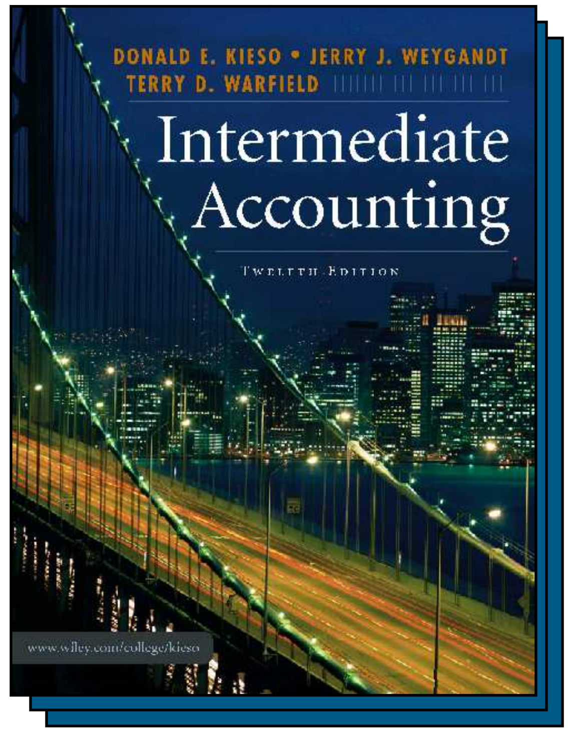
Leasing: Accounting Issues

Chapter 21

Intermediate Accounting
12th Edition
Kieso, Weygandt, and Warfield



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Learning Objectives

1. Explain the nature, economic substance, and advantages of lease transactions.
2. Describe the accounting criteria and procedures for capitalizing leases by the lessee.
3. Contrast the operating and capitalization methods of recording leases.
4. Identify the classifications of leases for the lessor.
5. Describe the lessor's accounting for direct-financing leases.
6. Identify special features of lease arrangements that cause unique accounting problems.
7. Describe the effect of residual values, guaranteed and unguaranteed, on lease accounting.
8. Describe the lessor's accounting for sales-type leases.
9. List the disclosure requirements for leases.

Accounting for Leases

Leasing Environment

- Who are players?
- Advantages of leasing
- Conceptual nature of a lease

Accounting by Lessee

- Capitalization criteria
- Accounting differences
- Capital lease method
- Operating method
- Comparison

Accounting by Lessor

- Economics of leasing
- Classification
- Direct-financing method
- Operating method

Special Accounting Problems

- Residual values
- Sales-type leases
- Bargain purchase option
- Initial direct costs
- Current versus noncurrent
- Disclosure
- Unsolved problems

The Leasing Environment

A **lease** is a contractual agreement between a lessor and a lessee, that gives the **lessee** the right to use specific property, owned by the **lessor**, for a specified period of time.

Largest group of leased equipment involves:

- Information technology,
- Transportation (trucks, aircraft, rail),
- Construction and
- Agriculture.

LO 1 Explain the nature, economic substance, and advantages of lease transactions.

The Leasing Environment

Who Are the Players?

Three general categories:

- Banks.
- Captive leasing companies.
- Independents.

LO 1 Explain the nature, economic substance, and advantages of lease transactions.

The Leasing Environment

Advantages of Leasing

1. 100% Financing at Fixed Rates.
2. Protection Against Obsolescence.
3. Flexibility.
4. Less Costly Financing.
5. Tax Advantages.
6. Off-Balance-Sheet Financing.

LO 1 Explain the nature, economic substance, and advantages of lease transactions.

The Leasing Environment

Conceptual Nature of a Lease

Capitalize a lease that transfers substantially all of the benefits and risks of property ownership, provided the lease is noncancelable.

Leases that do not transfer substantially all the benefits and risks of ownership are operating leases.

LO 1 Explain the nature, economic substance, and advantages of lease transactions.

The Leasing Environment

The issue of how to report leases is the case of substance versus form. Although technically legal title may not pass, the benefits from the use of the property do.

Operating Lease

Journal Entry:

Rent expense	xxx	
Cash		xxx

Capital Lease

Journal Entry:

Leased equipment	xxx	
Lease obligation		xxx

A lease that transfers substantially all of the benefits and risks of property ownership should be capitalized (only noncancellable leases may be capitalized).

Statement of Financial Accounting Standard No. 13, "Accounting for Leases," 1980

LO 1 Explain the nature, economic substance, and advantages of lease transactions.

