recognize interest expense in the year that it is incurred. In 2007 the amount is $\$9,489.19$, or 12% of $\$79,076.55$ ($\$112,000 - \$32,923.45$), as we show in Example 21-6. The lessee separates the Capital Lease Obligation into its current and noncurrent portions in its year-end balance sheet. In the December 31, 2007 balance sheet, it reports $\$32,923.45$ as a current liability and the remaining part, $\$55,642.29$, as a long-term liability.

5. *Second Annual Payment in Advance on January 1, 2008*

Accrued Interest on Capital		
Lease Obligation	9,489.19	
Capital Lease Obligation	23,434.26	
Cash		32,923.45

The interest applicable to 2008 is $\$9,489.19$, as we show in Example 21-6. The remaining entries follow the pattern of those for 2008. ♦

Other Lessee Capitalization Issues

A lessee may also sign a lease agreement that includes: (1) a bargain purchase option, or (2) a guaranteed residual value.

Impact of Bargain Purchase Option

To show the impact of a bargain purchase option, assume that Redd Company leases equipment for four years and agrees to pay $\$40,000$ at the end of each year. The lease also includes an option to pay $\$2,000$ at the end of the fourth year to purchase the asset. This amount is so much lower than the expected fair value at the end of the fourth year that Redd (the lessee) is reasonably assured of exercising the option. Therefore, it is a bargain purchase option. Redd's incremental borrowing rate is 11%, and the lessor's implicit interest rate is 10%. The cost and fair value of the equipment is $\$128,160.63$. This lease qualifies as a capital lease because there is a bargain purchase option. The lessee records the leased equipment at the present value of the

9. If not material, the lessee may credit this amount to the liability account, Capital Lease Obligation.

minimum lease payments (which includes the bargain purchase option) based on the lower 10% rate, calculated as follows:

Present value of the annual payments discounted at 10% (\$40,000 × 3.169865)	\$126,794.60
Add: Present value of the single sum of \$2,000 (the bargain purchase option) discounted at 10% (\$2,000 × 0.683013)	<u>1,366.03</u>
Present value of the minimum lease payments	<u>\$128,160.63</u>

The lessee records the leased asset as follows:

Leased Equipment	128,160.63	
Capital Lease Obligation		128,160.63

The accounting by the lessee follows the same principles as in the previous capital lease examples, except that the lessee depreciates the Leased Equipment asset amount of \$128,160.63 over its estimated *economic life* (not over the term of the lease) to its estimated residual value (*not* the bargain purchase option of \$2,000). The lessee reduces the liability account, Capital Lease Obligation, by the effective interest method, as we previously illustrated. However, at the end of the fourth year, it has a balance of \$2,000. When the lessee exercises the bargain purchase option, it debits Capital Lease Obligation and credits Cash for \$2,000.

Impact of Guaranteed Residual Value

The lessee may agree to guarantee part or all of the residual value. That is, it guarantees that the value of the leased asset at the end of the lease term will be at least the stated amount of the guarantee. If the asset is not worth this guaranteed value, the lessee must pay the lessor any difference between this smaller value and the guaranteed value. A lessor would generally prefer a guaranteed residual value because it transfers the risk associated with the future value of the asset to the lessee. The guaranteed residual value is included in the minimum lease payments. Therefore, the lessee capitalizes the present value of the amount guaranteed.

Example: Guaranteed Residual Value Assume that Karpas Company leases equipment for four years that cost the lessor \$147,284.99 (its fair value) and agrees to pay \$40,000 at the end of each year. The equipment has an estimated residual value of \$30,000 at the end of the fourth year. The Karpas Company agrees to guarantee the entire amount of this residual value (and there is no transfer of ownership or bargain purchase option). Assume an appropriate interest rate of 10%. This lease is a capital lease because the present value of the minimum lease payments (\$147,284.99), as we show in the following calculation, is equal to 90% or more of the fair value of the leased property (\$147,284.99).

Present value of the annual lease payments discounted at 10% (\$40,000 × 3.169865)	\$126,794.60
Add: Present value of the single sum of \$30,000 (the guaranteed residual value) discounted at 10% (\$30,000 × 0.683013)	<u>20,490.39</u>
Present value of minimum lease payments	<u>\$147,284.99</u>

The lessee records the leased equipment at the present value of the minimum lease payments (which includes the guaranteed residual value) as follows:

Leased Equipment	147,284.99	
Capital Lease Obligation		147,284.99

The accounting for the lease follows the same principles as in the previous capital lease examples. The lessee depreciates the asset by an appropriate method over the *lease term* down to the guaranteed residual value. It reduces the liability using the effective interest

method, so that at the end of the fourth year the liability has a balance of \$30,000. The elimination of this balance depends on the condition of the leased asset at the end of the lease term and the terms of the lease agreement. ♦

Example: Disposal Where Lease Has a Guaranteed Residual Value

Based on the previous information, at the beginning of the fifth year the Karpas Company has the following accounts and balances:

Account	Balance
Leased Equipment	\$147,284.99 (debit)
Accumulated Depreciation: Leased Equipment	117,284.99 (credit)
Capital Lease Obligation	30,000.00 (credit)

If the fair value of the leased asset is less than \$30,000, the lessee may pay part of the liability by returning the asset to the lessor. It then pays the remaining part in cash and recognizes a loss on disposal of the asset. For example, assume that the Karpas Company returns the leased equipment to the lessor. Both the Karpas Company and the lessor agree that the equipment is worth only \$20,000. The Karpas Company pays the lessor \$10,000 in cash, and records the disposal as follows:

Accumulated Depreciation: Leased Equipment	117,284.99	
Capital Lease Obligation	30,000.00	
Loss on Disposal of Leased Equipment	10,000.00	
Leased Equipment		147,284.99
Cash		10,000.00

If the fair value is more than \$30,000, the lessee may pay the liability in full by returning the asset to the lessor. In this case, the lessee does not recognize a gain or loss. Note that the lessee ignores any *unguaranteed* residual value.

Leases may be written with various provisions. For example, the lessee may be required to pay the lessor the full guaranteed residual value (in this case, \$30,000) in cash. The lessee then may choose to sell the asset or keep it to use in its operating activities. ♦

Disclosure Requirements of the Lessee

FASB Statement No. 13 as Amended requires certain disclosures by the lessee for both operating and capital leases. We summarize the basic disclosures in Exhibit 21-5. The lessee discloses this information in its balance sheet or in the notes to its financial statements.¹⁰ **Wal-Mart Stores** discloses its lease information in Note 9 of its 2005 financial statements, as we show in Real Report 21-1 on page 1084.

5 Understand disclosures by the lessee.



SECURE YOUR KNOWLEDGE 21-2

- A lessee accounts for an operating lease as a rental agreement. The lessee records rent expense each period and does not report the leased equipment nor any related obligation for future payments on the balance sheet.
- For a capital lease, the lessee records the leased asset and a liability equal to the present value of the minimum lease payments at the beginning of the lease term.
 - Executory costs (ownership costs such as insurance, maintenance, and property taxes) are not considered part of the minimum lease payment and are excluded from any present value calculations.
 - The lessee uses the lower of the lessee's incremental borrowing rate or the lessor's interest rate implicit in the lease (if it is known by the lessee) in any present value calculations.

(continued)

10. *FASB Statement No. 13 as Amended and Interpreted through January 1990, op. cit.*, sec. L10.112.

- The lessee depreciates the leased asset over its estimated economic life if it expects to acquire the asset at the end of the lease term (e.g., the lease agreement transfers ownership to the lessee or contains a bargain purchase option), or the lease term if the lessor is expected to retain ownership of the leased asset at the end of the lease term.
- Each lease payment consists of interest expense and a reduction of the principal of the recorded liability, computed using the effective interest method.
- The lease obligation is classified as current or noncurrent on the balance sheet using either the (1) present value of next year's payments approach or the (2) change in present value approach.
- If a lease contains a bargain purchase option, the bargain purchase option is viewed as an additional lease payment and is included in the computation of the present value of the minimum lease payments.
- If the lessee guarantees the residual value of the leased asset, it views the guaranteed residual value as an additional payment and includes this amount in the calculation of the present value of the minimum lease payments.

EXHIBIT 21-5 Disclosure Requirements for Lessee: Operating and Capital Leases

- A. For operating leases having lease terms in excess of one year:
 1. Future minimum rental payments required as of the date of the latest balance sheet presented, for each of the five succeeding fiscal years and in total.
 2. The total of minimum rentals to be received in the future under noncancelable subleases.
- B. For all operating leases, rental expense for each period.
- C. For capital leases:
 1. The gross amount of assets recorded under capital leases by major classes according to nature or function.
 2. Future minimum lease payments for each of the five succeeding fiscal years and in total with separate deductions from the total (1) for the amount of executory costs included in the minimum lease payments, and (2) for the amount of the imputed interest required to reduce the net minimum lease payments to present value.
 3. The total of minimum sublease rentals to be received in the future under noncancelable subleases.
 4. Assets, accumulated depreciation, depreciation expense, and liabilities.
- D. For all leases, a general description of the lessee's leasing arrangements including the following:
 1. The existence and term of renewal or purchase options and escalation clauses.
 2. Restrictions imposed by lease agreements, such as those concerning dividends, additional debt, and further leasing.

ACCOUNTING AND REPORTING BY A LESSOR

Recall that a lessor classifies a lease as follows:

1. *Operating Lease.* A lease that does not meet any of the criteria in Column A or does not meet both of the criteria in Column B of Exhibit 21-2.
2. *Sales-type Lease.* A sales-type lease results in a manufacturer's or dealer's profit (or loss) and meets one or more of the criteria in Column A and both the criteria in Column B of Exhibit 21-2.
3. *Direct Financing Lease.* A direct financing lease does not result in a manufacturer's or dealer's profit (or loss) and meets one or more of the criteria in Column A and both the criteria in Column B of Exhibit 21-2.
4. *Leveraged Lease.* A leveraged lease is a special three-party lease that is always considered to be a direct financing lease. We discuss these leases briefly in the Appendix to this chapter.

6 Account for a lessor's operating, direct financing, and sales-type leases.

We discuss the accounting method for each of the first three leases in the sections following Real Report 21-1.



Real Report 21-1 Wal-Mart Stores: Long-Term Lease Obligations

NOTE 9 (in part)

The Company and certain of its subsidiaries have long-term leases for stores and equipment. Rentals (including, for certain leases, amounts applicable to taxes, insurance, maintenance, other operating expenses, and contingent rentals) under all operating leases were \$1.2 billion, \$1.1 billion, and \$1.1 billion in 2005, 2004, and 2003, respectively. Aggregate minimum annual rentals at January 31, 2005, under noncancelable leases are as follows (in millions):

Fiscal Year	Operating Leases	Capital Leases
2006	\$ 730	\$ 521
2007	700	514
2008	626	505
2009	578	490
2010	530	468
Thereafter	<u>5,908</u>	<u>3,222</u>
Total minimum rentals	<u>\$9,072</u>	5,720
Less estimated executory costs		<u>42</u>
Net minimum lease payments		5,678
Less imputed interest at rates ranging from 4.2% to 14.0%		<u>1,886</u>
Present value of minimum lease payments		<u>\$3,792</u>

Certain of the company's leases provide for the payment of contingent rentals based on percentage of sales. Such contingent rentals amounted to \$42 million, \$46 million, and \$51 million in 2005, 2004, and 2003, respectively. Substantially all of the company's store leases have renewal options, some of which may trigger an escalation in rentals.

The company has entered into lease commitments for land and buildings for 46 future locations. These lease commitments with real estate developers provide for minimum rentals ranging from 5–30 years, which if consummated based on current cost estimates, will approximate \$30 million annually over the lease terms.

Questions:

1. Why do you think Wal-Mart has chosen to use long-term operating leases instead of buying the assets?
2. What is the present value of the minimum lease payments? Where would this be found on Wal-Mart's balance sheet?
3. If Wal-Mart's operating leases were classified as capital leases, what would the effect be on Wal-Mart's debt ratio? For simplicity, assume that lease payments are made as a single annual payment at the beginning of each year. (On 1/31/05, Wal-Mart's total liabilities were \$70,827 million and its total assets were \$120,223 million.)

Operating Lease (Lessor)



Under an operating lease, a lessor company leasing an asset to a lessee retains substantially all the risks and benefits of ownership. The lessor includes the leased asset, say equipment, on its balance sheet in a subsection of property, plant, and equipment entitled Plant and Equipment Leased to Others.¹¹ It also records depreciation on the leased asset and includes it on its income statement. The lessor usually pays executory costs and records the rental receipts as revenue when they become receivable.

11. *Ibid.*, sec. L10.111.

Example: Operating Lease (Lessor) Assume that the Owner Company leases a piece of equipment to User Company for five years under the terms described in Example 21-1 on page 1073. User Company agrees to pay \$50,000 at the beginning of each year. In addition, the Owner Company purchased the equipment at a cost of \$300,000. The equipment has an estimated life of 10 years and Owner Company uses the straight-line method of depreciation. On January 10, 2007 Owner pays the annual insurance premium of \$2,000, and on December 15, 2007 it pays for repairs of \$1,500. Assume that there are no initial direct costs involved in this lease. Owner records the preceding information as follows:

1. *Purchase of Equipment to Be Leased on January 1, 2007*

Equipment Leased to Others	300,000	
Cash (or Accounts Payable)		300,000

We show the purchase of the equipment to reinforce your understanding of its classification. If the company already owned the equipment, in the preceding entry it would credit the Equipment account, and also would reclassify the related Accumulated Depreciation.

2. *Collection of Annual Payment on Operating Lease on January 1, 2007*

Cash	50,000	
Rental Revenue		50,000

Owner Company collects the annual rental payments at the beginning of each year and records them as revenue. If the amount is receivable at this date but not yet collected, Owner debits a Rent Receivable account. If Owner prepares monthly or quarterly interim statements, it reports the unearned portion of the preceding revenue as a liability, Unearned Rent.

3. *Payment of Annual Insurance Premium on January 10, 2007*

Insurance Expense	2,000	
Cash		2,000

Under operating leases, the lessor usually pays executory costs such as insurance. It records these costs as operating expenses and matches them against the gross rental revenue.

4. *Payment of Repairs on December 15, 2007*

Repair Expense	1,500	
Cash		1,500

The repair expense is another example of an executory cost paid by the lessor.

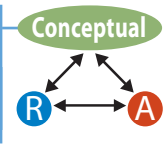
5. *Recognition of Annual Depreciation Expense on December 31, 2007*

Depreciation Expense: Equipment Leased to Others	30,000	
Accumulated Depreciation: Equipment Leased to Others		30,000

The lessor records depreciation on the leased equipment over its 10-year economic life. It reports the leased equipment and the accompanying accumulated depreciation on its balance sheet. ♦

Initial Direct Costs Involved in an Operating Lease

In the preceding lease example, we assumed that there were no initial direct costs. **Initial direct costs are costs that a lessor incurs directly from originating a lease that it would not have incurred if it had not entered into the lease contract.** For an operating lease, the lessor records these costs as an asset and allocates them as an operating expense in proportion to the rental receipts over the term of the operating lease. This procedure results in an appropriate matching of the initial direct costs as an expense against the rental revenue.



Direct Financing Leases (Lessor)

Under a direct financing lease, the lessor is usually a financial institution (or a financial subsidiary of a company). The lessor “sells” the asset at a fair value equal to its cost or carrying value and records an accompanying receivable. Since there is no manufacturer’s or dealer’s profit (or loss) in a direct financing lease, **the net amount at which the lessor records the receivable must be equal to the cost or carrying value of the property.** The *net* receivable is equal to the present value of the future lease payments to be received. There are, however, two components of the net receivable (net investment). These are the *gross receivable* (the total undiscounted cash flows) and the *unearned interest* (the interest to be earned over the life of the lease). The gross receivable of the lessor includes the sum of¹²

1. The *undiscounted* minimum lease payments to be received by the lessor, plus
2. Any unguaranteed residual value accruing to the benefit of the lessor.

Note that the gross receivable excludes any executory costs paid by the lessor. However, it includes the residual value, whether guaranteed or unguaranteed. If the residual value is guaranteed, it is included in the minimum lease payments. If it is unguaranteed, it is explicitly included as the second item. The lessor records the difference between the gross receivable (the Lease Receivable¹³ account) and the cost or carrying value of the leased property as unearned revenue, with a title such as Unearned Interest: Leases. This account is a contra account and the lessor deducts this account from the Lease Receivable account to determine its net investment in the direct financing lease. The lessor reports this net investment on its balance sheet and divides the amount between the current and noncurrent asset sections. The current asset portion is determined by using the present value of next year’s payments approach or by using the change in present value approach, as we explained earlier for the lessee’s accounting.



Note that the lessor’s accounting according to *FASB Statement No. 13 as Amended* follows the “gross” method whereas, as we discussed earlier, the lessee’s follows the “net” method. It is acceptable, however, for the lessor to record the asset at the “net” amount, provided it makes the appropriate disclosures, as we show later. However, the main advantage of recording the receivable at the gross (undiscounted) amounts is that this accounting provides the information for the required disclosures, as we discuss later.

