



Intermediate Accounting 2
CHAPTER 7
LEASES (Part 1)
1st Semester 2020-2021

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PROBLEM 1. TRUE OR FALSE

TRUE 1. According to PFRS, 16 leases, a lessee shall classify each of its leases into a finance lease or an operating lease.

TRUE 2. A contract is (or contains) a lease if it conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

FALSE 3. An underlying asset is not considered an identified asset for the purpose of applying the accounting requirements of PFRS 16 if the supplier's substitution right is not substantive.

TRUE 4. The current view on accounting for leases by lessees is that all leases are 'on balance sheet' items, with very minimal exceptions.

TRUE 5. In most leases, a lessee recognizes an asset and a liability at the commencement date.

TRUE 6. According to PFRS 16, lease payments include any amount to be paid for purchase options that are reasonably certain to be exercised and amounts that are expected to be paid under residual value guarantees.

TRUE 7. The lessee always uses its incremental borrowing rate in determining the present value of the minimum lease payments.

8. If a lease transfers ownership of the underlying asset to the lessee by the end of the lease term, the underlying asset is depreciated over its useful life or the lease term, whichever is shorter.

Fact pattern

On January 1, 20x1, Lessee enters into a 4-year lease of an asset for annual rent of ₱10,000 payable at the beginning of each year. The interest rate implicit in the lease is 10% while the lessee's incremental borrowing rate is 12%.

- The initial measurement of the right-of-use asset is determined as follows:
- The initial measurement of the lease liability is determined as follows: ₱10,000 x PV of an annuity due of ₱1 @10%, n=4.

Initial measurement:

Lease payments		PV factors @10%, n=4		PV
Fixed payments	10,000	PV of ordinary annuity of ₱1	3.169867	31,698.67

January 1, 20x1	Right-of-use asset	31,698.67	
	Lease liability		31,698.67

Subsequent measurement:

Date	Payments	Interest expense	Amortization	Present Value
Jan.1,20x1				31,698.67
Dec.31,20x1	10,000	3,169.87	6,830.13	24,868.54
Dec.31,20x2	10,000	2,486.85	7,513.15	17,355.39
Dec.31,20x3	10,000	1,735.54	8,264.46	9,090.9
Dec.31,20x4	10,000	909.09	9,090.9	0

The entries on Dec.31,20x1 are as follow:

Dec. 31,20x1	Interest expense	3,169.87	
	Lease liability	6,830.13	
	Cash		10,000
Dec. 31,20x1	Depreciation expense(31,698.67/4)	7,924.67	
	Accumulated depreciation		7,924.67

Current Portion (20x2)	7,513.15
Non current (20x2)	<u>17,355.39</u>
Total lease liability, Dec. 20x1	<u>24,868.54</u>

Dec. 31,20x4	Interest expense	909.09	
	Lease liability	9,090.91	
	Cash		10,000

9. The initial measurement of the right-of-use asset is determined as follows: ₱10,000 x PV of an annuity due of ₱1 @10%, n=4

Initial Measurement of Right-of-use

Annual Payments (due to beg. of each year)	₱10,000
PV of an annuity due ₱1 @10%, n=4	<u>3.169867</u>
Total	₱31,698.67

10. The initial measurement of the lease of liability is determined as follows: ₱10,000 x PV of an annuity due of ₱1 @10%, n=4

Initial Measurement of Lease of Liability

Annual Payments (due to beg. of each year)	₱10,000
PV of an annuity due ₱1 @10%, n=4	<u>3.169867</u>
Total	₱31,698.67

PROBLEM 2. FOR CLASSROOM DISCUSSION

1. Customer X enters into a contract with Supplier Y for the use of a specific car for one year. The car shall be modified according to the specifications of Customer X. Customer X shall have exclusive use of the car during the duration of the contract. If at any time the car is not working properly, Supplier Y shall provide a replacement car of the same type. Supplier Y cannot retrieve the car during the duration of the contract for reasons other than the default of Customer X. At the time of signing of contract, Supplier Y does not yet have the car described in the contract.

Requirement: Identify if the contract is (or contains) a lease using the guidance in PFRS 16. Provide brief explanations.

Analysis: The contract does not contain a lease because Supplier Y does not yet have the car at the time of signing of contract.