Accounting by the Lessee

If the lessee **capitalizes** a lease, the **lessee** records an asset and a liability generally equal to the present value of the rental payments.

- Records depreciation on the leased asset.
- Treats the lease payments as consisting of interest and principal.

LO 2 Describe the accounting criteria and procedures for capitalizing leases by the lessee.

Accounting by the Lessee

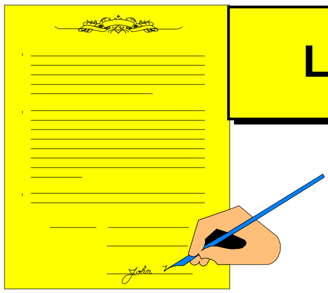
To record a lease as a **capital lease**, the lease must be noncancelable.

One or more of four criteria must be met:

1. Transfers ownership to the lessee.
2. Contains a bargain purchase option.
3. Lease term is equal to or greater than 75 percent of the estimated economic life of the leased property.
4. The present value of the minimum lease payments (excluding executory costs) equals or exceeds 90 percent of the fair value of the leased property.

LO 2 Describe the accounting criteria and procedures for capitalizing leases by the lessee.

Accounting by the Lessee



Lease Agreement

Leases that DO NOT meet any of the four criteria are accounted for as Operating Leases.

	Yes	No
Transfer of Ownership	Capital Lease	Next criterion
Bargain Purchase	Capital Lease	Next criterion
Lease Term >= 75%	Capital Lease	Next criterion
PV of Payments >= 90%	Capital Lease	Operating Lease

Capital Lease

Operating Lease

LO 2 Describe the accounting criteria and procedures for capitalizing leases by the lessee.

Accounting by the Lessee

Recovery of Investment Test (90% Test)

Discount Rate

Lessee computes the present value of the minimum lease payments using its **incremental borrowing rate**, with one exception.

- If the lessee knows the **implicit interest rate** computed by the lessor and it is less than the lessee's incremental borrowing rate, then lessee **must** use the lessor's rate.

LO 2 Describe the accounting criteria and procedures for capitalizing leases by the lessee.

Accounting by the Lessee

Recovery of Investment Test (90% Test)

Minimum lease payments:

- Minimum rental payment
- Guaranteed residual value
- Penalty for failure to renew
- Bargain purchase option

Executory Costs:

- Insurance
- Maintenance
- Taxes

Exclude from PV of Minimum Lease Payment calculation

LO 2 Describe the accounting criteria and procedures for capitalizing leases by the lessee.

Accounting by the Lessee

Asset and Liability Accounted for Differently

Asset and Liability Recorded at the lower of:

1. the present value of the minimum lease payments (excluding executory costs) or
2. the fair-market value of the leased asset.

LO 2 Describe the accounting criteria and procedures for capitalizing leases by the lessee.

Accounting by the Lessee

Asset and Liability Accounted for Differently

Depreciation Period

- If lease transfers ownership, depreciate asset over the **economic life of the asset**.
- If lease does not transfer ownership, depreciate over the **term of the lease.**

Accounting by the Lessee

E21-1 (Capital Lease with Unguaranteed Residual Value) On January 1, 2007, Burke Corporation signed a 5-year noncancelable lease for a machine. The terms of the lease called for Burke to make annual payments of $8,668 at the beginning of each year, starting January 1, 2007. The machine has an estimated useful life of 6 years and a $5,000 unguaranteed residual value. Burke uses the straight-line method of depreciation for all of its plant assets. Burke's incremental borrowing rate is 10%, and the Lessor's implicit rate is unknown.

Instructions

(a) What type of lease is this? Explain.

(b) Compute the present value of the minimum lease payments.

(c) Prepare all journal entries for Burke through Jan. 1, 2008.

LO 2 Describe the accounting criteria and procedures for capitalizing leases by the lessee.

Accounting by the Lessee

E21-1 What type of lease is this? Explain.

Capitalization Criteria:

Capital Lease, #3

1. Transfer of ownership → **NO**
2. Bargain purchase option → **NO**
3. Lease term => 75% of economic life of leased property

Lease term	5 yrs.
Economic life	6 yrs.
YES	83.3%

4. Present value of minimum lease payments => 90% of FMV of property

FMV of leased property is unknown.

LO 2 Describe the accounting criteria and procedures for capitalizing leases by the lessee.

Accounting by the Lessee

E21-1 Compute present value of the minimum lease payments.