The lessor determines its interest revenue each period using the effective interest method to produce a constant periodic rate of return on the net investment in the lease. At the beginning of the lease, the net investment is equal to the original cost of the asset, if it is new, or the carrying value, if it has been owned in previous periods. **The interest rate implicit in the lease is the rate that, when applied to the gross receivable, will discount that amount to a present value that is equal to the net receivable.** Thus, there are three variables: the present value (the net receivable), the implicit rate, and the future cash flows (the gross receivable). If the lessor knows two of these three variables, it can calculate the third. We show three examples of accounting for a direct financing lease in the following sections.

12. *Ibid.*, sec. L10.114.

13. The title “Minimum Lease Payments Receivable” is appropriate when there is a *guaranteed* residual value. The title “Gross Investment in the Lease” is most appropriate if there is an *unguaranteed* residual value, because then the lessor has not “sold” the residual value. For simplicity, we use the title “Lease Receivable.”

Example: Direct Financing Lease with No Unguaranteed Residual Value and Payments Made at End of Year

For the first example, we show the accounting by the Gardner Leasing Company (a financial institution) that leases equipment to the Martin Company as shown earlier in Example 21-3 on page 1077. In addition to the items in Example 21-3, assume that:

1. The collectibility of the lease payments is reasonably assured, and there are no uncertainties involved in the lease.
2. There are no initial direct costs of negotiating and closing the lease transaction.

The cost, and fair value, of the equipment is \$100,000. The interest rate implicit in the lease is 12% on the net investment. Though given in the data for the lessee, the lessor calculates the annual rental payments it charges the lessee as follows:

$$\begin{aligned} \text{Annual Payments} &= \frac{\text{Present Value Equal to the Cost of Equipment}}{\text{Present Value of an Annuity for 4 Periods at 12\%}} \\ &= \frac{\$100,000}{3.037349} \\ &= \$32,923.45 \end{aligned}$$

As we show in Example 21-7, based on the criteria from Exhibit 21-2 (columns A and B) the lease is a direct financing rather than a sales-type lease because the fair (present) value of the property is equal to its cost.

EXAMPLE 21-7 Application of Lease Classification Criteria by Gardner Leasing Company (Lessor)		
Classification Criteria	Criteria Met?	Remarks
Column A		
1. Transfer of ownership	No	
2. Bargain purchase option	No	
3. Lease term is 75% or more of economic life	Yes	100% of economic life
4. Present value of minimum lease payments is 90% or more of fair value	Yes	The present value is \$100,000, or 100% of fair value
Column B		
1. Collectibility reasonably assured	Yes	
2. No uncertainties	Yes	
Decision: If the lease meets one or more of the Column A criteria and both of Column B criteria, and there is no manufacturer's or dealer's profit or loss, it is a direct financing lease.		
Conclusion: The lease is a direct financing lease, since appropriate criteria are met and there is no manufacturer's or dealer's profit or loss. The present (fair) value of the lease payments equals the		

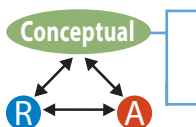
The lessor records the Lease Receivable at the sum of the undiscounted annual payments to be collected from the lessee plus the undiscounted unguaranteed residual value. Since there are no executory costs or unguaranteed residual value, the Gardner Leasing Company records this asset at \$131,693.80 $\{4 \times (\$32,923.45 - \$0)\} + \$0$. The beginning balance of the account, Unearned Interest: Leases, is the difference between the Lease Receivable account and the cost or carrying value of the leased asset.

For the Gardner Leasing Company, this difference is \$31,693.80 (\$131,693.80 – \$100,000). Gardner records the following for 2007 and 2008:

1. *Initial Recording of the Lease on January 1, 2007*

Lease Receivable	131,693.80	
Equipment		100,000.00
Unearned Interest: Leases		31,693.80

The effect of this transaction is to replace the equipment asset with a monetary asset of an equal amount. Again, note that Gardner records the receivable at the amount of the gross (undiscounted) rentals plus the estimated unguaranteed residual value of the leased asset (zero in this case). It credits the Equipment account for the cost of the item, because from an *economic-substance-over-legal-form* point of view it is the disposal of an asset, even though legal transfer of ownership has not occurred. Gardner records the Unearned Interest: Leases account as the difference between the cost of the equipment and the receivable; it is a contra account to the Lease Receivable account.



2. *Collection of Annual Payment at End of First Year on December 31, 2007*

Cash	32,923.45	
Lease Receivable		32,923.45

Gardner collects and records the payment of \$32,923.45.

3. *Recognition of Interest Revenue for First Year on December 31, 2007*

Unearned Interest: Leases	12,000.00	
Interest Revenue: Leases		12,000.00

Gardner amortizes the Unearned Interest account using the effective interest method. That is, it recognizes the interest revenue as 12% of the net investment at the beginning of the period (the January 1, 2007 balance of the Lease Receivable less the January 1, 2007 balance of the Unearned Interest: Leases) or \$12,000.00 (12% × \$100,000; that is, \$131,693.80 – \$31,693.80).

Gardner (the lessor) separates the receivable into its current and noncurrent portions for reporting the lease on its balance sheet. It calculates the current and noncurrent amounts of the Net Investment that it reports on its December 31, 2007 balance sheet as follows:

	<u>Current</u>	<u>Noncurrent</u>
Lease receivable	\$32,923.45	\$65,846.90 ^a
Unearned interest: leases	<u>(3,527.52)</u>	<u>(16,166.27)^b</u>
Net investment	\$29,395.93	\$49,680.63

a. $2 \times \$32,923.45$

b. $[\$32,923.45 - (\$32,923.45 \times 0.797194)] + [\$32,923.45 - (\$32,923.45 \times 0.711780)]$

Note that the \$29,395.93 current portion plus the \$49,680.63 noncurrent portion sum to the \$79,076.55 (with a \$0.01 rounding error) total Net Investment on December 31, 2007 shown in Example 21-8.

4. *Collection of Annual Payment for Second Year on December 31, 2008*

Cash	32,923.45	
Lease Receivable		32,923.45

Gardner records the receipt of the payment for the second period in the same way as during the first period.

5. *Recognition of Interest Revenue for Second Year on December 31, 2008*

Unearned Interest: Leases	9,489.19	
Interest Revenue: Leases		9,489.19

EXAMPLE 21-8 Summary of Lease Payments Received in Arrears and Interest Revenue Earned by Gardner Leasing Company (Lessor)

(1) Date	(2) Annual Lease Payment Received	(3) Interest Revenue at 12% on Net Investment ^a	(4) Amount of Net Investment Recovered ^b	(5) Lease Receivable ^c	(6) Unearned Interest Leases ^d	(7) Net Investment ^e
January 1, 2007				\$131,693.80	\$31,693.80	\$100,000.00
December 31, 2007	\$32,923.45	\$12,000.00	\$20,923.45	98,770.35	19,693.80	79,076.55
December 31, 2008	32,923.45	9,489.19	23,434.26	65,846.90	10,204.61	55,642.29
December 31, 2009	32,923.45	6,677.07	26,246.38	32,923.45	3,527.54	29,395.91
December 31, 2010	32,923.45	3,527.54 ^f	29,395.91	0	0	0

a. Column 7 at beginning of year \times 12%

b. Column 2 – Column 3

c. Annual lease payment \times Number of years remaining on lease, or Previous balance – Column 2

d. Previous balance – Column 3

e. Column 5 – Column 6

f. Adjusted for \$0.03 rounding error

The calculation of the 2008 interest revenue by the effective interest method follows the same procedure as that for 2007. The only difference is that the net investment as of January 1, 2008 is less than that of January 1, 2007. The calculation for 2008 is 12% of the January 1, 2008 balance in the Lease Receivable account less the January 1, 2008 balance of the Unearned Interest: Leases. For 2008 the interest revenue is \$9,489.19 (12% \times \$79,076.55; that is, \$100,000 – \$20,923.45).

Example 21-8 shows the interest revenue and the reductions in the receivable and the unearned interest over the life of the lease. The Gardner Leasing Company would use the information we show in Example 21-8 to record the journal entries for the remaining years of the lease. At the end of 2008 its net investment is zero. ♦

Example: Direct Financing Lease with No Unguaranteed Residual Value and Payments Received in Advance

To show a direct financing lease with a different timing of the payments, assume that on January 1, 2007 the Watkins Finance Company leases equipment to the Hutton Company, with the terms and provisions of the lease we show in Example 21-9. This lease is a direct financing lease because the provisions of the lease agreement we show in Example 21-9 meet one or more of the Column A and both of the Column B classification criteria from Exhibit 21-2, do not include any manufacturer's or dealer's profit, and the fair (present) value of the property is equal to its cost.

The Watkins Finance Company records the information for this lease in 2007 using the amounts from Example 21-10.

1. Initial Recording of Lease on January 1, 2007

Lease Receivable	500,000.00	
Equipment		391,371.20
Unearned Interest: Leases		108,628.80

Watkins (the lessor) records the Lease Receivable at the undiscounted five annual rental payments totaling \$500,000 (5 \times \$100,000) plus the unguaranteed residual value (\$0 in this case). It records the Unearned Interest at \$108,628.80. Thus, the net receivable is the cost of the equipment of \$391,371.20. Because the transaction is considered a disposal of an asset, Watkins also credits Equipment.

EXAMPLE 21-9 Terms and Provisions of Lease Agreement Between Watkins Finance Company (Lessor) and Hutton Company (Lessee) Dated January 1, 2007

- The cost, and fair value, of the equipment is \$391,371.20.
- The initial direct costs incurred by Watkins Finance Company are not material.
- The term of the lease is five years, with annual payments of \$100,000 received in advance at the beginning of each year.
- The economic useful life of the equipment is five years and the estimated residual value to the lessor is zero.
- The lease receipts are determined at an amount that will yield to the Watkins Finance Company a 14% annual rate of return on net investment.
- The Hutton Company pays all the executory costs.
- The equipment reverts to the Watkins Finance Company at the end of the fifth year; the lease contains no bargain purchase option.
- The present value of the minimum lease payments receivable for the lessor is \$391,371.20, calculated as follows:

$$\begin{aligned} \text{Present value of 5 amounts of} \\ \$100,000 \text{ in advance at } 14\% &= 3.913712 \times \$100,000 \\ &= \underline{\underline{\$391,371.20}} \end{aligned}$$

- The collectibility of the payments is reasonably assured, and there are no uncertainties involved in the lease.

EXAMPLE 21-10 Summary of Lease Payments Received in Advance and Interest Revenue Earned by Watkins Finance Company (Lessor)

(1) Date	(2) Annual Lease Payment Received	(3) Interest Revenue at 14% on Net Investment ^a	(4) Lease Receivable ^b	(5) Unearned Interest: Leases ^c	(6) Net Investment ^d
January 1, 2007			\$500,000	\$108,628.80	\$391,371.20
January 1, 2007	\$100,000		400,000		291,371.20
December 31, 2007		\$40,791.97		67,836.83	332,163.17 ^e
January 1, 2008	100,000		300,000		232,163.17
December 31, 2008		32,502.84		35,333.99	264,666.01 ^e
January 1, 2009	100,000		200,000		164,666.01
December 31, 2009		23,053.24		12,280.75	187,719.25 ^e
January 1, 2010	100,000		100,000		87,719.25
December 31, 2010		12,280.75 ^f		0	100,000.00 ^e
January 1, 2011	100,000		0		0

a. Column 6 at beginning of year \times 14%

b. Annual lease payment \times Number of years remaining on lease, or Previous balance $-$ Column 2

c. Previous balance $-$ Column 3

d. Column 4 $-$ Column 5

e. \$100,000 of this amount is a current asset; it will be received on January 1 of the next year. The remaining amount is a noncurrent asset.

f. Adjusted for \$0.05 rounding error

2. Collection of Annual Payment for First Year on January 1, 2007

Cash	100,000.00	
Lease Receivable		100,000.00

The payments are collected in advance. The first payment collected consists entirely of principal since no interest has accrued. (The two preceding journal entries could be made as one compound entry.)

3. *Recognition of Interest Revenue for First Year on December 31, 2007*

Unearned Interest: Leases	40,791.97	
Interest Revenue: Leases		40,791.97

As we show in Example 21-10, the interest earned in 2007 is \$40,791.97 (14% × \$291,371.20). Watkins would use the information we show in Example 21-10 to record the journal entries for the remaining years of the lease. At the end of the lease term, there will be a zero balance in both the Lease Receivable and Unearned Interest: Leases accounts. ♦

Example: Direct Financing Lease with an Unguaranteed Residual Value at the End of the Lease and Payments Made in Advance

To show a direct financing lease with additional issues, assume that on January 1, 2007 the Carlson Bank leases equipment to the Johnson Company, with the terms and provisions of the lease we show in Example 21-11.

EXAMPLE 21-11 Terms and Provisions of Lease Agreement Between Carlson Bank (Lessor) and Johnson Company (Lessee) Dated January 1, 2007

1. The cost, and fair value, of the equipment is \$11,149.06.
2. The initial direct costs incurred by Carlson Bank are not material.
3. The term of the lease is four years, with annual payments of \$3,000 received at the beginning of each year.
4. The estimated economic life of the equipment is five years, the lease is for only four years and there is an estimated residual value of \$2,000 at the end of the lease. The Johnson Company does not guarantee any of the estimated residual value.
5. The lease payments are determined at an amount that will yield to the Carlson Bank a 14% annual rate of return on its net investment.
6. The Johnson Company pays all the executory costs.
7. The equipment reverts to the Carlson Bank at the end of the fourth year. The lease contains no renewal or bargain purchase options.
8. The present value of the minimum lease payments receivable for the lessor, plus the unguaranteed residual value, is \$11,149.06, calculated as follows:

Present value of 4 amounts of \$3,000 in advance at 14% ($3.321632 \times \$3,000$)	= \$ 9,964.90
Add: Present value of a single sum of \$2,000 (the unguaranteed residual value) at 14% for 4 periods ($0.592080 \times \$2,000$)	= <u>1,184.16</u>
Total present value	= <u><u>\$11,149.06</u></u>

9. The collectibility of the payments is reasonably assured, and there are no uncertainties involved in the lease.

Since the provisions of the lease agreement in Example 21-11 meet one or more of the Column A and both of the Column B lease classification criteria from Exhibit 21-2, and do not include any manufacturer's or dealer's profit, this lease is a direct financing lease. The Carlson Bank records the information relevant to this lease for the year 2007 using the amounts from Example 21-12.

1. *Initial Recording of Lease on January 1, 2007*

Lease Receivable	14,000.00	
Equipment		11,149.06
Unearned Interest: Leases		2,850.94

Carlson (the lessor) records the Lease Receivable at \$14,000 (the undiscounted four annual rental payments totaling \$12,000, plus the \$2,000 unguaranteed residual value). Note that the discounted amount of the \$2,000 unguaranteed residual value included in the receivable to determine the net investment must earn a return (14% in this case), as well as the remaining part of the net investment. Carlson records the Unearned Interest at \$2,850.94; thus, the net receivable is the cost of the equipment of \$11,149.06. Because the transaction is considered a disposal of an asset, Carlson also credits the Equipment account.

2. *Collection of Annual Payment for First Year on January 1, 2007*

Cash	3,000.00	
Lease Receivable		3,000.00

The payments are collected in advance. This journal entry reduces the net investment that will earn interest.

3. *Recognition of Interest Revenue for First Year on December 31, 2007*

Unearned Interest: Leases	1,140.87	
Interest Revenue: Leases		1,140.87

As we show in Example 21-12, the interest earned during 2007 is \$1,140.87.

The Carlson Bank would use the information we show in Example 21-12 to record the entries for the remaining years. At the end of the lease, there will be \$2,000 left in the Lease Receivable account. When Carlson receives the asset, it records it at the lowest of the cost, carrying value, or fair value. Carlson records a loss if the asset value is less than \$2,000. ♦

EXAMPLE 21-12 Summary of Lease Payments Received in Advance and Interest Revenue Earned by Carlson Bank (Lessor)

(1) Date	(2) Annual Lease Payment Received	(3) Interest Revenue at 14% on Net Investment ^a	(4) Lease Receivable ^b	(5) Unearned Interest: Leases ^c	(6) Net Investment ^d
January 1, 2007			\$14,000	\$2,850.94	\$11,149.06
January 1, 2007	\$3,000		11,000		8,149.06 ^e
December 31, 2007		\$1,140.87		1,710.07	9,289.93
January 1, 2008	3,000		8,000		6,289.93
December 31, 2008		880.59		829.48	7,170.52 ^e
January 1, 2009	3,000		5,000		4,170.52
December 31, 2009		583.87		245.61	4,754.39 ^e
January 1, 2010	3,000		2,000 ^f		1,754.39
December 31, 2010		245.61		0	2,000.00 ^f

a. Column 6 at beginning of year \times 14%

b. Annual lease payment \times Number of years remaining on lease + \$2,000 residual value, or Previous balance – Column 2

c. Previous balance – Column 3

d. Column 4 – Column 5

e. \$3,000 of each of these December 31 balances is a current asset; the remaining amount is a noncurrent asset

f. The estimated unguaranteed residual value

Initial Direct Costs Involved in a Direct Financing Lease

The accounting for initial direct costs incurred by the lessor is different for each of the main types of leases. Recall that for an operating lease, the lessor records these initial direct costs as an asset, allocates them as an operating expense over the term of the operating lease, and matches them against the rental revenue. For a direct financing lease, FASB Statement No. 91 states that the *initial direct costs* of a completed lease transaction

include incremental direct costs and certain other direct costs. *Incremental direct costs* include those costs that result directly from and are essential to the leasing transaction and would not have been incurred by the lessor if the transaction had not occurred. The *other direct costs* that may be included are those costs of the lessor related to evaluating the lessee's financial condition, negotiating terms, preparing and processing lease documents, and closing the transaction.¹⁴

Since the lessor does not recognize any revenue at the time it signs a direct financing lease, it does *not* expense the initial direct costs at that time. Therefore, there is no effect on net income at the time it records the direct financing lease. Instead, it defers the initial direct costs. This accounting procedure requires that the lessor determine a *new* (lower) implicit rate that will discount the remaining future minimum lease payments to the net investment at the inception of the lease.¹⁵ It expenses all other lease-related costs, such as the costs of advertising, servicing existing leases, unsuccessful lease originations, supervision, and administration, as incurred.