2. Customer X enters into a three-year contract with Supplier Y for the use of a bus. The bus shall be used as a shuttle service for Customer X's guest. Supplier Y owns a fleet of buses and each of these buses meets the specifications of Customer X. The contract requires Supplier Y to make available for Customer X the use of a bus throughout the duration of the contract. Supplier Y provides a driver for the bus and decides which one of its many buses will be provided to Customer X. this would depend, for example, on the number of guest that will be using the bus and the destination-whether long trip or short trip. Customer X decides the time of use and the destination. Only the guest of Customer X shall be the passenger when the bus is used. After Customer X's use, the bus kept in Supplier Y's premises.

Requirement: Identify if the contract is (or contains) a lease using the guidance in PFRS 16. Provide brief explanation.

Analysis: The contract contains a lease because Customer X has the right to control the use of an identified asset for a period of time. This is evidenced by the following:

- a. The bus are identified asset (explicit specified in the contract) and Customer X has the right to obtain substantially all of the economic benefits from their use throughout the period of use (Customer X has exclusive use of bus)
- b. Customer X has the right to direct the use of the bus because Customer X makes relevant decisions on how and for what purpose the trucks are to be used. Although Supplier Y controls the drivers and the buses are to be used, this is necessary only for the efficient use of buses and does not give Supplier Y the right to direct how and for what purpose the buses are used.

3. On January 1, 20x1, ABC Co. enters into a 4-year lease agreement with XYZ, Inc. for industrial equipment. Lease payment is ₱ 100,000 payable annually starting on January 1, 20x1. ABC knows that the lessor expects a 10% return on the lease. ABC has a 12% incremental borrowing rate. The equipment is expected to have an estimated useful life of 5 years and a residual value of ₱ 25,000. The lease agreement contained a purchase option of ₱50,000 exercisable at the end of the lease term. It is reasonably certain as of inception of the lease that ABC will exercise the option in the future. ABC uses the straight line method of depreciation.

Requirements:

- a. Provide the journal entries.
- b. Determine the carrying amounts of the right-of-use asset and lease liability on December 31,20x1.

Initial measurement:

The lease payment consist of the 100,000 fixed payments consist of the 100,000 fixed payments and the 10% expected payable on the guarantee.

Lease payments		PV factors @10%,n=5		PV
Fixed payments	100,000	PV of annuity due to ₱1	3.40183	340,183
Payable on RV	10,000	PV of ₱1	0.63552	6,355
Total				<u>346,538</u>

January 1,20x1	Right-to-use asset	346,538.3	
	Cash		100,000
	Lease liability		246,538.2

Subsequent measurement:

Date	Payments	Interest Expense	Amortization	Present Value
Jan.1,20x1				346,538
Jan.1,20x1	100,000		100,000	246,538
Jan.1,20x2	100,000	29,585	70,145	176,123
Jan.1,20x3	100,000	21,135	78,865	97,258
Jan.1,20x4	100,000	11,671	88,329	8,929
Jan.1,20x5	100,000	1,071	8,929	0

Dec.31,20x1	Interest expense	29,585	
	Lease liability		29,585
Dec.31,20x1	Depreciation expense(346,538/4)	86,635	
	Right-of-use asset		86,635
Jan.1,20x1	Lease liability	100,000	
	Cash		100,000

4. On January 1, 20x1, ABC Co. enters into a 4-year lease of office equipment. Annual rental payable at the end of each year is ₱12,000. As inducement in entering into the lease, the lessor makes the first 3 months of the lease as rent-lease. ABC Co. opts to use the practical expedient allowed under PFRS 16 for leases of low value assets.

Requirements: Provide the journal entries.

The annual expense is computed as follow:

20x1	(12,000x9/12)	9,000
20x2	12,000	12,000
20x3	12,000	12,000
20x4	12,000	12,000
Total lease payments		45,000
Divide by: lease term		4
Annual expense		11,250

The first 3 months are rent-free

The entries are as follow:

Jan.1,20x1	No entry		
Dec. 31,20x1	Rent expense(lease expense)	11,250	
	Cash		9,000
	Rent Payable		2,250
Dec. 31,20x2	Rent Expense(lease expense)	11,250	
	Rent payable	750	
	Cash		12,000
Dec. 31,20x3	Rent expense(lease expense)	11,250	

	Rent payable(squeeze)	750	
	Cash		12,000
Dec. 31,20x4	Rent expense(lease expense)	11,250	
	Rent payable	750	
	Cash		12,000

PROBLEM 3: EXERCISES

1. TAUNT TO JEER AT Co. leased a new machine from RIDICULE TO MOCK, Inc. on January 1, 20x1, under a lease with the following information.