Payment	$ 8,668
Present value factor (i=10%,n=5)	4.16986
PV of minimum lease payments	$36,144

Journal entry

1/1/07	Leased Machine Under Capital Lease	36,144	
	Leases liability		36,144
	Leases liability	8,668	
	Cash		8,668

LO 2 Describe the accounting criteria and procedures for capitalizing leases by the lessee.

Accounting by the Lessee

E21-1 Lease Amortization Schedule

Date	Lease Payment	10% Interest Expense	Reduction in Liability	Lease Liability
1/1/07				$ 36,144
1/1/07	$ 8,668		$ 8,668	27,476
12/31/07	8,668	2,748	5,920	21,556
12/31/08	8,668	2,156	6,512	15,044
12/31/09	8,668	1,504	7,164	7,880
12/31/10	8,668	788	7,880	0

LO 2 Describe the accounting criteria and procedures for capitalizing leases by the lessee.

Accounting by the Lessee

E21-1 Journal entries for Burke through Jan. 1, 2008.

Journal entry

12/31/07	Depreciation expense	7,229	
	Accumulated depreciation		7,229
	($36,144 ÷ 5 = $7,229)		
	Interest expense	2,748	
	Interest payable		2,748
	[($36,144 – $8,668) X .10]		

LO 2 Describe the accounting criteria and procedures for capitalizing leases by the lessee.

Accounting by the Lessee

E21-1 Journal entries for Burke through Jan. 1, 2008.

Journal entry

1/1/08	Lease liability	5,920	
	Interest payable	2,748	
	Cash		8,668

LO 2 Describe the accounting criteria and procedures for capitalizing leases by the lessee.

Accounting by the Lessee

E21-1 Comparison of Capital Lease with Operating Lease

	E21-1 Capital Lease			Operating	
Date	Depreciation Expense	Interest Expense	Total	Lease Expense	Diff.
2007	$ 7,229	$ 2,748	$ 9,977	$ 8,668	$1,309
2008	7,229	2,156	9,385	8,668	717
2009	7,229	1,504	8,733	8,668	65
2009	7,229	788	8,017	8,668	(651)
2010	7,228 *		7,228	8,668	(1,440)
	$ 36,144	$ 7,196	$ 43,340	$ 43,340	0

* rounding

LO 3 Contrast the operating and capitalization methods of recording leases.

Accounting by the Lessor

Benefits to the Lessor

1. Interest Revenue.
2. Tax Incentives.
3. High Residual Value.

LO 4 Identify the classifications of leases for the lessor.

Accounting by the Lessor

Economics of Leasing

A lessor determines the amount of the rental, based on the rate of return needed to justify leasing the asset.

If a residual value is involved (whether guaranteed or not), the company would not have to recover as much from the lease payments

Accounting by the Lessor

E21-10 (Computation of Rental) Morgan Leasing Company signs an agreement on January 1, 2007, to lease equipment to Cole Company. The following information relates to this agreement.

1. The term of the noncancelable lease is 6 years with no renewal option. The equipment has an estimated economic life of 6 years.
2. The cost of the asset to the lessor is $245,000. The fair value of the asset at January 1, 2007, is $245,000.
3. The asset will revert to the lessor at the end of the lease term at which time the asset is expected to have a residual value of $43,622, none of which is guaranteed.
4. The agreement requires annual rental payments, beg. Jan. 1, 2007.
5. Collectibility of the lease payments is reasonably predictable. There are no important uncertainties surrounding the amount of costs yet to be incurred by the lessor.

LO 4 Identify the classifications of leases for the lessor.

Accounting by the Lessor

E21-10 (Computation of Rental) Assuming the lessor desires a 10% rate of return on its investment, calculate the amount of the annual rental payment required.

Residual value		$	43,622
PV of single sum (i=10%, n=6)	×		0.56447
PV of residual value		$	24,623
Fair market value of leased equipment		$	245,000
Present value of residual value	-		(24,623)
Amount to be recovered through lease payment			220,377
PV factor of annunity due (i=10%, n=6)	÷		4.79079
Annual payment required		$	46,000

LO 4 Identify the classifications of leases for the lessor.

Accounting by the Lessor

Classification of Leases by the Lessor

a. Operating leases.

b. Direct-financing leases.

c. Sales-type leases.

LO 4 Identify the classifications of leases for the lessor.

Accounting by the Lessor

Classification of Leases by the Lessor

Capitalization Criteria (Lessor)

Illustration 21-11

Group I

1. The lease transfers ownership of the property to the lessee.
2. The lease contains a bargain purchase option.
3. The lease term is equal to 75 percent or more of the estimated economic life of the leased property.
4. The present value of the minimum lease payments (excluding executory costs) equals or exceeds 90 percent of the fair value of the leased property.