For example, if a lessor incurs initial direct costs of \$5,000 on a direct financing lease, it records the costs as follows:

Unearned Interest: Leases	5,000	
Cash, etc.		5,000

This entry results in appropriate matching because the initial direct costs are deferred and recognized over the lease term. The reduction in the Unearned Interest: Leases account increases the net investment, but the future cash flows remain unchanged, thereby lowering the implicit rate. The lower rate results in less interest revenue being recognized each period. This achieves the goal of deferring the initial direct costs and including them as a reduction of income over the life of the lease.

The calculation of the new implicit rate requires the use of compound interest techniques, as we discuss in the Time Value of Money module. Since we do not show the calculation, we assume a new implicit rate and list it in the related problems at the end of the chapter.

Sales-Type Leases (Lessor)

In a sales-type lease, like a direct financing lease, the lessor "sells" the asset and records a receivable.¹⁶ In contrast, however, in a sales-type lease the fair value of the asset that is "sold" is greater (or less) than its cost or carrying value. Thus, **the differences between a sales-type lease and a direct financing lease are the manufacturer's or dealer's (gross) profit or loss in a sales-type lease and the accounting for initial direct costs.** The manufacturer's or dealer's profit or loss is the difference between the following two items: (1) the present value of the minimum lease payments computed at the interest rate implicit in the lease (i.e., the sales price), and (2) the cost or carrying value of the asset plus any initial direct costs less the present value of the unguaranteed residual value accruing to the benefit of the lessor.¹⁷

Example: Sales-Type Lease Assume that on January 1, 2007 the York Company leases specialty equipment to the Lake Company with the terms and provisions of the lease we show in Example 21-13. The test in Example 21-14 shows that this lease qualifies as a sales-type lease.

14. "Accounting for Nonrefundable Fees and Costs Associated with Originating or Acquiring Loans and Initial Direct Costs of Leases," *FASB Statement No. 91* (Stamford, Conn.: FASB, 1987), par. 5–7. This *Statement* was clarified by *FASB Statement No. 98*.

15. *FASB Statement No. 13 as Amended and Interpreted through January 1990*, *op. cit.*, sec. L10.114.

16. A lessor may not classify a lease involving real estate as a sales-type lease unless the lease agreement provides for the transfer of title to the lessee at or shortly after the end of the lease term.

17. *FASB Statement No. 13 as Amended and Interpreted through January 1990*, *op. cit.*, sec. L10.113.

EXAMPLE 21-13 Terms and Provisions of Lease Agreement Between York Company (Lessor) and Lake Company (Lessee) Dated January 1, 2007

- The cost of the equipment is \$120,000. The fair value is \$190,008.49.
- No initial direct costs are incurred by the York Company.
- The term of the lease is 10 years, with annual payments of \$30,000 received at the beginning of each year. The estimated economic life of the equipment is also 10 years.
- The Lake Company agrees to pay all executory costs.
- The Lake Company is given an option to buy the equipment for \$500 at the end of the lease term, December 31, 2016. This is a bargain purchase option.
- The interest rate implicit in the lease is 12%.
- The present value of 10 payments of \$30,000 at 12% on an annuity-due basis, plus the present value of the bargain purchase option is \$190,008.49, calculated as follows:

Present value of 10 amounts in advance at 12% ($6.328250 \times \$30,000$)	=	\$189,847.50
Plus: Present value of \$500 discounted at 12% ($0.321973 \times \500)	=	160.99
Total present value	=	<u>\$190,008.49</u>

- The collectibility of the payments is reasonably assured, and there are no uncertainties involved in the lease.

Assuming that the York Company is a manufacturer or dealer in the specialty equipment being leased, it records the information relevant to the lease for 2007 as follows:

- Initial Recording of the Sales-Type Lease on January 1, 2007*

Lease Receivable	300,500.00	
Sales Revenue		190,008.49
Unearned Interest: Leases		110,491.51
Cost of Goods Sold	120,000.00	
Merchandise Inventory (or Equipment Held for Lease)		120,000.00

EXAMPLE 21-14 Application of Lease Classification Criteria by York Company (Lessor)

Classification Criteria	Criteria Met?	Remarks
Column A		
1. Transfer of ownership	No	
2. Bargain purchase option	Yes	
3. Lease term is 75% or more of economic life	Yes	100% of life
4. Present value of minimum lease payments is 90% or more of fair value	Yes	The present value is \$190,008.49, or 100% of estimated fair value
Column B		
1. Collectibility reasonably assured	Yes	
2. No uncertainties	Yes	

Decision: If the lease meets one or more of the Column A criteria and both of Column B criteria and there is a manufacturer's or dealer's profit or loss, it is a sales-type lease.

Conclusion: The lease is a sales-type lease, since appropriate criteria are met and there is a manufacturer's or dealer's profit because the amount used as the selling price (\$190,008.49) exceeds the cost (\$120,000). That is, the present (fair) value of the lease payments is greater than the cost of the property.

The first journal entry records the "sale." Because this lease contains a bargain purchase option, York (the lessor) records the lease receivable at the sum of the undiscounted annual rental payments (\$300,000) plus the undiscounted amount of the bargain purchase option (\$500). It records the \$190,008.49 sales revenue at the present value of the minimum lease payments, which is the present value of the annual payments (\$189,847.50), plus the present value of the bargain purchase option (\$160.99). The accounting for the bargain purchase option is the same as that for a guaranteed residual value since each is included in the minimum lease payments. Thus, the present value of the bargain purchase option (or a guaranteed residual value) is included as a part of the sales price of the equipment. The Unearned Interest: Leases amount of \$110,491.51 is the difference between the receivable of \$300,500 (the gross investment) and the sales revenue of \$190,008.49. In general, however, the Unearned Interest: Leases amount is the difference between the gross investment in the lease and the sum of the present value of the two components of the gross investment. That is, the present value of the minimum lease payments and the present value of the unguaranteed residual value accruing to the lessor (none in this example because of the bargain purchase option).

The second journal entry records the cost of goods sold at the assigned inventory cost (\$120,000) because there is no unguaranteed residual value. Thus the York Company reports a gross profit of \$70,008.49 (\$190,008.49 sales revenue – \$120,000 cost of goods sold) on this sales-type lease at the time of the transfer of the property.

2. *Collection of Annual Payment for First Year on January 1, 2007*

Cash	30,000.00	
Lease Receivable		30,000.00

The lease provisions require that payments are collected in advance at the beginning of each year. Also, remember that this collection reduces the net investment (the amount on which interest revenue is calculated) by \$30,000.

3. *Recognition of Interest Revenue for First Year on December 31, 2007*

Unearned Interest: Leases	19,201.02	
Interest Revenue: Leases		19,201.02

York amortizes the Unearned Interest: Leases account using the effective interest method. It recognizes interest as 12% of the net investment *after* the collection of the first rent, or \$19,201.02, calculated as follows:

$$12\% \times [(\$300,500 - \$30,000) - \$110,491.51] = \$19,201.02$$

As we discussed for a direct financing lease, York may prepare a schedule of the periodic interest revenue, similar to the one we show in Example 21-12.

York's journal entries for the following nine years will show a pattern similar to the preceding ones. After it records the entries for the tenth year, its net investment on December 31, 2016 will be \$500, the amount of the bargain purchase option. Also, as with a direct financing lease, since a sale is considered to have taken place, a lessor does not record any depreciation on the leased asset. The lessee typically would pay and record the executory costs. ♦

Initial Direct Costs Involved in a Sales-Type Lease

As we indicated previously, the accounting for the lessor's initial direct costs is different for each of the three main types of leases. In the preceding example of a sales-type lease, we assumed that there are no initial direct costs. If a lessor does incur initial direct costs on a sales-type lease, it expenses them in the same period.¹⁸ The lessor could include them in cost of goods sold, but since the initial direct costs primarily relate to a selling activity it may report them as a selling expense entitled Initial Direct Sales-Type Lease

18. *Ibid.*

Expense. Either procedure results in an appropriate matching of the costs against the revenue recognized.

Unguaranteed and Guaranteed Residual Values

As we discussed in the introduction to sales-type leases, the lessor deducts the present value of any *unguaranteed* residual value from the cost or carrying value of the asset when it recognizes the expenses associated with the signing of the lease. Note that the unguaranteed residual value is *not* included in sales revenue because it represents an item that is *not* sold.

The present value of any *guaranteed* residual value, on the other hand, is *not* subtracted from the expenses (e.g., cost of goods sold) and is included in sales. Since both the expense and the revenue items contain the present value of the guaranteed residual value, the gross profit is the same as for an unguaranteed residual value of the same amount. The sales revenue and expenses for a sales-type lease with an unguaranteed residual value are both reduced by the present value of the unguaranteed residual value. This method of accounting for the guaranteed residual value in a sales-type lease indicates that there has been a transfer of the risks and benefits to the lessee usually associated with ownership of an asset. Since the unguaranteed residual value accrues to the lessor, there has been a transfer of fewer ownership risks and benefits. Note, however, as we indicated earlier, this distinction does not prohibit a lease containing an unguaranteed residual value from qualifying as a sales-type lease.

Disclosure Requirements for the Lessor

FASB Statement No. 13 as Amended requires the lessor to make certain disclosures in its financial statements or the related notes. Exhibit 21-6 shows the basic disclosures for operating, direct financing, and sales-type leases for a lessor whose leasing activities are a significant part of its business activities.¹⁹

7 Understand disclosures by the lessor.

EXHIBIT 21-6 Disclosure Requirements for Lessor: Operating, Direct Financing, and Sales-Type Leases

- A. For operating leases:
 1. The cost and carrying amount, if different, of property on lease or held for leasing by major classes of property, and the amount of the total accumulated depreciation.
 2. Minimum future rentals on noncancelable leases for each of the five succeeding fiscal years and in total.
 3. Total contingent rentals included in income for each period.
- B. For direct financing and sales-type leases:
 1. The components of the net investment in direct financing and sales-type leases including:
 - a. The future minimum lease payments to be received, including any profit thereon.
 - b. The unguaranteed residual values accruing to the benefit of the lessor.
 - c. For direct financing leases only, initial direct costs.
 - d. Unearned income.
 2. Future minimum lease payments to be received for each of the five succeeding fiscal years and in total.
 3. Total contingent rentals included in revenue for each period.
- C. A general description of the lessor's leasing arrangements.

SUMMARY OF ACCOUNTING BY LESSEE AND LESSOR

The accounting issues involved in the various types of leases are numerous and sometimes complex. To assist in identifying the key issues involved, we include a summary of the accounting by the lessee and lessor in Exhibit 21-7.

19. *Ibid.*, sec. L10.119.

EXHIBIT 21-7 Summary of Accounting for Leases by the Lessee and the Lessor**LESSEE*****Operating Lease***

- Rent expense is recognized each period.

Capital Lease

- Leased property is recorded at the present value of the minimum lease payments.
- Lease obligation is recorded at the present value of the minimum lease payments.
 - The minimum lease payments are discounted at the lessee's incremental borrowing rate unless the lessor's implicit rate is both known and lower.
 - The leased property cannot be recorded at an amount that exceeds its fair value.
- Depreciation of the leased property
 - Over the economic life if the lease is capitalized under either of the following criteria:
 - the lease transfers ownership of the property to the lessee by the end of the lease term
 - the lease contains a bargain purchase option
 - Over the lease life if the lease is capitalized but does not meet either of the preceding criteria
 - Use the normal depreciation policy
- Interest expense is recognized by use of the effective interest method.

LESSOR***Operating Lease***

- Rent revenue is recognized each period.
- Property leased to others is depreciated using the normal depreciation policy.

Direct Financing Lease

- Lease receivable is recorded at the sum of the minimum lease payments plus the unguaranteed residual value (not discounted).
- Unearned interest is recorded at an amount equal to the gross investment in the lease minus the cost or carrying value of the leased property.
- Initial direct costs are deferred and amortized over the life of the lease.
- Interest revenue is recognized by use of the effective interest method.

Sales-Type Lease

- Lease receivable is recorded at the sum of the minimum lease payments plus the unguaranteed residual value (not discounted).
- Unearned interest is recorded at an amount equal to the gross investment in the lease minus the sum of the present value of the two components of the gross investment.
- Sales revenue is recorded at the present value of the minimum lease payments.
- Expenses that are recognized include the cost or carrying amount of the leased property, plus the initial direct costs, minus the present value of the unguaranteed residual value.
- Interest revenue is recognized by use of the effective interest method.

ADDITIONAL LEASE ISSUES

This section discusses how to report lease transactions on the statement of cash flows. It also discusses several conceptual issues regarding accounting for leases, as well as international differences.

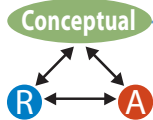
Statement of Cash Flows Disclosures

If a lessee records a lease as an operating lease, it classifies each lease payment as a cash outflow in the operating activities section of its statement of cash flows. If a lessee records a lease as a capital lease, it reports a noncash investing and financing activity at the signing of the lease agreement. For each lease payment, it classifies the interest portion as a cash outflow in the operating activities section, and the reduction of the lease obligation as a cash outflow in the financing activities section.

If a lessor records a lease as an operating lease, it classifies each lease receipt as a cash inflow in the operating activities section of its statement of cash flows. If a lessor records a lease as a direct financing lease, it classifies any cash paid to purchase the asset as a cash outflow in the investing activities section. Then, for each lease receipt, it classifies the interest portion as a cash inflow in the operating activities section, and the reduction of the lease receivable as a cash inflow in the investing activities section. If a lessor records a lease as a sales-type lease, it classifies any cash paid to purchase the asset as a cash outflow in the operating activities section. Then, for each lease receipt, it classifies the receipt as a cash inflow in the operating activities section.

Conceptual Evaluation of Accounting for Leases

8 Explain the conceptual issues regarding leases.



The four criteria used to determine if there is a capital lease are reasonable measures of whether the risks and benefits of ownership are transferred. Either of the first two criteria would be written into a lease agreement if both parties clearly wanted ownership of the leased property to transfer to the lessee. There is more controversy about the third and fourth criteria because they are fairly easy to avoid. For example, for the third criterion the economic life of the property may be “estimated” so that the lease life is less than 75% of that period. Note that for the fourth criterion, the inclusion of a guaranteed residual value in the lease agreement will typically result in a present value of the minimum lease payments that is equal to the fair value of the property. Therefore, companies will often try to find a way to effectively protect the lessor’s risk related to the residual value of the property without meeting the definition of a guaranteed residual value. This would make the present value of the minimum lease payments equal to less than 90% of the fair value of the property. For example, third-party guarantees of the residual value have been fairly widely used to ensure that the present value of the minimum lease payments is less than 90% of the fair value, while providing the lessor with an effective guarantee of the residual value.

These examples raise the issue of why the lessee and lessor may want to avoid a capital lease. The motivation usually comes from the lessee who wants to avoid reporting the liability on its balance sheet. The lessee apparently believes that a “stronger” balance sheet allows it either to borrow more money or to borrow money at a lower interest rate.



However, the lessee is required to disclose in the notes to its financial statements of the future cash flows each year for the next five years and all years thereafter. This allows the user to perform a present value calculation that determines the approximate amount of the balance sheet liability (and asset) that the lessee has avoided. Therefore, it appears that the lessee must assume that users do not read (or understand) the notes.

Many users believe that both the relevance and reliability of lease accounting would be enhanced by having a simple rule that requires capitalization of all leases with, say, a life of more than one year. However, companies lobbied not to have such a rule included in *FASB Statement No. 13*. Instead, the FASB opted for the four capitalization criteria. However, the *Statement* also has been criticized for being very “mechanical.” That is, the criteria used for capitalization are “absolutes” and are either met or not, thereby leaving no room for professional judgment.



SECURE YOUR KNOWLEDGE 21-3

- A lessor accounts for an operating lease as a rental agreement.
 - The lessor records rental revenue each period and includes the leased equipment on its balance sheet as part of property, plant, and equipment.