Group II

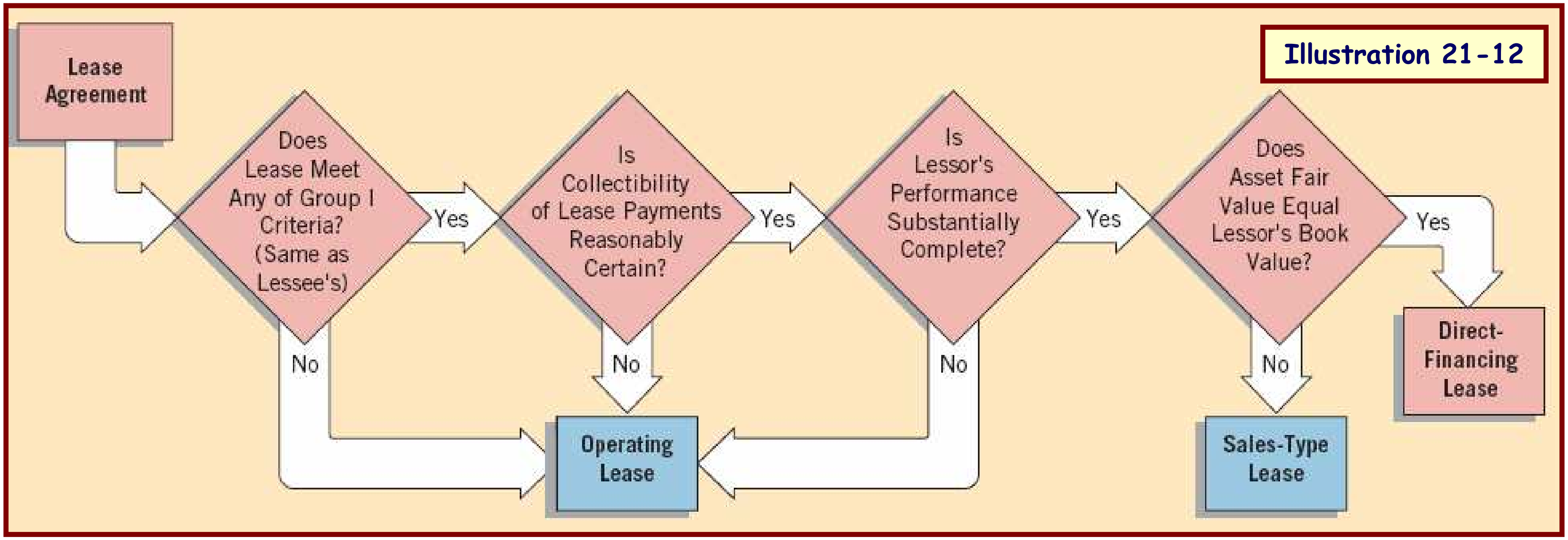
1. Collectibility of the payments required from the lessee is reasonably predictable.
2. No important uncertainties surround the amount of unreimbursable costs yet to be incurred by the lessor under the lease (lessor's performance is substantially complete or future costs are reasonably predictable).

A sales-type lease involves a manufacturer's or dealer's profit, and a direct-financing lease does not.

LO 4 Identify the classifications of leases for the lessor.

Accounting by the Lessor

Classification of Leases by the Lessor



A lessor may classify a lease as an **operating** lease but the lessee may classify the same lease as a **capital** lease.

LO 4 Identify the classifications of leases for the lessor.

Accounting by the Lessor

Direct-Financing Method (Lessor)

In substance the financing of an asset purchase by the lessee.

Accounting by the Lessor

E21-10 Prepare an amortization schedule that would be suitable for the lessor.

Date	Lease Payment	10% Interest Revenue	Recovery of Receivable	Lease Receivable
1/1/07				$ 245,000
1/1/07	$ 46,000		$ 46,000	199,000
12/31/07	46,000	19,900	26,100	172,900
12/31/08	46,000	17,290	28,710	144,190
12/31/09	46,000	14,419	31,581	112,609
12/31/10	46,000	11,261	34,739	77,870
12/31/11	46,000	7,787	38,213	39,657
12/31/12	43,622	3,965*	39,657	0

* rounding

LO 5 Describe the lessor's accounting for direct-financing leases.

Accounting by the Lessor

E21-10 Prepare all of the journal entries for the lessor for 2007 and 2008.