(continued)

- The lessor depreciates the leased equipment over its estimated economic life.
- Executory costs paid by the lessor are recorded as operating expenses and matched against rental revenue.
- Any initial direct costs (costs incurred from directly originating the lease) are recorded as an asset and amortized over the lease term.
- For a direct financing lease, the lessor removes the carrying value of the leased equipment and records a gross receivable equal to the undiscounted minimum lease payments plus any unguaranteed residual value. The difference between the gross receivable and the carrying value of the leased property is recorded as unearned interest revenue (a contra-account to the lease receivable).
 - The gross receivable includes the residual value, whether it is guaranteed or unguaranteed.
 - Executory costs are not included in the gross receivable or the present value calculations.
 - The lessor's net investment in the lease (the lease receivable less unearned revenue) is reported as current or noncurrent using the present value of next year's payments approach or the change in present value approach.
 - Interest revenue is recorded each period and is computed using the effective interest method based on the interest rate implicit in the lease.
 - Any initial direct costs are deferred and recognized over the lease term by reducing unearned interest revenue based on a newly computed implicit interest rate.
- For a sales-type lease, the lessor recognizes a manufacturer's or dealer's profit or loss at the inception of the lease in addition to interest revenue over the lease term (like in a direct financing lease).
 - The manufacturer's or dealer's profit is measured as the difference between (1) the present value of the minimum lease payments (sales revenue) and (2) the cost of the asset less the present value of the unguaranteed residual value (cost of goods sold).
 - If the residual value is guaranteed by the lessee, the present value of this amount is not subtracted from the cost of the asset and is included in sales revenue.
 - Any initial direct costs are expensed at the inception of the lease.



LINK TO INTERNATIONAL DIFFERENCES

International accounting standards for leases are generally similar to U.S. standards. However, international standards focus more on the *substance* of the agreement rather than the *form* as defined by the four criteria in the U.S. standards. For this reason, international standards are generally less detailed and are considered more principles-based, while U.S. standards have more extensive form-driven requirements and are generally considered rules-based. Terminology differences exist. For example, under international standards, a lease is classified as either a finance lease or an operating lease. Under a finance lease, capitalization is required when substantially all of the risks and rewards of ownership are transferred, as demonstrated by several examples or indicators. While the first two indicators are very similar to U.S. standards, the third indicator is less precise because it states that "the lease term is for a major part of the asset's useful life," as compared to the 75% used in the United States. The fourth indicator also differs from the U.S. criterion in that it states that "the present value of the lease payments is equal to or greater than the fair value of the asset," as compared to the 90% used in the United States. Finally, international standards contain other indicators that are not specified under U.S. standards. U.S. standards also contain more detailed disclosures related to lease maturities.

9 Understand lease issues related to real estate, sale-leaseback issues, leveraged leases, and changes in lease provisions.

APPENDIX: SPECIALIZED LEASE ISSUES AND CHANGES IN LEASE PROVISIONS

Some companies engage in specialized leases. We discuss three specialized lease issues briefly in this Appendix: (1) real estate leases, (2) sales-leaseback transactions, and (3) leveraged leases. Other companies may be involved in lease agreements whose provisions are modified. We also briefly discuss changes in lease provisions.

LEASE ISSUES RELATED TO REAL ESTATE

In the main portion of this chapter we considered only the leasing of personal property (the example we used was equipment). Special issues are involved in the classification of leases that include land, either alone or in combination with buildings or equipment.²⁰ We show the differences in the classification of leases involving real estate in Exhibit 21-8.

Lease of Land Only

If land is the only item of property leased, the lessee accounts for the lease as a capital lease only if the lease transfers ownership at the end of the lease, or includes a bargain purchase option. Otherwise, the lessee accounts for the lease as an operating lease. (The criteria dealing with the 75% of the estimated economic life and the 90% of the fair value of the leased property do *not* apply because the asset would have to be depreciated over the lease life. Such a situation would be inappropriate for land.) The lessee does *not* depreciate the asset, Leased Land Under Capital Leases, because title to the land is expected to be transferred, and land is not subject to depreciation. The lessor accounts for the lease of land as a sales-type lease if (1) the lease transfers ownership or contains a bargain purchase option, (2) the lease meets both the collectibility and uncertainty criteria, and (3) there is a dealer's profit or loss. If the criteria for a sales-type lease are met with the exception that there is no dealer's profit or loss, then the lease qualifies as a direct financing one. Otherwise, it is an operating lease.

Lease of Both Land and Buildings That Transfers Title or Contains a Bargain Purchase Option

When both land and buildings are leased, a new issue arises as to the classification of the lease because one portion involves a depreciable asset with an estimated economic life and the other involves a nondepreciable asset. This lease is accounted for either as: (1) a lease of both land and buildings that meets criteria 1 and 2 of Column A (Part I) of Exhibit 21-8, or (2) a lease of both land and buildings that does *not* meet either criterion 1 or 2.

Lessee's Accounting

For a capital lease of land and buildings that transfers ownership or that contains a bargain purchase option, the lessee allocates the present value of the minimum lease payments between the two leased assets in proportion to their fair values at the inception of the lease (Exhibit 21-8, IIIA). It depreciates the amount assigned to Leased Buildings over the estimated economic life of the buildings. It does *not* depreciate the amount assigned to Leased Land.

Lessor's Accounting

The lessor accounts for the lease as a single unit, either as a direct financing, a sales-type, or an operating lease. The term **single unit** means that for a sales-type or direct financing

20. FASB Statement No. 13 as Amended and Interpreted through January 1990, *op. cit.*, sec. L10.120-.124.

EXHIBIT 21-8 Classification of Leases Involving Real Property**I. General Criteria for Classifying Leases**

(Brief titles are given in this exhibit; see Exhibit 21-2 for fuller titles)

Column A Criteria Applicable to Both Lessees and Lessors	Column B Criteria Applicable to Lessors Only
<ol style="list-style-type: none"> 1. Transfer of ownership 2. Contains bargain purchase option 3. Lease term is 75% or more of economic life 4. Present value of minimum lease payments is 90% or more of fair value 	<ol style="list-style-type: none"> 1. Collectibility reasonably assured 2. No uncertainties
II. Lease of Land Only	
A. Lessee	B. Lessor
<ol style="list-style-type: none"> 1. Capital lease. Lease must meet either criterion 1 or 2 in Column A (Part I). (Criteria 3 and 4 are <i>not</i> applicable.) 2. Operating lease. Lease must not meet either criterion 1 or 2 in Column A (Part I). 	<ol style="list-style-type: none"> 1. Sales-type lease. Lease must <ol style="list-style-type: none"> a. Meet either criterion 1 or 2 in Column A (Part I), <i>and</i> b. Meet both criteria in Column B (Part I), <i>and</i> c. Results in a dealer's profit or loss. 2. Direct financing lease. Lease must meet <ol style="list-style-type: none"> a. Either criterion 1 or 2 in Column A (Part I), <i>and</i> b. Both criteria in Column B (Part I). 3. Operating lease. Lease that does <i>not</i> qualify as a sales-type or direct financing lease.
III. Lease of Both Land and Buildings	
A. Lease of both land and buildings that transfers ownership or contains a bargain purchase option	
1. Lessee	2. Lessor
<ol style="list-style-type: none"> a. Capital lease. The lease is a capital lease since one or more of the criteria of Column A (Part I) are met. Land and buildings are separately capitalized. 	<ol style="list-style-type: none"> a. Sales-type lease. The two assets, land and buildings, are considered as a single unit and the lease must <ol style="list-style-type: none"> (1) Meet either criterion 1 or 2 in Column A (Part I), <i>and</i> (2) Meet both criteria in Column B (Part I), <i>and</i> (3) Results in a dealer's profit or loss. b. Direct financing lease. The lease of the two assets combined must meet <ol style="list-style-type: none"> (1) Either criterion 1 or 2 in Column A (Part I), <i>and</i> (2) Both criteria in Column B (Part I).
B. If lease meets neither criterion 1 nor criterion 2 in Column A (Part I), and if fair value of land is less than 25% of fair value of both land and buildings. (The land portion is ignored and the classification is determined using the characteristics of building.)	
1. Lessee	2. Lessor
<ol style="list-style-type: none"> a. Capital lease. Lease must meet either criterion 3 or 4 in Column A (Part I). b. Operating lease. Lease meets none of the criteria in Column A (Part I). 	<ol style="list-style-type: none"> a. Sales-type lease. Lease must <ol style="list-style-type: none"> (1) Meet either criterion 3 or 4 in Column A (Part I), <i>and</i> (2) Meet both criteria in Column B (Part I), <i>and</i> (3) Results in a dealer's profit or loss. b. Direct financing lease. Lease must meet <ol style="list-style-type: none"> (1) Either criterion 3 or 4 in Column A (Part I), <i>and</i> (2) Both criteria in Column B (Part I). c. Operating Lease. Lease that does <i>not</i> qualify as a sales-type or direct financing lease.
C. If lease meets neither criterion 1 nor criterion 2 in Column A (Part I), and if fair value of land is more than 25% of fair value of both land and buildings. (The lease is separated into land and building portions.)	
1. Lessee	2. Lessor
<ol style="list-style-type: none"> a. Land portion. Always an operating lease. b. Building portion. Classified by remaining criteria of Column A (Part I). 	<ol style="list-style-type: none"> a. Land portion. Always an operating lease. b. Building portion. Classified by remaining criteria of Columns A and B (Part I).

lease, the lessor uses one Lease Receivable account to record the appropriate values for the lease of both land and buildings. In the original lease entry, however, the lessor credits both the land and the buildings accounts.



Credit: ©Tony Freeman/Photo Edit

Lease of Land and Buildings That Does Not Transfer Title or Contain a Bargain Purchase Option

Value of Land Is Less Than 25%

If a lease of land and buildings does not transfer ownership or contain a bargain purchase option, it is a capital lease if it meets one of the other two criteria. If the fair value of the land is less than 25% of the total fair value of the leased property at the inception of the lease, the land is considered to be immaterial. Therefore, *both* the lessee and the lessor treat the land and buildings as a single unit. Note that the estimated economic life of the building is used as the economic life of the unit.

1. *Lessee's Accounting.* If either criterion 3 or 4 of Column A (Part I) of Exhibit 21-8 is met, the lessee classifies the lease as a capital lease and recognizes the leased land and buildings as a single asset. It depreciates the total amount over the term of the lease, even though it is implicitly depreciating the land portion of the asset. If the lease does not meet any of the criteria in Column A (Part I), it is an operating lease.
2. *Lessor's Accounting.* If the lease meets either criterion 3 or 4 of Column A (Part I) of Exhibit 21-8 and both of the criteria of Column B (Part I), the lessor accounts for the lease as a single unit, as either a direct financing or a sales-type lease as appropriate. Otherwise, the lease is an operating lease.

Value of Land Is More Than 25%

On the other hand, if at the inception of the lease, the land represents 25% or more of the fair value of the leased property, the amount of the land is considered to be a material amount. Then, both the lessee and the lessor must treat the land and the buildings separately for purposes of applying the criteria listed in Exhibit 21-8. In this case, the lessee and lessor separate the minimum lease payments into amounts applicable to land and to buildings. Since the lease of the land results in an operating lease, the best way to make the

preceding calculation is to determine the fair value of land, and then use the appropriate interest rate to determine the periodic minimum lease payments applicable to the land portion, as follows:

$$\text{Incremental Borrowing Rate} \times \text{Fair Value of Land} = \text{Periodic Minimum Lease Payment Applicable to Land}$$

The periodic minimum lease payments applicable to both land and buildings, less the amount calculated, is the amount attributed to the buildings.

1. *Lessee's Accounting.* Once the amount assigned to the buildings is determined, if the building portion of the lease meets either criterion 3 or 4 of Column A (Part I) of Exhibit 21-8, the lessee accounts for it as a capital lease. The lessee depreciates the present value amount assigned to the asset, Leased Buildings, over the life of the lease. It accounts for the land portion of the lease separately as an operating lease. Therefore, if the buildings portion of the lease meets neither criterion 3 nor 4 of Column A (Part I) of Exhibit 21-8, the lessee accounts for both the buildings and the land as a single operating lease.
2. *Lessor's Accounting.* If the buildings portion of the lease meets either criterion 3 or 4 of Column A (Part I) and both criteria of Column B of Exhibit 21-8, the lessee accounts for the lease as a direct financing or sales-type lease, depending on whether there is a manufacturer's or dealer's profit or loss. It accounts for the land portion of the lease separately as an operating lease. If the buildings portion of the lease does not meet the relevant criteria, the lessor accounts for both the buildings and land as a single operating lease.

Lease Involving Equipment as Well as Real Estate

If a lease involves both equipment and real estate, the portion of the minimum lease payments for the equipment portion of the lease is estimated. The equipment then is treated separately when applying the criteria we list in Exhibit 21-8. It is accounted for separately according to its classification by both the lessee and lessor. The accounting for the remaining real estate portion follows the accounting standards described in the preceding section.

SALE-LEASEBACK ISSUES

If a company has limited cash or decides it does not want to be responsible for owning the property, it may sell an asset (often land and buildings, but not real property exclusively) and then immediately lease it back from the buyer. This kind of transaction may be advantageous to both the lessee and lessor: The lessee receives cash from the sale that is needed for its activities, and may derive a tax advantage. The lessor acquires an asset.

The sale of the asset and the leaseback are considered to be a single transaction that is like a secured loan, with the creditor obtaining legal title to the asset. The sales price of the asset, any profit earned, and the minimum lease payments must be considered together. If the lease meets one of the criteria for treatment as a capital lease (see Exhibit 21-2), the seller-lessee accounts for the lease as a capital lease²¹. Otherwise, it accounts for the lease as an operating lease. It defers any profit on the sale. If the lease is a capital lease, the lessee amortizes the profit in proportion to the depreciation of the leased asset. If the lease is an operating lease, the lessee amortizes the profit in proportion to the payments over the period of time it expects the asset to be used. However, when the fair value of the property

21. A sale-leaseback transaction involving real estate must qualify as a sale under the provisions of *FASB Statement No. 66, "Accounting for Sales of Real Estate."*

at the time of the transaction is less than its undepreciated cost, it *recognizes a loss immediately* up to the amount of the difference between the undepreciated cost and fair value.²²

Lessor's Accounting Issues

The purchaser-lessor follows the principles we discussed in the preceding sections to account for the purchase of the asset and the immediate lease of it back to the seller. From the lessor's point of view, no new issues are involved, so we do not show its accounting here.

Lessee's Accounting Issues

If the lease meets at least one of the four criteria in Column A of Exhibit 21-2, the seller-lessee accounts for the lease as a capital lease. If none of the criteria are met, the seller-lessee accounts for the lease as an operating lease. The accounting for the main provisions of the lease follows the procedures we already illustrated. The primary new issue from the lessee's viewpoint is the accounting for the profit or loss on the sale of the property by the seller-lessee.

Example: Sale-Leaseback (Lessee Accounting) Assume that on January 1, 2007 the High Point Railroad built ten boxcars costing \$400,000. Because of a cash flow problem resulting from this new acquisition, High Point decided to sell these boxcars immediately to Landlord Company for \$600,000, and then lease them back under the conditions we show in Example 21-15.

EXAMPLE 21-15 Terms and Provisions of Lease Agreement Between Landlord Company and High Point Railroad Dated January 1, 2007

1. The cost of the boxcars to High Point Railroad (the seller-lessee) is \$400,000. The selling price to Landlord Company (the purchaser-lessor) is \$600,000; thus, this amount becomes the new cost of the equipment to the seller-lessee.
2. The term of the lease is 15 years, with annual payments of \$92,771.13 in advance at the beginning of each year. The estimated economic life of the equipment is 20 years, with no expected residual value at the end of this time. (The residual value at the end of 15 years is not considered because title passes at that time.)
3. The High Point Railroad agrees to pay all executory costs.
4. Title to the boxcars will be transferred to the seller-lessee at the end of lease term.
5. The interest rate implicit on the lease is 16%. High Point Railroad knows this rate, and the rate equals its incremental borrowing rate.
6. The present value of 15 payments of \$92,771.13 at 16% on an annuity-due basis is \$600,000, calculated as follows:

$$\begin{aligned} \text{Present value of 15 amounts in advance at 16\%} &= 6.467529 \times \$92,771.13 \\ &= \underline{\underline{\$600,000}} \text{ (rounded)} \end{aligned}$$

7. The lease qualifies as a capital lease to High Point Railroad, since it meets the criteria stated in Exhibit 21-2.

Typical journal entries to record the information related to the preceding sale-leaseback for High Point Railroad (the seller-lessee) for 2007 are as follows:

1. *Sale of the Boxcars to Landlord Company on January 1, 2007*

Cash	600,000.00	
Boxcars		400,000.00
Unearned Profit on Sale-Leaseback		200,000.00

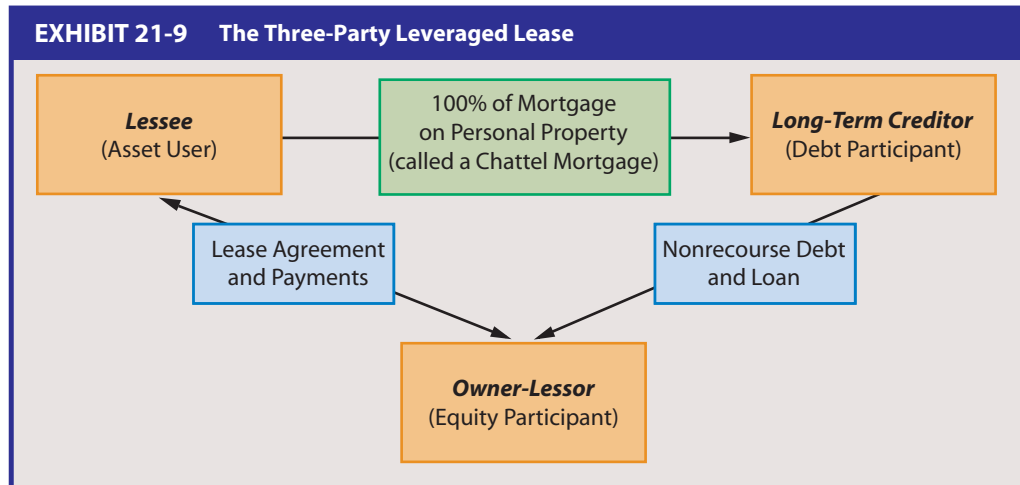
22. FASB Statement No. 13 as Amended and Interpreted through January 1990, *op. cit.*, sec. L10.129.

2. *Initial Recording of the Leaseback as a Capital Lease on January 1, 2007*
- | | | |
|--------------------------|------------|------------|
| Leased Boxcars | 600,000.00 | |
| Capital Lease Obligation | | 600,000.00 |
3. *Annual Payment on January 1, 2007*
- | | | |
|--------------------------|-----------|-----------|
| Capital Lease Obligation | 92,771.13 | |
| Cash | | 92,771.13 |
4. *Payment of Executory Costs on Various Dates in 2007 (amounts assumed)*
- | | | |
|---------------------------------|----------|-----------|
| Insurance Expense | 2,600.00 | |
| Repairs and Maintenance Expense | 2,300.00 | |
| Property Tax Expense | 9,700.00 | |
| Cash | | 14,600.00 |
5. *Recording Depreciation of Boxcars on December 31, 2007*
- | | | |
|--|-----------|-----------|
| Depreciation Expense: Leased Boxcars | 30,000.00 | |
| Accumulated Depreciation: Leased Boxcars | | 30,000.00 |
- High Point uses the straight-line method and a life of 20 years because ownership is transferred at the end of the lease. Depreciation for 2007 is \$30,000 ($\$600,000 \div 20$).
6. *Amortization of Unearned Profit on Sale-Leaseback on December 31, 2007*
- | | | |
|--|-----------|-----------|
| Unearned Profit on Sale-Leaseback | 10,000.00 | |
| Profit on Sale-Leaseback (or Depreciation Expense: Leased Boxcars) | | 10,000.00 |
- The amortization is \$10,000 ($\$200,000 \div 20$). Note that High Point amortizes the Unearned Profit on Sale-Leaseback and recognizes the profit over a 20-year period. For a capital lease, *FASB Statement No. 13 as Amended* requires that a seller-lessee recognize any profit using the same rate that it used to depreciate the Leased Boxcars. For an operating lease, the seller-lessee defers such profit (or loss) and amortizes the amount in proportion to the lease payments over the period it expects to use the leased assets. A loss would be recorded by the seller-lessee if the book value or carrying amount were larger than the fair value of the asset. The seller-lessee recognizes the entire amount of this loss in the year of the sale-leaseback.
7. *Recognition of Interest Expense on December 31, 2007*
- | | | |
|--------------------------|-----------|-----------|
| Interest Expense | 81,156.62 | |
| Capital Lease Obligation | | 81,156.62 |
- This year-end adjusting entry is the same as that made for any capital lease for which the payment is made in advance. High Point calculates the amount as $\$81,156.62 [16\% \times (\$600,000 - \$92,771.13)]$. ♦

Leveraged Leases

A leveraged lease is a special arrangement involving three different participants to the agreement: (1) the equity participant (the owner-lessor); (2) the asset user (the lessee); and (3) the debt participant (the long-term creditor who provides nonrecourse financing for the leasing transaction between the lessee and lessor). Exhibit 21-9 shows the inter-related activities of the three parties to a leveraged lease. If the owner-lessor buys the equipment from a manufacturer, a fourth party to the transaction would be involved.

The SEC estimates that public companies have approximately \$1.3 trillion of cash flow commitments for leases. Many of these leases are leveraged leases. Leveraged leasing arrangements began in the late 1960s and have grown rapidly since then. The lease is



designed to provide income tax benefits to the three parties involved in the transaction. The lessor may be able to retain various tax credits, and also can immediately recognize all the cost of the asset as an income tax deduction. The lessee receives the right to income tax deductions for the rent of land, buildings, and other personal property. The creditor receives the tax protection provided for the leveraged lease contract.

From the standpoint of the lessee, no new accounting issues arise. It classifies a leveraged lease and accounts for it in the same way as a nonleveraged lease. *FASB Statement No. 13 as Amended* requires that the lessor classify a leveraged lease as a direct financing lease, since no manufacturer's or dealer's profit can arise from the transaction and therefore it cannot be classified as a sales-type lease.²³

The lessor records its investment in a leveraged lease net of the nonrecourse debt, which usually consists of the (1) rental receivables, net of that portion applicable to the nonrecourse debt; (2) amount of any tax credits to be realized on the transaction; (3) estimated residual value of the leased asset; and (4) reduction for the unearned revenue items. Since leveraged leases are complex financial arrangements that vary in structure, the lessor's accounting for them is also complex and is beyond the scope of the book.²⁴

CHANGES IN LEASE PROVISIONS

As we discussed earlier, lease contracts are written with many provisions, including renewal, extension, or purchase options, and penalties. Lessees and lessors may opt to change certain provisions that, in effect, change the classification of the lease. If at any time the lessee and lessor change a lease (other than by renewing or extending its term) so that the lease would have been classified differently *had the changed terms been in effect at the beginning of the lease term*, the revised agreement is considered a new agreement. The new agreement is reclassified as operating, direct financing, or sales-type, according to the criteria in Exhibit 21-2.

FASB Statement No. 13 as Amended also addresses the issue of renewals and extensions. A change in an operating lease to a direct financing or sales-type lease presents the fewest issues, since the accounting for the new lease would be similar to that described earlier in the chapter. The most complex issue involves a change in either a sales-type or direct financing lease. We briefly discuss some of the possible lease provision changes in the following sections.

23. *Ibid.*, sec. L10.144.

24. See Appendix E of *FASB Statement No. 13 as Amended and Interpreted through January 1990*, sec. L10.161, for an illustration of the accounting and financial statement presentation of leveraged leases.

Review of Estimated Unguaranteed Residual Value

A lessor reviews the estimated unguaranteed residual value annually. It *ignores* any upward adjustments in the estimated value, but must record any downward adjustment as a reduction in its net investment and a loss in the period. This recognition involves the calculation of a new implicit interest rate.

Impact of Renewal of Lease on Guarantee of Residual Value

Suppose, for example, a lessee records a lease as a capital lease while the lessor records it as a direct financing lease, and the lease contains a guarantee of the residual value of the leased property. If at the end of the lease term the lessee elects to renew the lease, this election would cancel the guarantee of residual value. The renewal, however, is *not* treated as a new agreement, because there is no change in the lease classification. The lessee adjusts the remaining balances of the asset and obligation from the original lease. The amount of the adjustment is equal to the difference between the present value of the future minimum lease payments under the new renewal agreement and the existing present balance of the obligation.

Changes to Sales-Type or Direct Financing Lease Prior to Lease Term Expiration That Change the Lease to an Operating Lease

If changes are made in either sales-type or direct financing lease provisions before the expiration of the lease, and if these changes would have caused the original agreement to be classified as an operating lease, the lessor removes the remaining net investment from its accounts. It replaces the Lease Receivable with an asset at its original cost, fair value, or carrying amount, whichever is lowest, and reports any net adjustment as an operating loss in the period of change. It then accounts for the new lease as any other operating lease.

An exception occurs when a guarantee or penalty becomes inoperative. In this case, if the renewal or extension results in an operating lease, the lessor continues to account for the existing lease as either a sales-type or direct financing lease (depending on the original classification) to the end of its original term. It then accounts for the renewal or extension as any other operating lease. The accounting by the lessee follows a similar pattern.

Renewal of Sales-Type or Direct Financing Lease Resulting in a New Lease That Qualifies as a Sales-Type Lease

The accounting for a renewal of sales-type and direct financing leases that results in a lease that qualifies again as a sales-type lease has been debated by the FASB since it originally issued *FASB Statement No. 13*. The original *FASB Statement No. 13* clearly indicated that when an existing sales-type or direct financing lease is renewed, the lessor could *not* classify the renewal lease as a sales-type lease even though it meets the necessary criteria. This renewal lease had to be treated as a direct financing lease. *FASB Statement No. 13 as Amended* qualifies the prior position. If the renewal takes place *during the term* of the lease, the position of the original *FASB Statement No. 13* will be followed. If the renewal takes place *at the end* of the lease (or during the last few months of the existing lease), the lease change can qualify as a sales-type lease. We discuss these two renewal situations briefly.

Renewal Occurring During Lease Term

The FASB concluded that if a lessor treated a renewal of a sales-type or direct financing lease as a sales-type lease at the time of an interim renewal, a “second sale” would result in recognition of revenue before its realization. For this reason, *FASB Statement No. 13 as Amended* requires that a lessor classify a renewal of an existing sales-type or direct financing lease that *otherwise qualifies as a sales-type lease* as a direct financing lease if the lease change occurs *during the term* of the lease.

Renewal Occurring at End of Lease Term

The FASB then altered its position regarding this type of lease change. It concluded that if the renewal occurred at the end of the lease term, and if the new agreement qualified as a sales-type lease (according to criteria stated in Exhibit 21-2), the lessor accounts for the renewal as a sales-type lease at the end of the original term of the existing lease.

Many other changes may be made in lease terms. These often involve complex changes in accounting and, thus, require careful consideration. The preceding discussion indicates the scope of the issues. An accountant faced with new changes should study carefully all current standards before taking action on a particular change.

SUMMARY

At the beginning of the chapter, we identified several objectives you would accomplish after reading the chapter. The objectives are listed below, each followed by a brief summary of the key points in the chapter discussion.

1. **Explain the advantages of leasing.** For the lessee, a lease may involve financing benefits, a risk benefit, a tax benefit, a financial reporting benefit, and a billing benefit. For the lessor, a lease may involve the benefits of indirectly making a sale, and an alternative means of obtaining a profit opportunity.
2. **Understand key terms related to leasing.** The key terms related to leasing are included in Exhibit 21-1.
3. **Explain how to classify leases of personal property.** A lessee classifies a lease as a capital lease if it meets any one of the four capitalization criteria (listed in Exhibit 21-2), and as an operating lease if it meets none of the four criteria. A lessor classifies a lease as a sales-type lease if it meets any one of the four capitalization criteria, both of the additional criteria, and involves a manufacturer's or dealer's profit or loss. A lessor classifies a lease as a direct financing lease if it meets any one of the four capitalization criteria, both of the additional criteria, and does not result in a manufacturer's or dealer's profit or loss. A lessor classifies a lease as an operating lease if it meets none of the four criteria.
4. **Account for a lessee's operating and capital leases.** A lessee accounts for an operating lease by expensing the periodic lease payments. For a capital lease, the lessee records an asset and a liability equal to the present value, at the beginning of the lease term, of the minimum lease payments during the lease term. The discount rate is the lower of the lessee's incremental borrowing rate or the lessor's implicit rate if known and lower. The lessee depreciates the asset over its economic life if the lease contained a transfer of ownership or a bargain purchase option. Otherwise, the lessee uses the lease life. The lessee computes interest expense using the effective interest rate, and reduces the lease obligation for the difference between the cash paid and the interest expense.
5. **Understand disclosures by lessees.** The disclosure requirements of the lessee are summarized in Exhibit 21-5. Among the most important are the future minimum lease payments for each of the succeeding five years and in total, separately reported for its operating and capital leases.
6. **Account for a lessor's operating, direct financing, and sales-type leases.** A lessor accounts for an operating lease by recording the amounts of the periodic lease receipts as revenue. It also reports the asset on its balance sheet and records depreciation on the asset. For a direct financing lease, the lessor records a receivable at the undiscounted minimum lease payments plus any unguaranteed residual value. The difference between the receivable and the carrying value of the leased property is recorded as a contra-account to the receivable. The lessor computes interest revenue on a direct financing lease using its implicit interest rate. For a sales-type lease, the lessor records a receivable at the undiscounted minimum lease payments plus any unguaranteed residual value. It records a contra-account to the receivable as the difference between the gross receivable and the present value of the components of the receivable. The lessor also expenses the cost or carrying value of the property, plus any initial direct costs, minus the present value of any unguaranteed residual value. The lessor computes interest revenue on a sales-type lease using its implicit interest rate.
7. **Understand disclosures by lessors.** The disclosure requirements of the lessor are summarized in Exhibit 21-6. Among the most important are the future minimum lease payments for each of the succeeding five years and in total, separately for operating and capital leases.
8. **Explain the conceptual issues regarding leases.** The primary conceptual issue is whether the four capitalization criteria appropriately measure the transfer of the risks and benefits of ownership. A related issue is whether it is too easy for a lessee to avoid meeting any of the criteria and therefore not reporting the lease liability (and asset) on its balance sheet.

9. **Understand lease issues related to real estate, sales-leaseback issues, leveraged leases, and changes in lease provisions (Appendix).** Leases of real estate follow special rules that are summarized in Exhibit 21-8. The primary issue in a sales-leaseback is that the seller-lessee recognizes a loss in the period of the transaction, but defers any gain and amortizes it over the remaining life of the lease. Leveraged leases involve three parties: the lessor, the lessee, and a long-term creditor who provides nonrecourse financing for the leasing transaction. When the lease provisions are changed in such a way that the lease would have been classified differently had the changed terms been in effect at the beginning of the lease term, the revised agreement is considered a new agreement.

ANSWERS TO REAL REPORT QUESTIONS

Real Report 21-1 Answers

- Operating leases provide many benefits to the lessee. The use of long-term operating leases for stores and equipment may provide Wal-Mart considerable flexibility. For example, the renewal options allow Wal-Mart to continue to operate profitable locations, and for less profitable locations, the company may have lower expenses due to contingent rentals while relocating these stores can be accomplished relatively easily by choosing not to exercise renewal options. Such flexibility can be a significant reduction in the company's risk. In addition, the use of operating leases provides a financial reporting benefit in that the lease does not add an asset or liability to Wal-Mart's balance sheet which generally results in "better" debt and return ratios.
- The present value of the minimum lease payments for Wal-Mart's capital leases is \$3,792 million. This amount is included in the liability section of Wal-Mart's balance sheet with a portion classified as a current liability and a portion classified as a noncurrent liability (based on either the present value of next year's payments approach or the change in present value approach). In addition, the present value of the minimum lease payments at the inception of the lease

less accumulated depreciation is included in the property, plant, and equipment section of the balance sheet.

- The classification of Wal-Mart's operating leases as capital leases would result in a deterioration of Wal-Mart's debt ratio. The current debt ratio is 58.9% ($\$70,827 \text{ million} \div \$120,223 \text{ million}$). Assuming a rate of interest of 10%, annual lease payments in advance, and a lease term of 15 years, assets and liabilities would be increased by the present value of the lease payments of approximately \$5,160 million (see calculations in the following table). This would result in an increase in Wal-Mart's debt ratio to 60.6% ($\$75,987 \text{ million} \div \$125,383 \text{ million}$).

Payment Schedule (in millions)

Year	Payment	Present Value
2006	\$730	\$ 730.00
2007	700	636.36
2008	626	517.36
2009	578	434.26
2010	530	362.00
Thereafter	591*	2,480.32
		<u>\$5,160.30</u>

* ($\$5,908 \div 10 \text{ years}$)

QUESTIONS

Q21-1 What does *FASB Statement No. 13 as Amended* provide in reference to the measuring and reporting of leases?

Q21-2 List seven advantages to the lessee of leasing, as compared with purchasing, an asset.

Q21-3 Assume that a lessee leases equipment and insists on terms that qualify it as an operating lease, barely escaping the qualification as a capital lease. Discuss the impact that such an operating lease has on financial statements and related financial information as compared to the effect that a capital lease would have.

Q21-4 Define the following terms: (a) *lease*, (b) *sales-type lease*, (c) *direct financing lease*, (d) *sale-leaseback transaction*, (e) *operating lease*, (f) *leveraged lease*.

Q21-5 Define the following terms used in *FASB Statement No. 13 as Amended*: (a) *inception of lease*, (b) *bargain purchase option*, (c) *unguaranteed residual value*, (d) *implicit interest rate*, (e) *initial direct costs*.

Q21-6 What components make up the minimum lease payments of a typical capital lease?

Q21-7 List the four criteria used to determine if a lease is classified as a capital lease by the lessee.

Q21-8 Describe briefly the accounting procedures followed by the lessor and by the lessee for an operating lease.

Q21-9 Describe briefly the procedures followed by the lessee to account for a capital lease.

Q21-10 From the standpoint of the lessor, a sales-type lease must meet one or more of the criteria of a capital lease as well as two additional criteria. Name these two additional criteria.