Journal entry

1/1/07	Lease receivable	245,000	
	Equipment		245,000
1/1/07	Cash	46,000	
	Lease receivable		46,000
12/31/07	Interest receivable	19,900	
	Interest revenue		19,900

Accounting by the Lessor

E21-10 Prepare all of the journal entries for the lessor for 2007 and 2008.

Journal entry

1/1/08	Cash	46,000	
	Lease receivable		26,100
	Interest receivable		19,900
12/31/08	Interest receivable	17,290	
	Interest revenue		17,290

LO 5 Describe the lessor's accounting for direct-financing leases.

Accounting by the Lessor

Operating Method (Lessor)

- Records each rental receipt as rental revenue.
- Depreciates the leased asset in the normal manner.

Special Accounting Problems

1. Residual values.
2. Sales-type leases (lessor).
3. Bargain purchase options.
4. Initial direct costs.
5. Current versus noncurrent classification.
6. Disclosure.

LO 6 Identify special features of lease arrangements that cause unique accounting problems.

Special Accounting Problems

Residual Values

Lessee Accounting for Residual Value

The accounting consequence is that the **minimum lease payments**, include the guaranteed residual value but excludes the unguaranteed residual value.

Illustration: See previous E21-1 (Capital Lease with Unguaranteed Residual Value)

LO 7 Describe the effect of residual values, guaranteed and unguaranteed, on lease accounting.

Special Accounting Problems

Illustration (LESSEE and LESSOR Computations and Entries)

On Jan. 1, 2007, Velde Company (lessee entered into a four-year, noncancellable contact to lease a computer for Exceptional Computer Company (lessor). Annual rentals of $16,228 are to be paid each Jan. 1. The cost of the computer to Exceptional Computer Company was $60,000 and has an estimated useful life of four years and a $5,000 residual value. Velde has guaranteed the lessor a residual value of $5,000. Velde has an incremental borrowing rate of 12% but has knowledge that Exceptional computer Company used a rate of 10% in setting annual rentals. Collection of the rentals is reasonably predictable and there are no important uncertainties regarding future unreimbursable costs to be incurred by the lessor.

LO 7 Describe the effect of residual values, guaranteed and unguaranteed, on lease accounting.

Special Accounting Problems

Illustration (LESSEE) What is the present value of the minimum lease payments?

Payment	$	16,228
PV of annunity due (i=10%, n=4)		3.48685
PV of residual value		56,585
Residual value		5,000
PV of single sum (i=10%, n=4)		0.68301
PV of residual value		3,415
Total Present Value	$	60,000

LO 7 Describe the effect of residual values, guaranteed and unguaranteed, on lease accounting.

Special Accounting Problems

Illustration (LESSEE) What type of lease is this? Explain.

Capitalization Criteria:

Capital Lease, #3

1. Transfer of ownership → **NO**
2. Bargain purchase option → **NO**
3. Lease term => 75% of economic life of leased property

Lease term	4 yrs.
Economic life	4 yrs.
YES	100%

4. Present value of minimum lease payments => 90% of FMV of property

FMV of leased property is unknown.

LO 7 Describe the effect of residual values, guaranteed and unguaranteed, on lease accounting.

Special Accounting Problems

Illustration (LESSEE) Prepare an amortization schedule that would be suitable for the Velde.

Date	Lease Payment	10% Interest Expense	Reduction of Liability	Lease Liability
1/1/07				$ 60,000
1/1/07	$ 16,228		$ 16,228	43,772
12/31/07	16,228	4,377	11,851	31,921
12/31/08	16,228	3,192	13,036	18,885
12/31/09	16,228	1,889	14,339	4,546
12/31/10	5,000	454 *	4,546	0

* rounding

LO 7 Describe the effect of residual values, guaranteed and unguaranteed, on lease accounting.

Special Accounting Problems

Illustration (LESSEE) Prepare all of the journal entries for the Velde for 2007 and 2008.

Journal entry

1/1/07	Lease computer	60,000	
	Lease liability		60,000
1/1/07	Lease liability	16,228	
	Cash		16,228
12/31/07	Interest expense	4,377	
	Interest payable		4,377
12/31/07	Depreciation expense	13,750	
	Accumulated Depreciation		13,750

($60,000 – 5,000) / 4 = $13,750

LO 7 Describe the effect of residual values, guaranteed and unguaranteed, on lease accounting.

Special Accounting Problems

Illustration (LESSEE) Prepare all of the journal entries for the Velde for 2007 and 2008.