Q21-11 What is the basic difference between the accounting procedures used by a lessor for a sales-type lease and those used for a direct financing lease?

Q21-12 Why are compound interest concepts appropriate and applicable in accounting for a direct financing lease?

Q21-13 The Owens Company leased equipment for four years at \$50,000 a month, with an option to renew the lease for six years at \$2,000 per month or to purchase the equipment for \$25,000 (a price considerably less than the expected fair value) after the initial lease term of four years. How does Owens Company record this transaction?

Q21-14 McFarland Corporation leased equipment under a lease calling for the payment of \$50,000 a year in rent. At

the end of the current year, when the capital lease had a remaining term of 20 years, McFarland Company sub-leased the asset for a rental of \$75,000 a year for 20 years. The new lease is acceptable to the lessor, who agrees that McFarland Company has completed its primary obligation. When will McFarland Company report the gain from this transaction? Explain.

Q21-15 (a) What disclosures are lessees required to make? (b) What disclosures are lessors required to make for various types of leases?

Q21-16 (Appendix) From the point of view of the seller-lessee, what is the primary accounting issue involved in accounting for a sale-leaseback transaction as compared to other lessee transactions? Discuss.

Q21-17 (Appendix) What distinguishes a leveraged lease from other leases? What, if any, is the major difference in the accounting of the lessee for a leveraged lease?

MULTIPLE CHOICE (AICPA Adapted)

Select the best answer for each of the following.

M21-1 The present value of the minimum lease payments should be used by the lessee in the determination of a(an)

	Capital Lease Liability	Operating Lease Liability
a.	Yes	No
b.	Yes	Yes
c.	No	Yes
d.	No	No

M21-2 East Company leased a new machine from North Company on May 1, 2007 under a lease with the following information:

Lease term	10 years
Annual rental payable at beginning of each lease year	\$40,000
Useful life of machine	12 years
Implicit interest rate	14%
Present value factor for an annuity of 1 in advance for 10 periods at 14%	5.95
Present value factor for 1 for 10 periods at 14%	0.27

East has the option to purchase the machine on May 1, 2017 by paying \$50,000, which approximates the expected fair value of the machine on the option exercise date. On May 1, 2007 East should record a capitalized lease asset of

- a. \$251,500 c. \$224,500
b. \$238,000 d. \$198,000

M21-3 For a lease that transfers ownership of the property to the lessee by the end of the lease term, the lessee should

- a. Record the minimum lease payment as an expense
b. Amortize the capitalizable cost of the property using the interest method
c. Depreciate the capitalizable cost of the property in a manner consistent with the lessee's normal depreciation policy for owned assets, except that the period of depreciation should be the lease term
d. Depreciate the capitalizable cost of the property in a manner consistent with the lessee's normal depreciation policy for owned assets

Items 4 and 5 are based on the following information:

Fox Company, a dealer in machinery and equipment, leased equipment to Tiger, Inc. on July 1, 2007. The lease is appropriately accounted for as a sale by Fox and as a purchase by Tiger. The lease is for a 10-year period (the useful life of the asset) expiring June 30, 2017. The first of 10 equal annual payments of \$500,000 was made on July 1, 2007. Fox had purchased the equipment for \$2,675,000 on January 1, 2007 and established a list selling price of \$3,375,000 on the equipment. Assume that the present value at July 1, 2007 of the rent payments over the lease term, discounted at 12% (the appropriate interest rate), was \$3,165,000.

M21-4 What is the amount of profit on the sale and the amount of interest income that Fox should record for the year ended December 31, 2007?

- a. \$0 and \$159,900
b. \$490,000 and \$159,900
c. \$490,000 and \$189,900
d. \$700,000 and \$189,900

M21-5 Assuming that Tiger uses straight-line depreciation, what is the amount of depreciation and interest

expense that Tiger should record for the year ended December 31, 2007?

- \$158,250 and \$159,900
- \$158,250 and \$189,900
- \$168,750 and \$159,900
- \$168,750 and \$189,900

M21-6 Rent received in advance by the lessor for an operating lease should be recognized as revenue

- When received
- At the lease's inception
- In the period specified by the lease
- At the lease's expiration

M21-7 For a six-year capital lease, the portion of the minimum lease payment applicable in the third year to the reduction of the obligation should be

- Less than in the second year
- More than in the second year
- The same as in the fourth year
- More than in the fourth year

M21-8 On January 2, 2007, Lafayette Machine Shops, Inc. signed a 10-year noncancelable lease for a heavy-duty drill press, stipulating annual payments of \$15,000 starting at the end of the first year, with title passing to Lafayette at the expiration of the lease. Lafayette treated this transaction as a capital lease. The drill press has an estimated useful life of 15 years, with no salvage value. Lafayette uses straight-line depreciation for all of its fixed assets. Aggregate lease payments were determined to have a present value of \$92,170, based on implicit interest of 10%. For 2007 Lafayette should record

	Interest Expense	Depreciation Expense
a.	\$ 0	\$ 0
b.	\$7,717	\$6,145
c.	\$9,217	\$6,145
d.	\$9,217	\$9,217

M21-9 On August 1, 2007 Kern Company leased a machine to Day Company for a six-year period requiring payments of \$10,000 at the beginning of each year. The machine cost \$48,000, which is the fair value at the lease date, and has a useful life of eight years with no residual value. Kern's implicit interest rate is 10% and present value factors are as follows:

Present value for an annuity due of \$1 at 10% for six periods	4.791
Present value for an annuity due of \$1 at 10% for eight periods	5.868

Kern appropriately recorded the lease as a direct financing lease. At the inception of the lease, the gross lease receivables account balance should be

- \$60,000
- \$58,680
- \$48,000
- \$47,910

M21-10 At its inception, the lease term of Lease G is 65% of the estimated remaining economic life of the leased property. This lease contains a bargain purchase option. The lessee should record Lease G as

- Neither an asset nor a liability
- An asset but not a liability
- An expense
- An asset and a liability

EXERCISES

E21-1 Determining Type of Lease and Subsequent Accounting On January 1, 2007 the Caswell Company signs a 10-year cancelable (at the option of either party) agreement to lease a storage building from the Wake Company. The following information pertains to this lease agreement:

- The agreement requires rental payments of \$100,000 at the end of each year.
- The cost and fair value of the building on January 1, 2007 is \$2 million.
- The building has an estimated economic life of 50 years, with no residual value. The Caswell Company depreciates similar buildings according to the straight-line method.
- The lease does not contain a renewable option clause. At the termination of the lease, the building reverts to the lessor.
- Caswell's incremental borrowing rate is 14% per year. The Wake Company set the annual rental to ensure a 16% rate of return (the loss in service value anticipated for the term of the lease).
- Executory costs of \$7,000 annually, related to taxes on the property, are paid by Wake Company.

Required

- Determine what type of lease this is for the lessee.
- Prepare appropriate journal entries on the lessee's books to reflect the signing of the lease agreement and to record the payments and expenses related to this lease for the years 2007 and 2008.

E21-2 Lessee Accounting Issues The Sax Company signs a lease agreement dated January 1, 2007 that provides for it to lease computers from the Appleton Company beginning January 1, 2007. The lease terms, provisions, and related events are as follows:

- The lease term is five years. The lease is noncancelable and requires equal rental payments to be made at the end of each year.
- The computers have an estimated life of five years, a fair value of \$300,000, and a zero estimated residual value.

- Sax Company agrees to pay all executory costs.
- The lease contains no renewal or bargain purchase option.
- The annual rental is set by Appleton at \$83,222.92 to earn a rate of return of 12% on its net investment. The Sax Company is aware of this rate, which is equal to its borrowing rate.
- Sax Company uses the straight-line method to record depreciation on similar equipment.

Required

- Determine what type of lease this is for Sax Company.
- Calculate the amount of the asset and liability of the Sax Company at the inception of the lease (round to the nearest dollar).
- Prepare a table summarizing the lease payments and interest expense.
- Prepare journal entries for Sax Company for the years 2007 and 2008.

E21-3 Lessee Accounting with Payments Made at Beginning of Year The Adden Company signs a lease agreement dated January 1, 2007 that provides for it to lease heavy equipment from the Scott Rental Company beginning January 1, 2007. The lease terms, provisions, and related events are as follows:

- The lease term is four years. The lease is noncancelable and requires annual rental payments of \$20,000 each to be paid in advance at the beginning of each year.
- The cost, and also fair value, of the heavy equipment to Scott at the inception of the lease is \$68,036.62. The equipment has an estimated life of four years and has a zero estimated residual value at the end of this time.
- Adden Company agrees to pay all executory costs.
- The lease contains no renewal or bargain purchase option.
- Scott's interest rate implicit in the lease is 12%. Adden Company is aware of this rate, which is equal to its borrowing rate.
- Adden Company uses the straight-line method to record depreciation on similar equipment.
- Executory costs paid at the end of the year by Adden Company are:

2007	2008
Insurance, \$1,500	Insurance, \$1,300
Property taxes, \$6,000	Property taxes, \$5,500

Required

- Determine what type of lease this is for Adden Company.
- Prepare a table summarizing the lease payments and interest expense for Adden Company.
- Prepare journal entries for Adden Company for the years 2007 and 2008.

E21-4 Lessor Accounting Issues The Rexon Company leases equipment to Ten-Care Company beginning January 1, 2007. The lease terms, provisions, and related events are as follows:

- The lease term is eight years. The lease is noncancelable and requires equal rental payments to be made at the end of each year.
- The cost, and also fair value, of the equipment is \$500,000. The equipment has an estimated life of eight years and has a zero estimated value at the end of that time.
- Ten-Care Company agrees to pay all executory costs.
- The lease contains no renewal or bargain purchase option.
- The interest rate implicit in the lease is 14%.
- The initial direct costs are insignificant and assumed to be zero.
- The collectibility of the rentals is reasonably assured, and there are no important uncertainties surrounding the amount of unreimbursable costs yet to be incurred by the lessor.

Required

- Assuming that the lease is a direct financing lease from Rexon's point of view, calculate the amount of the equal rental receipts.
- Prepare a table summarizing the lease receipts and interest revenue earned by Rexon.
- Prepare journal entries for Rexon for the years 2007 and 2008.

E21-5 Lessor Accounting Issues Ramallah Company leases heavy equipment to Terrell, Inc. on January 2, 2007 on the following terms:

- Forty-eight lease rentals of \$1,600 at the end of each month are to be paid by Terrell, Inc., and the lease is noncancelable.
- The cost of the heavy equipment to Ramallah Company was \$60,758.
- Ramallah Company will account for this lease using the direct financing method. The difference between total rental receipts ($\$1,600 \times 48 = \$76,800$) and the cost of the equipment (\$60,758) was computed to yield a return of 1% per month over the lease term.

Required

Prepare journal entries for Ramallah Company (the lessor) to record the lease contract and the receipt of the first lease rental on January 31, 2007. Record the part of the \$16,042 Unearned Interest that was earned during the first month and carry calculations to the nearest dollar.

E21-6 Lessee and Lessor Accounting Issues Lessor Leasing Company agrees to provide Lessee Company with equipment under a noncancelable lease for five years. The equipment has a five-year life, cost Lessor Company \$30,000, and will have no residual value when the lease term ends. Lessee Company agrees to pay all executory costs (\$500 per year) throughout the lease period. On January 1, 2007 the equipment is delivered. Lessor expects a 14% return. The five equal annual rents are payable in advance starting January 1, 2007.

Required 

1. Assuming this is a direct financing lease for the lessor and a capital lease for the lessee, prepare a table summarizing the lease and interest payments suitable for use by either party.
2. On the assumption that both companies adjust and close books each December 31, prepare journal entries relating to the lease for both companies through December 31, 2007 based on data derived in the table. Assume that Lessee Company depreciates similar equipment by the straight-line method.

E21-7 Lessor Accounting with Receipts at End of Year The Berne Company, the lessor, enters into a lease with Fox Company to lease equipment to Fox beginning January 1, 2007. The lease terms, provisions, and related events are as follows:

1. The lease term is four years. The lease is noncancelable and requires annual rental payments of \$50,000 to be made at the end of each year.
2. The cost of the equipment is \$130,000. The equipment has an estimated life of four years and an estimated residual value at the end of the lease term of zero.
3. Fox agrees to pay all executory costs.
4. The interest rate implicit in the lease is 12%.
5. The initial direct costs are insignificant and assumed to be zero.
6. The collectibility of the rentals is reasonably assured, and there are no important uncertainties surrounding the amount of unreimbursable costs yet to be incurred by the lessor.

Required

1. Assuming that the lease is a sales-type lease from Berne's point of view, calculate the selling price and assume that this is also the fair value.
2. Prepare a table summarizing the lease receipts and interest revenue earned by the lessor.
3. Prepare journal entries for Berne Company, the lessor, for the years 2007 and 2008.

E21-8 Lessor Accounting with Receipts at Beginning of Year The Edom Company, the lessor, enters into a lease with Jebusite Company to lease equipment to Jebusite beginning January 1, 2007. The lease terms, provisions, and related events are as follows:

1. The lease term is five years. The lease is noncancelable and requires annual rental receipts of \$100,000 to be made in advance at the beginning of each year.
2. The cost of the equipment is \$313,000. The equipment has an estimated life of six years and, at the end of the lease term, has an unguaranteed residual value of \$20,000 accruing to the benefit of Edom.
3. Jebusite agrees to pay all executory costs.
4. The interest rate implicit in the lease is 14%.
5. The initial direct costs are insignificant and assumed to be zero.
6. The collectibility of the rentals is reasonably assured, and there are no important uncertainties surrounding the amount of unreimbursable costs yet to be incurred by the lessor.

Required 

1. Assuming that the lease is a sales-type lease from Edom's point of view, calculate the selling price and assume that this is also the fair value.
2. Prepare a table summarizing the lease receipts and interest revenue earned by the lessor.
3. Prepare journal entries for Edom Company, the lessor, for the years 2007 and 2008.

E21-9 Lessee and Lessor Accounting Issues The following information is available for a noncancelable lease of equipment that is classified as a sales-type lease by the lessor and as a capital lease by the lessee. Assume that the lease payments are made at the beginning of each month, interest and straight-line depreciation are recognized at the end of each month, and the residual value of the leased asset is zero at the end of a three-year life.

Cost of equipment to lessor (Anson Company)	\$50,000
Initial payment by lessee (Bullard Company) at inception of lease	2,000
Present value of remaining 35 payments of \$2,000 each discounted at 1% per month	58,817

Required

1. Record the lease (including the initial receipt of \$2,000) and the receipt of the second and third installments of \$2,000 in the accounts of the Anson Company. Carry computations to the nearest dollar.
2. Record the lease (including the initial payment of \$2,000), the payment of the second and third installments of \$2,000, and monthly depreciation in the accounts of the Bullard Company. The lessee records the lease obligation at net present value. Carry computations to the nearest dollar.

E21-10 Comparisons of Operating and Sales-Type Leases On January 1, 2007 Nelson Company leases certain property to Queens Company at an annual rental of \$60,000 payable in advance at the beginning of each year for eight years. The first payment is received immediately. The leased property, which is new, cost \$275,000 and has an estimated economic life of eight years and no residual value. The interest rate implicit in the lease is 12% and the lease is noncancelable. Nelson Company had no other costs associated with this lease. It should have accounted for this lease as a sales-type lease but mistakenly treated it as an operating lease.

Required

Compute the effect on income before income taxes during the first year of the lease as a result of Nelson Company's classification of this lease as an operating rather than a sales-type lease.

E21-11 Lease Income and Expense Reuben Company retires a machine from active use on January 2, 2007 for the express purpose of leasing it. The machine had a carrying value of \$900,000 after 12 years of use and is expected to have 10 more years of economic life. The machine is depreciated on a straight-line basis. On March 2, 2007 Reuben Company leases the machine to Owens Company for \$180,000 a year for a five-year period ending February 28, 2012. Under the provisions of the lease, Reuben Company incurs total maintenance and other related costs of \$20,000 for the year ended December 31, 2007. Owens Company pays \$180,000 to Reuben Company on March 2, 2007. The lease was properly classified as an operating lease.

Required

1. Compute the income before income taxes derived by Reuben Company from this lease for the calendar year ended December 31, 2007.
2. Compute the amount of rent expense incurred by Owens Company from this lease for the calendar year ended December 31, 2007.

E21-12 Determining Type of Lease and Subsequent Accounting The Ravis Rent-A-Car Company leases a car to Ira Reem, an employee, on January 1, 2007. The term of the noncancelable lease is four years. The following information about the lease is provided:

1. Title to the car passes to Ira Reem on the termination of the lease with no additional payment required by the lessee.
2. The cost and fair value of the car to the Ravis Rent-A-Car Company is \$8,400. The car has an economic life of five years.
3. The lease payments are determined at an amount that will yield Ravis Rent-A-Car Company a rate of return of 10% on its net investment.
4. Collectibility of the lease payments is reasonably assured.
5. There are no important uncertainties surrounding the amount of unreimbursable costs yet to be incurred by the lessor.
6. Equal annual lease payments are due at the end of each year.

Required

1. What type of lease is this to Ravis Rent-A-Car Company? Why?
2. Prepare a table summarizing the lease receipts and interest revenue earned by the Ravis Rent-A-Car Company for the four-year lease term.
3. Prepare the journal entries for 2007 and 2008 to record the lease agreement, the lease receipts, and the recognition of income on the books of Ravis Rent-A-Car Company.

E21-13 Sale-Leaseback (Appendix) On January 1, 2007 the Stimpson Company sells land to Barker Company for \$2.5 million, then immediately leases it back. The relevant information is as follows:

1. The land was carried on Stimpson's books at a value of \$2 million.
2. The term of the noncancelable lease is 25 years.
3. The lease agreement requires equal rental payments of \$357,007 at the end of each year.
4. The incremental borrowing rate of Stimpson Company is 15%. Stimpson is aware that Barker Company set the annual rental to ensure a rate of return of 14%.
5. The land has a fair value of \$2.5 million on January 1, 2007.
6. Stimpson Company has the option of purchasing the land for \$150 at the end of 25 years.
7. Stimpson Company pays all executory costs. These costs consist of insurance and property taxes amounting to \$12,000 per year.
8. There are no important uncertainties surrounding the amount of unreimbursable costs yet to be incurred by the lessor, and the collectibility of the rentals is reasonably assured.

Required

1. Prepare the journal entries for the seller-lessee, Stimpson, for 2007 to reflect the sale and leaseback agreement. In calculating the present value of the lease payments, ignore the \$150 bargain purchase option as immaterial.
2. Describe briefly the accounting treatment of the gain by the seller-lessee.

PROBLEMS

P21-1 *Determining Type of Lease and Subsequent Accounting* On January 1, 2007 the Alice Company leases electronic equipment for five years, agreeing to pay \$70,000 annually at the beginning of each year under the noncancelable lease. Superior Electronics Company, the lessor, agrees to pay all executory costs, estimated to be \$3,450 per year. The cost and also fair value of the equipment is \$500,000. Its estimated life is 10 years. The estimated residual value at the end of five years is \$200,000; at the end of 10 years, it is \$5,000. There is no bargain purchase option in the lease nor any agreement to transfer ownership at the end of the lease to the lessee. The lessee's incremental borrowing rate is 12%. During 2007 Superior Electronics pays property taxes of \$650, maintenance costs of \$1,600, and insurance of \$1,200. There are no important uncertainties surrounding the amount of unreimbursable costs yet to be incurred by the lessor. Straight-line depreciation is considered the appropriate method by both companies.

Required

1. Identify the type of lease involved for Alice Company and Superior Electronics Company and give reasons for your classifications.
2. Prepare appropriate journal entries for 2007 for the lessee and lessor.

P21-2 *Determining Type of Lease and Subsequent Accounting* On January 1, 2007 the Ballieu Company leases specialty equipment with an economic life of eight years to the Anderson Company. The lease contains the following terms and provisions:

The lease is noncancelable and has a term of eight years. The annual rentals are \$35,000, payable at the beginning of each year. The interest rate implicit in the lease is 14%. The Anderson Company agrees to pay all executory costs and is given an option to buy the equipment for \$1 at the end of the lease term, December 31, 2014.

The cost of the equipment to the lessor is \$150,000 and the fair retail value is approximately \$185,100. The lessor incurs no material initial direct costs. The collectibility of the rentals is reasonably assured, and there are no important uncertainties surrounding the amount of unreimbursable costs yet to be incurred by the lessor. The lessor estimates that the fair value is expected to be significantly greater than \$1 at the end of the lease term.

The lessor calculates that the present value on January 1, 2007 of eight annual payments in advance of \$35,000 discounted at 14% is \$185,090.68 (the \$1 purchase option is ignored as immaterial).

Required

1. Identify the classification of the lease transaction from the point of view of Ballieu Company. Give the reasons for your classification.
2. Prepare all the journal entries for Ballieu Company for the years 2007 and 2008.
3. Discuss the disclosure requirements for the lease transaction in the notes to the financial statements of the Ballieu Company.

P21-3 *Lessee Accounting Issues* The Timmer Company signs a lease agreement dated January 1, 2007 that provides for it to lease equipment from Landau Company beginning January 1, 2007. The lease terms, provisions, and related events are as follows:

The lease is noncancelable and has a term of five years. The annual rentals are \$83,222.92, payable at the end of each year, and provide Landau with a 12% annual rate of return on its net investment. The Timmer Company agrees to pay all executory costs at the end of each year. In 2007 these were: insurance \$3,760; property taxes, \$5,440. In 2008: insurance, \$3,100; property taxes, \$5,330. There is no renewal or bargain purchase option.

Timmer estimates that the equipment has an economic life of five years and a zero residual value. Timmer's incremental borrowing rate is 16%, it knows the rate implicit in the lease, and it uses the straight-line method to record depreciation on similar equipment.

Required

1. Calculate the amount of the asset and liability of the Timmer Company at the inception of the lease. (Round to the nearest dollar.)
2. Prepare a table summarizing the lease payments and interest expense.
3. Prepare journal entries on the books of Timmer for 2007 and 2008.
4. Prepare a partial balance sheet in regard to the lease for Timmer for December 31, 2007.

P21-4 *Direct Financing Lease* Calder Company, the lessor, enters into a lease with Darwin Company, the lessee, to provide heavy equipment beginning January 1, 2007. The lease terms, provisions, and related events are as follows:

The lease is noncancelable, has a term of eight years, and has no renewal or bargain purchase option. The annual rentals are \$65,000, payable at the end of each year. The interest rate implicit in the lease is 15%. The Darwin Company agrees to pay all executory costs.

The cost and fair value of the equipment to the lessor is \$308,021.03. The lessor incurs no material initial direct costs. The collectibility of the rentals is reasonably assured, and there are no important uncertainties surrounding the amount of unreimbursable costs yet to be incurred by the lessor. The lessor estimates that the fair value at the end of the lease term will be \$50,000 and that the economic life of the equipment is nine years.

The following present value factors are relevant:

$$PV_{n=8,i=15\%} = 4.487322; PV_{n=8,i=15\%} = 0.326902; PV_{n=1,i=15\%} = 0.869565$$

Required

1. Prepare a table summarizing the lease receipts and interest revenue earned by the lessor for this direct financing lease.
2. State why the lease is a direct financing lease.
3. Prepare journal entries for Calder Company for the years 2007, 2008, and 2009.
4. Prepare partial balance sheets for December 31, 2007 and December 31, 2008 showing how the accounts should be reported.

P21-5 Comprehensive Landlord Company and Tenant Company enter into a noncancelable, direct financing lease on January 1, 2007 for new heavy equipment that cost the Landlord Company \$300,000 (useful life is six years with no residual value). The fair value is also \$300,000. Landlord Company expects a 14% return over the six-year period of the lease. Lease provisions require six equal annual amounts payable each January 1, beginning with January 1, 2007. The Tenant Company pays all executory costs. The heavy equipment reverts to the lessor at the termination of the lease. Assume that there are no initial direct costs. The collectibility of the rentals is reasonably assured and there are no important uncertainties surrounding the amount of unreimbursable costs yet to be incurred by the lessor.

Required

1. (a) Show how the Landlord Company should compute the annual rental amounts. (b) Discuss how the Tenant Company should compute the present value of the lease rights. What additional information would be required to make this computation?
2. Prepare a table summarizing the lease and interest receipts that would be suitable for the Landlord Company. Under what conditions would this table be suitable for the Tenant Company?
3. Assuming that the table prepared in Requirement 2 is suitable for both the lessee and the lessor, prepare the journal entries for both firms for the years 2007 and 2008. Use the straight-line depreciation method for the leased equipment. The executory costs paid by the lessee in 2007 are: insurance, \$700 and property taxes, \$800; in 2008: insurance, \$600 and property taxes, \$750.
4. Show the items and amounts that would be reported on the comparative 2007 and 2008 income statements and ending balance sheets for both the lessor and the lessee. Include appropriate notes to the financial statements.

P21-6 Direct Financing Lease with Unguaranteed Residual Value Lessor Company and Lessee Company enter into a five-year, noncancelable, direct financing lease on January 1, 2007 for a new computer that cost the Lessor Company \$400,000 (useful life is five years). The fair value is also \$400,000. Lessor Company expects a 12% return over the five-year period of the lease. The computer will have an estimated unguaranteed residual value of \$20,000 at the end of the fifth year of the lease. The lease provisions require five equal annual amounts, payable each January 1, beginning with January 1, 2007. The Lessee Company pays all executory costs. The computer reverts to the lessor at the termination of the lease. Assume there are no initial direct costs, no important uncertainties surrounding the amount of unreimbursable costs yet to be incurred by the lessor, and that the collectibility of rentals is reasonably assured.

Required

1. Show how the Lessor Company should compute the annual rental amounts.
2. Prepare a table summarizing the lease and interest receipts that would be suitable for the Lessor Company.
3. Prepare the journal entries for Lessor Company for the years 2007, 2008, and 2009.

P21-7 Sales-Type Lease with Receipts at End of Year The Lamplighter Company, the lessor, agrees to lease equipment to Tilson Company, the lessee, beginning January 1, 2007. The lease terms, provisions, and related events are as follows:

The lease is noncancelable and has a term of eight years. The annual rentals are \$32,000, payable at the end of each year. The Tilson Company agrees to pay all executory costs. The interest rate implicit in the lease is 14%.

The cost of the equipment to the lessor is \$110,000. The lessor incurs no material initial direct costs. The collectibility of the rentals is reasonably assured, and there are no important uncertainties surrounding the amount of unreimbursable costs yet to be incurred by the lessor. The lessor estimates that the fair value at the end of the lease term will be \$20,000 and that the economic life of the equipment is nine years.

Required

1. Calculate the selling price implied by the lease and prepare a table summarizing the lease receipts and interest revenue earned by the lessor for this sales-type lease.
2. State why this is a sales-type lease.

3. Prepare journal entries for Lamplighter Company for the years 2007, 2008, and 2010.
4. Prepare partial balance sheets for Lamplighter Company for December 31, 2007 and December 31, 2008, showing how the accounts should be disclosed.

P21-8 Various Lease Issues for Lessor and Lessee Lessee Company leases heavy equipment on January 1, 2007 under a capital lease from Lessor Company with the following lease provisions:

The lease is noncancelable and has a term of 10 years. The lease does not contain a renewal or bargain purchase option. The annual rentals are \$27,653.77, payable at the beginning of each year. The Lessee Company agrees to pay all executory costs. The interest rate implicit in the lease is 12%, which is known by Lessee Company. The residual value of the property at the end of 10 years is estimated to be zero.

The cost and fair value of the equipment to the lessor is \$175,000. The lessor incurs no material initial direct costs. The collectibility of the rentals is reasonably assured, and there are no important uncertainties surrounding the amount of unreimbursable costs yet to be incurred by the lessor.

Lessee's incremental borrowing rate is 15% and it uses the straight-line method to record depreciation on similar equipment. In 2007 the lessee pays insurance of \$1,900, property taxes of \$1,300, and maintenance of \$600; and in 2008 the lessee pays insurance of \$1,800, property taxes of \$1,200, and maintenance of \$500.

Required

1. Identify the type of lease involved for the lessee and the lessor, and give reasons for your classifications.
2. Prepare all the journal entries for both the lessee and the lessor for 2007 and 2008.

P21-9 Various Lease Issues for Lessor and Lessee Benjamin Company has rented new equipment to Murrell Builders that cost \$50,000. This equipment has a life of 4 years and no residual value at the end of that time. The lease is noncancelable and is signed on January 1, 2007. Murrell Builders assumes all normal risks and executory costs of ownership. The title to the property is transferred to Murrell Builders at the end of the four years. The Benjamin Company computes the rents on the basis of a 14% return. The lessee's incremental borrowing rate is also 14%. The collectibility of rentals is reasonably assured and there are no important uncertainties surrounding the amount of unreimbursable costs yet to be incurred by the lessor.

Required

1. Assuming the annual rentals are payable at the end of each year, complete the following:
 - a. Lessor computation of periodic rental receipts.
 - b. Lessee computation of the present value of the special property rights under the lease.
 - c. A table summarizing lease and interest payments that would be suitable for both lessor and lessee.
2. Assuming the annual rentals are payable at the start of each year, compute the same three items listed in Requirement 1.
3. Prepare the journal entries for the lessor and lessee for Requirement 2 throughout 2007. Use the straight-line depreciation method.
4. Indicate the asset and liability amounts that the lessor and lessee would report on their balance sheets at December 31, 2007 under Requirement 2.

P21-10 Initial Direct Costs and Related Issues On January 1, 2007 the Amity Company leases a crane to Baltimore Company. The lease contains the following terms and provisions:

The lease is noncancelable and has a term of 10 years. The lease does not contain a renewal or bargain purchase option. The annual rentals are \$4,000, payable at the beginning of each year. The Baltimore Company agrees to pay all executory costs.

The cost and fair value of the equipment to the lessor is \$24,913.94. The lessor incurs initial direct costs of \$1,364.98. The interest rate implicit in the lease is 12.5%. After including the initial direct costs, the implicit rate is 12%. The collectibility of the rentals is reasonably assured, and there are no important uncertainties surrounding the amount of unreimbursable costs yet to be incurred by the lessor. The lessor estimates that the fair value at the end of the lease term will be \$3,000 and that the economic life of the crane is 12 years.

Required

1. What are initial direct costs? Discuss the accounting treatment of these costs. Are they treated in the same manner for (a) an operating lease, (b) a sales-type lease, and (c) a direct financing lease?
2. From the lessor's viewpoint, is the preceding lease a sales-type or direct financing lease? Give reasons to support your conclusion.
3. Prepare the journal entries for Amity Company for 2007.

P21-11 Various Lease Issues Farrington Company leases a computer from the Wilson Company. The lease includes the following provisions:

The lease is noncancelable and has a term of eight years. The annual rentals are \$60,000, payable at the end of each year. The Farrington Company agrees to pay all executory costs and has an option to purchase the computer for \$1,000 at the end of the life of the lease. The interest rate implicit in the lease is 12%, which is known to Farrington.

Farrington estimates that the computer has an economic life of 12 years and a value of \$70,000 at the end of eight years. Farrington's incremental borrowing rate is 16% and it uses the straight-line method to record depreciation on similar equipment.

The computer cost Wilson \$200,000 to manufacture. The lessor incurs initial direct costs of \$10,000. The collectibility of the rentals is reasonably assured, and there are no important uncertainties surrounding the amount of unreimbursable costs yet to be incurred by the lessor.

Required

1. What is the correct classification of the lease for the lessee and lessor? Explain whether the lease meets *each* of the required criteria.
2. Assuming that the lease is signed on January 1, 2007, prepare all journal entries for 2007 for the lessor.
3. After six years, because of changes in the technology, the lessee and lessor independently conclude that the expected residual value of the computer at the end of the life of the lease is only \$10,000. Discuss how the lessor should account for the change.

P21-12 *Accounting for Leases by Lessee and Lessor* Scuppermong Farms, the lessee, and Tyrrell Equipment, the lessor, sign a lease agreement on January 1, 2007 that provides for Scuppermong Farms to lease a cultivator from Tyrrell Equipment. The lease terms, provisions, and other related events are as follows: The lease is noncancelable and has a term of six years. The annual rentals are \$56,100, payable at the beginning of each year. Tyrrell Equipment agrees to pay all executory costs, which are expected to be \$1,100 annually, including property taxes of \$500, insurance of \$350, and maintenance of \$250. Scuppermong Farms guarantees a residual value of \$60,000 at the end of six years. The interest rate implicit in the lease is 14%, which is known by Scuppermong.

Scuppermong Farms' incremental borrowing rate is 15% and it uses the sum-of-the-years'-digits method to record depreciation on similar equipment.

The cost and fair value of the cultivator to Tyrrell Equipment is \$271,154.68. The lessor incurs no material initial direct costs. The collectibility of the rentals is reasonably assured, and there are no important uncertainties surrounding the amount of unreimbursable costs yet to be incurred by the lessor.

Required

1. Identify the type of lease involved for both Scuppermong Farms and Tyrrell Equipment, and give reasons for your classifications.
2. Prepare the journal entries for both Scuppermong Farms and Tyrrell Equipment for 2007. (*Hint:* Scuppermong Farms should expense executory costs when annual payments are made to Tyrrell.)

P21-13 **AICPA Adapted** *Lessor's Income Statement* The Dahlia Company has two divisions, the Astor Division which started operating in 2005, and the Tulip Division which started operating in 2006. The Astor Division leases medical equipment to hospitals. All of its leases are appropriately recorded as operating leases for accounting purposes, except for a major lease entered into on January 1, 2007, which is appropriately recorded as a sale-type lease for accounting purposes.

Under long-term contracts, Tulip constructs wastewater treatment plants for small communities throughout the United States. All of its long-term contracts are appropriately recorded for accounting purposes under the percentage-of-completion method, except for two contracts which are appropriately recorded for accounting purposes under the completed-contract method because of a lack of dependable estimates at the time of entering into these contracts.