Journal entry

1/1/08	Interest payable	4,377	
	Lease liability	11,851	
	Cash		16,228
12/31/08	Interest expense	3,192	
	Interest payable		3,192
12/31/08	Depreciation expense	13,750	
	Accumulated Depreciation		13,750

LO 7 Describe the effect of residual values, guaranteed and unguaranteed, on lease accounting.

Special Accounting Problems

Residual Values

Lessor Accounting for Residual Value

Lessor works on the assumption that it will realize the residual value at the end of the lease term whether guaranteed or unguaranteed.

LO 7 Describe the effect of residual values, guaranteed and unguaranteed, on lease accounting.

Special Accounting Problems

Illustration (LESSOR) Calculation of the annual rental payment.

Residual value		$	5,000
PV of single sum (i=10%, n=4)	x		0.68301
PV of residual value		$	3,415
Cost of equipment to be recovered		$	60,000
Present value of residual value	-		(3,415)
Amount to be recovered through lease payment			56,585
PV factor of annunity due (i=10%, n=4)	÷		3.48685
Annual payment required		$	16,228

LO 7 Describe the effect of residual values, guaranteed and unguaranteed, on lease accounting.

Special Accounting Problems

Illustration (LESSOR) Prepare an amortization schedule that would be suitable for the Exceptional.

Date	Lease Payment	10% Interest Revenue	Recovery of Receivable	Lease Receivable
1/1/07				$ 60,000
1/1/07	$ 16,228		$ 16,228	43,772
12/31/07	16,228	4,377	11,851	31,921
12/31/08	16,228	3,192	13,036	18,885
12/31/09	16,228	1,889	14,339	4,546
12/31/10	5,000	454 *	4,546	0

* rounding

LO 7 Describe the effect of residual values, guaranteed and unguaranteed, on lease accounting.

Special Accounting Problems

Illustration (LESSOR) Prepare all of the journal entries for the Exceptional for 2007 and 2008.

Journal entry

1/1/07	Lease receivable	60,000	
	Equipment		60,000
1/1/07	Cash	16,228	
	Lease receivable		16,228
12/31/07	Interest receivable	4,377	
	Interest revenue		4,377

LO 7 Describe the effect of residual values, guaranteed and unguaranteed, on lease accounting.

Special Accounting Problems

Illustration (LESSOR) Prepare all of the journal entries for the Exceptional for 2007 and 2008.

Journal entry

1/1/08	Cash	16,228	
	Lease receivable		11,851
	Interest receivable		4,377
12/31/07	Interest receivable	3,192	
	Interest revenue		3,192

LO 7 Describe the effect of residual values, guaranteed and unguaranteed, on lease accounting.

Special Accounting Problems

Sales-Type Leases (Lessor)

- Primary difference between a direct-financing lease and a **sales-type lease** is the manufacturer's or dealer's gross profit (or loss).
- Lessor records the sale price of the asset, the cost of goods sold and related inventory reduction, and the lease receivable.
- Difference in accounting for guaranteed and unguaranteed residual values.

LO 8 Describe the lessor's accounting for sales-type leases.

Special Accounting Problems

Bargain Purchase Option (Lessee)

- Present value of the minimum lease payments must include the present value of the option.
- Only difference between the accounting treatment for a bargain purchase option and a guaranteed residual value of identical amounts is in the computation of the annual depreciation.

Special Accounting Problems

Initial Direct Costs (Lessor)

The accounting for initial direct costs:

- For **operating leases**, the lessor should defer initial direct costs.
- For **sales-type leases**, the lessor expenses the initial direct costs.
- For a **direct-financing lease**, the lessor adds initial direct costs to the net investment.

Special Accounting Problems

Current versus Noncurrent

FASB Statement No. 13 does not indicate how to measure the current and noncurrent amounts.

It requires that for the lessee the "obligations shall be separately identified on the balance sheet as obligations under capital leases and shall be subject to the same considerations as other obligations in classifying them with current and noncurrent liabilities in classified balance sheets."

LO 6 Identify special features of lease arrangements that cause unique accounting problems.

Special Accounting Problems

Disclosing Lease Data

1. General description of the nature of the lease.
2. Nature, timing and amount of cash inflows and outflows associated with leases, including payments for each of the five succeeding years.
3. Amount of lease revenues and expenses reported in the income statement each period.
4. Description and amounts of leased assets by major balance sheet classification and related liabilities.
5. Amounts receivable and unearned revenues under lease.

LO 9 List the disclosure requirements for leases.

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