For the year ended December 31, 2007 the following information is available:

Astor Division:

Operating Leases. Revenues from operating leases were \$800,000. The cost of the related leased equipment is \$3,700,000, which is being depreciated on a straight-line basis over a five-year period. The estimated residual value of the leased equipment at the end of the five-year period is \$200,000. No leased equipment was acquired or constructed in 2007. Maintenance and other related costs and the costs of any other services rendered under the provisions of the leases were \$70,000 in 2007.

Lease Recorded as a Sale. The January 1, 2007 lease recorded as a sale is for a six-year period expiring December 31, 2012. The cost of this leased equipment is \$3,500,000. This leased equipment is estimated to have no residual value at the end of the lease. Maintenance and other related costs, and the costs of any other services rendered under the provisions of this lease, all of which were paid by the lessee, were \$120,000 in 2007. Equal annual payments under the lease are \$750,000 and are due on January 1. The first payment was made on January 1, 2007. The present value for an annuity of \$1 in advance at 10% is as follows:

Number of Periods	Present Value
5	4.170
6	4.791
7	5.355

Tulip Division:

Long-Term Contracts: Percentage-of-Completion Method. Long-term contracts recorded under the percentage-of-completion method aggregate \$6,000,000. Costs incurred on these contracts were \$1,500,000 in 2006 and \$3,000,000 in 2007. Estimated additional costs of \$1,000,000 are required to complete these contracts. Revenues of \$1,740,000 were recognized in 2006 and a total of \$4,800,000 has been billed, of which \$4,600,000 has been collected. No long-term contracts recorded under the percentage-of-completion method were completed in 2007.

Long-Term Contracts: Completed-Contract Method. The two long-term contracts recorded under the completed-contract method were started in 2006. One is a \$5,000,000 contract. Costs incurred were \$1,400,000 in 2006 and \$1,600,000 in 2007. A total of \$3,100,000 has been billed and \$2,800,000 collected. Although it is difficult to estimate the additional costs required to complete this contract, indications are that this contract will prove to be profitable.

The second contract is for \$4,000,000. Costs incurred were \$1,200,000 in 2006 and \$2,600,000 in 2007. A total of \$3,300,000 has been billed and \$2,900,000 collected. Although it is difficult to estimate the additional costs required to complete this contract, indications are that there will be a loss of approximately \$550,000.

Dahlia Company:

Selling, general, and administrative expenses exclusive of amounts specified earlier were \$600,000 in 2007. Other income exclusive of amounts specified earlier was \$50,000 in 2007.

Required 

Prepare an income statement of the Dahlia Company for the year ended December 31, 2007, stopping at income (loss) before income taxes. Show supporting schedules and computations in good form. *Ignore income tax and deferred tax considerations.* Notes are *not* required.

P21-14 Determining Types of Leases (Appendix) Rigdon Company leases 50 acres of land to Christmas Tree International on January 1, 2007. The provisions of the lease are as follows:

The lease is noncancelable and has a term of 25 years. The annual rentals are \$10,000, payable at the end of each year. The lease contains no bargain purchase option and the land reverts to Rigdon at the end of the lease. The incremental borrowing rate of Christmas Tree International is 12%.

The cost of the land to Rigdon Company is \$60,000. The fair value is \$78,431.39. The lessor incurs no material initial direct costs. The collectibility of the rentals is reasonably assured, and there are no important uncertainties surrounding the amount of unreimbursable costs yet to be incurred by the lessor.

Required

1. Determine the classification of this lease for both the lessor and the lessee.
2. Why are the final two criteria (lease term 75% of economic life and present value of lease payments 90% of fair value) not applicable when classifying a lease of land?

P21-15 Sale-Leaseback (Appendix) On January 1, 2007 the Orr Company sells heavy equipment to Foible Company for \$3 million, then immediately leases it back. The relevant information is as follows:

The lease is noncancelable and has a term of eight years. The annual rentals are \$603,908.50, payable at the end of each year. The seller-lessee agrees to pay all executory costs. The interest rate implicit in the lease is 12%.

The cost of the heavy equipment to Orr Company is \$2,100,000. The purchaser-lessor incurs no material initial direct costs. The collectibility of the rentals is reasonably assured, and there are no important uncertainties surrounding the amount of unreimbursable costs yet to be incurred by the lessor.

Orr's incremental borrowing rate is 12% and the company estimates that the economic life of the equipment is eight years. The present value on January 1, 2007 of eight payments of \$603,908.50, discounted at 12%, is \$3 million ($\$603,908.50 \times 4.967640$). The executory costs for 2007 are:

Repairs and maintenance	\$10,200
Property taxes	20,500
Insurance	18,000

Required

1. What type of lease is this to the seller-lessee? Discuss.
2. Prepare the journal entries for both the seller-lessee and the purchaser-lessor for 2007 to reflect the sale and leaseback agreement. Assume that the company uses the straight-line depreciation method.

CASES

COMMUNICATION

C21-1 Initial Direct Costs

The Efland Company leases equipment to Orange Company. Efland pays \$3,000 initial direct costs in negotiating the lease.

Required

1. Explain what initial direct costs are.
2. Indicate precisely how Efland should account for initial direct costs if this lease is (a) an operating lease, (b) a sales-type lease, (c) a direct financing lease.
3. For a sales-type lease, *FASB Statement No. 13 as Amended* requires that: "The cost or carrying amount, if different, of the leased property, plus any initial direct costs . . . , less the present value of the unguaranteed residual value accruing to the benefit of the lessor, computed at the interest rate implicit in the lease, shall be charged against income in the same period." Does this provision require that initial direct costs for sales-type leases be charged to cost of goods sold? Discuss the reasons for or against this accounting treatment.

C21-2 Sales-Type Lease Issues

Jordan Industries manufactures and leases to its customers five-ton construction dump trucks. The lease arrangements are usually as follows:

1. Payments on the lease are due for five years after its inception, but the present value is not greater than 90% of the fair value of the trucks at the time of sale.
2. The trucks revert to Jordan at the end of the lease. Estimated economic life of the trucks is 10 years.
3. No substantial uncertainties exist as to future payments Jordan must make, and potential customers are thoroughly checked for creditworthiness before the trucks are leased to them.
4. Jordan's accountant has informed the company that there are advantages from a reporting standpoint in treating the leases as sales-type instead of operating leases.

Required

1. Discuss the reasons why Jordan would want to treat the leases as sales-type instead of operating leases.
2. Explain what Jordan should do, under the requirements of *FASB Statement No. 13 as Amended*, to treat the leases properly as sales-type leases.

C21-3 Classification of Leases

AICPA Adapted *Part a.* Capital leases and operating leases are the two classifications of leases for the lessee.

Required

1. Explain how a capital lease is accounted for by the lessee, both at the inception of the lease and during the first year of the lease, assuming the lease transfers

ownership of the property to the lessee by the end of the lease.

2. Explain how an operating lease is accounted for by the lessee, both at the inception of the lease and during the first year of the lease, assuming equal monthly payments are made by the lessee at the beginning of each month of the lease. Describe the change in accounting, if any, when rental payments are not made on a straight-line basis.

Do not discuss the criteria for distinguishing between capital leases and operating leases.

Part b. Sales-type leases and direct financing leases are two of the classifications of leases for the lessor.

Required

Write a short report that compares and contrasts a sales-type lease with a direct financing lease as follows:

1. Gross investment in the lease.
2. Amortization of unearned interest income.
3. Manufacturer's or dealer's profit.

Do not discuss the criteria for distinguishing between the leases described above and operating leases.

C21-4 Miscellaneous Lease Issues

AICPA Adapted On January 1, 2007 Von Company entered into two noncancelable leases for new machines to be used in its manufacturing operations. The first lease does not contain a bargain purchase option. The lease term is equal to 80% of the estimated economic life of the machine. The second lease contains a bargain purchase option. The lease term is equal to 50% of the estimated economic life of the machine.

Required

1. Explain the theoretical basis for requiring lessees to capitalize certain long-term leases. Do **not** discuss the specific criteria for classifying a lease as a capital lease.
2. Explain how a lessee should account for a capital lease at its inception.
3. Explain how a lessee should record each minimum lease payment for a capital lease.
4. Explain how Von should classify each of the two leases.

C21-5 Sale-Leaseback

AICPA Adapted On January 1, 2007 Metcalf Company sold equipment for cash and leased it back. As seller-lessee, Metcalf retained the right to substantially all of the remaining use of the equipment.

The term of the lease is eight years. There is a gain on the sale portion of the transaction. The lease portion of the transaction is classified appropriately as a capital lease.

Required

1. Explain the theoretical basis for requiring lessees to capitalize certain long-term leases. Do **not** discuss the specific criteria for classifying a lease as a capital lease.
2. a. Explain how Metcalf should account for the sale portion of the sale-leaseback transaction at January 1, 2007.
 - b. Explain how Metcalf should account for the lease-back portion of the sale-leaseback transaction at January 1, 2007.
3. Explain how Metcalf should account for the gain on the sale portion of the sale-leaseback transaction during the first year of the lease.

CREATIVE AND CRITICAL THINKING**C21-6 Capitalized and Operating Leases**

AICPA Adapted On January 1 Borman Company, a lessee, entered into three noncancelable leases for brand-new equipment, Lease J, Lease K, and Lease L. None of the three leases transfer ownership of the equipment to Borman at the end of the lease term. For each of the three leases, the present value of the minimum lease payments at the beginning of the lease term, excluding that portion of the payments representing executory costs such as insurance, maintenance, and taxes to be paid by the lessor, including any profit thereon, is 75% of the fair value of the equipment to the lessor at the inception of the lease.

The following information is peculiar to each lease:

- (a) Lease J does not contain a bargain purchase option. The lease term is equal to 80% of the estimated economic life of the equipment.
- (b) Lease K contains a bargain purchase option. The lease term is equal to 50% of the estimated economic life of the equipment.
- (c) Lease L does not contain a bargain purchase option. The lease term is equal to 50% of the estimated economic life of the equipment.

Required

1. Explain how Borman Company should classify each of the preceding three leases. Discuss the rationale for your answer.
2. What amount, if any, should Borman record as a liability at the inception of the lease for each of the preceding three leases?
3. Assuming that the minimum lease payments are made on a straight-line basis, how should Borman record the minimum lease payment for each of the preceding three leases?

C21-7 Disclosure of Leases and Related Issues

United Manufacturing Company manufactures and leases computers to its customers. During 2007 the following lease transactions take place:

1. On January 1 a computer is leased to Superior Microelectronics Industries and is guaranteed by United against obsolescence. The present value of the lease payments is greater than 90% of the fair value of the computer to both United and Superior.
2. Also on January 1 a computer is leased to Pitt Steel Company. Because of Pitt's unstable financial condition, its incremental borrowing rate is substantially greater than United's rate implicit in the lease (which Pitt did not know and could not estimate).

Required

1. For the first transaction, explain on whose financial statements the leased computer is shown.
2. Explain under what conditions in the second transaction the computer could fail to be shown on either United's or Pitt Steel's balance sheets at December 31, 2007.

C21-8 Types of Leases and Related Issues

AICPA Adapted Circuit Village Company entered into a lease arrangement with Thomas Leasing Company for a certain machine. Thomas's primary business is leasing, and it is not a manufacturer or dealer. Circuit Village will lease the machine for a period of four years, which is 50% of the machine's economic life. Thomas will take possession of the machine at the end of the initial four-year lease and lease it to another smaller company that does not need the most current version of the machine. Circuit Village does not guarantee any residual value for the machine and will not purchase the machine at the end of the lease term. Circuit Village's incremental borrowing rate is 16% and the implicit rate on the lease is 14%. Circuit Village has no way of knowing or estimating the implicit rate used by Thomas. Using either rate, the present value of the minimum lease payments is between 90% and 100% of the fair value of the machine at the time of the lease agreement. Circuit Village has agreed to pay all executory costs directly, and no allowance for these costs is included in the lease payments. Thomas is reasonably certain that Circuit Village will pay all lease payments, and because it has agreed to pay all executory costs, there are no important uncertainties regarding costs to be incurred by Thomas.

Required

1. With respect to Circuit Village (the lessee), answer the following:
 - a. What type of lease has been entered into? Explain the reason for your answer.
 - b. How should Circuit Village compute the appropriate amount to record for the lease or asset acquired?
 - c. What accounts will be created or affected by this transaction, and how will the lease or asset or other cost be matched with earnings?
2. With respect to Thomas (the lessor), answer the following:
 - a. What type of leasing arrangement has been entered into? Explain the reason for your answer.
 - b. How should this lease be recorded by Thomas, and how are the appropriate amounts determined?
 - c. How should Thomas determine the appropriate amount of earnings to be recognized from each lease payment?

C21-9 Capital Lease Issues

AICPA Adapted On January 1, 2007 Lani Company entered into a noncancelable lease for a machine to be used in its manufacturing operations. The lease transfers ownership of the machine to Lani by the end of the lease term. The term of the lease is eight years. The minimum lease payment made by Lani on January 1, 2007 was one of eight equal annual payments. At the inception of the lease, the criteria established for classification as a capital lease by the lessee were met.

Required

1. Explain the theoretical basis for the accounting standard that requires certain long-term leases to be capitalized by the lessee. Do not discuss the specific lease as a capital lease.
2. Explain how Lani should account for this lease at its inception and determine the amount to be recorded.
3. Explain what expenses related to this lease Lani will incur during the first year of the lease, and how they will be determined.
4. Explain how Lani should report the lease transaction on its December 31, 2007 balance sheet.

C21-10 Sale-Leaseback (Appendix)

AICPA Adapted On December 31, 2006 Port Co. sold six-month-old equipment at fair value and leased it back. There was a loss on the sale. Port pays all insurance, maintenance, and taxes on the equipment. The lease provides for eight equal annual payments, beginning December 31, 2007, with a present value equal to 85% of the equipment's fair value and sales price. The lease's term is equal to 80% of the equipment's useful life. There is no provision for Port to reacquire ownership of the equipment at the end of the lease term.

Required

1. a. Explain why it is important to compare an equipment's fair value to its lease payments' present value, and its useful life to the lease term.
b. Evaluate Port's leaseback of the equipment in terms of each of the four criteria for determination of a capital lease.
2. Explain how Port should account for the sale portion of the sale-leaseback transaction at December 31, 2006.
3. Explain how Port should report the leaseback portion of the sale-leaseback transaction on its December 31, 2007 balance sheet.



C21-11 Ethics and Leasing

You are an accountant for the ABC Mining Company, and the CFO gives you a copy of a recent lease agreement to record. As you read the agreement you discover the company has leased 12 trucks from the XYZ Finance Co. The fair value of the trucks is \$2.4 million. ABC has agreed to pay \$250,000 semiannually, in advance. The lease term is five years, and the lessor's implicit rate is 8%. There is no option or requirement to purchase the trucks. This all seems straightforward, especially when you remember that the company recently borrowed from a bank and agreed to a 10% interest rate. Also, you recall that the company owns some similar trucks and depreciates them over eight years. You are about to leave the office early to meet some friends when you notice that there is a contingent rental of \$97,592, payable by ABC Mining and starting with the seventh semiannual payment if the Consumer Price Index prevailing at the beginning of the lease increases in any one of the first three years of the lease.

Required

From financial reporting and ethical perspectives, discuss the issues raised by this situation.

RESEARCH SIMULATIONS

R21-1 Capital Lease Issues

Situation

The Cliborn Retail Company negotiated a lease for a retail store in a new shopping center that included 30 stores. The accountant for Cliborn, Gail Naugle, was given the lease agreement to analyze. She looked into whether the lease was a capital lease. The lease did not include a transfer of ownership or an option to purchase. The lease term was for 20 years and the present value of the minimum lease payments was \$100,000. Unsure of the fair market value of the property or its life, she called the lessor's controller.

"That is easy," he replied. "There is no fair value because we would never sell a single store in a shopping center. And, let's see, 20 years divided by 75% is about 27 years, so the life of the property must be at least that much. Or do you want a capital lease?"

Directions

Assuming that you are Gail Naugle, research the generally accepted accounting principles and prepare a short memo to the controller of Cliborn that summarizes how to classify the lease. Cite your reference and applicable paragraph numbers.

R21-2 Capital Lease Issues

Situation

The Stirbis Company was negotiating a lease for a new building that would be used as a warehouse. Stirbis' accountant, Shannon Fenimore, had been invited to join Jim Stirbis (the president) in a meeting where the lease agreement was settled. The president of the company that owned the building said, "I assume you want an operating lease."

"That is correct," replied Jim Stirbis.

The president responded, "So we will not include a transfer of ownership or an option to purchase. Anyway, I am sure you do not want to get into the real estate business."

"No, of course not."

"And we agree that the lease term is 30 years."

"Yes, but that seems to present some problems. We would have to argue that the life of the building is more than 40 years."

"You should not have any trouble persuading your auditors to agree to that."

"Maybe not. But the present value of the \$53,040 annual lease payment is \$500,000, which is the fair value of the building."

"That is a problem. But I think I have a solution. We will adjust the annual payment to \$45,000, so that the present value is only 85% of the fair value. Then we will add a clause that you also pay 1% of your total sales, up to a maximum of \$8,040 each year."

Directions

Assuming that you are Shannon Fenimore, research the generally accepted accounting principles and prepare a short memo to the controller of Stirbis that summarizes how to classify the lease. Cite your reference and applicable paragraph numbers.