Lease term	10 years
Annual rate payable at the end of each year	₱80,000
Useful life of machine	12 years
Implicit interest rate	14%
Lessee's incremental borrowing rate	12%

The annual rental payment includes ₱6,000 to cover maintenance costs. The maintenance costs transfer services to TAUNT. The amount charged reflects the stand alone selling price of the maintenance services.

Requirements:

- Provide the entries in 20x1 and 20x2.
- Determine the current and non current portions of the lease liability on December 31, 20x1

Initial measurement:

Lease payments	PV factors @14%,n=10	PV
Fixed payments 80,000	PV of an annuity of ₱1	5.2161178 417,289.42

Initial amount of liability	417,289.42
Maintenance Cost	6,000
Right-of-use asset-January1,20x1	423,289.42

Jan. 1,20x1	Right-of-use asset (417,289.42 +6,000)	423,289.42	
	Lease liability		517,289.42
	Cash		6,000

Subsequent measurement:

Date	Payments	Interest Expense	Amortization	Present Value
Jan.1,20x1				417,289.42
Dec.31,20x1	80,000	58,420.518	21,579.482	395,709.94
Dec.31,20x2	80,000	55,399.391	24,600.609	371,109.34
Dec.31,20x3	80,000	51,955.307	28,044.693	343,064.65
Dec.31,20x4	80,000	48,029.051	31,970.949	311,093.71
Dec.31,20x5	80,000	43,553.119	36,446.881	274,646.83
Dec.31,20x6	80,000	38,450.556	41,549.444	233,097.39

Dec. 31,20x7	80,000	32,633.634	47,366.366	185,731.03
Dec.31,20x8	80,000	26,002.344	53,997.656	131,733.38
Dec.31,20x9	80,000	18,442.673	61,557.327	70,176
Dec. 31,2010	80,000	9,824.648	70,176	0

The entries on December 31, 20x1 are as follow:

Dec.31,20x1	Interest Expense	58,420.518	
	Lease liability	21,579.482	
	Cash		80,000
Dec.31,20x1	Depreciation expense(417,289/120)	34,774.118	
	Accumulated depreciation		34,774.118

The entries on December 31, 20x2 are as follow:

Dec.31,20x2	Interest Expense	55,399.391	
	Lease liability	24,600.609	
	Cash		80,000
Dec.31,20x2	Depreciation expense(417,289.42/12)	34,774.118	
	Accumulated depreciation		34,774.118

CURRENT AND NONCURRENT PORTIONS OF THE LEASE LIABILITY

Current portion (20x2)	24,600.609
Non current portion (20x2)	371,109.34
Total lease liability	<u>395,709.949</u>

Dec.31,20x2	Interest expense	9,83.6484	
	Lease liability	70,176	
	Cash		80,000

2. On January 1,20x1, Lessee enters into a 4-year lease of heavy machinery. Annual rent is ₱200,000 payable at the beginning of each year. Lessee does not know the lessor's implicit interest rate. Lessee's incremental borrowing rate is 14% Lessee incurs initial direct costs of ₱ 50,000 in negotiating the lease. The underlying asset's remaining useful life is 10 years. Lessee uses the straight line method of depreciation.

Requirements:

- Prepare the amortization table for the lease liability.
- Provide the journal entries on the following dates: January 1, 20x1, December 31,20x1, and January 1,20x2.
- Compute for the carrying amounts of the right-of-use asset and lease liability on December 31,20x1.

Initial measurement

Annual payments (due at beg. of each year)	200,000
PV of an annuity due of 1 @ 14%, n=4	<u>2.9137135</u>
Total	<u>582,742.7</u>
Initial amount of liability	582,742.7

Initial Direct cost 50,000
 Right –of-use asset- Jan. 1,20x1 632,742.7

Jan. 1,20x1	Right-of-use asset	632,742.7	
	Lease liability		582,742.7
	Cash		50,000

Subsequent measurement:

Date	Payments	Interest Expense	Amortization	Present value
Jan.1,20x1				582,742.7
Dec.31,20x1	200,000	81,583.978	118,416.03	464,326.67
Dec.31,20x2	200,000	65,005.733	134,994.27	329,332.4
Dec.31,20x3	200,000	46,106.536	153,893.47	175,439
Dec.31,20x4	200,000	24,561.45	175,439	0

The entries of 20x1 are as follow:

Jan.1,20x1	Right-of-use asset	632,742.7	
	Lease liability		582,742.7
	Cash		50,000
Dec.31,20x1	Depreciation expense(582,742.7/10)	58,274.27	
	Right –of-use asset		58,274.27
Dec.31,20x1	Interest expense	65,005.733	
	Lease liability		65,005.733

The entries of 20x2 are as follow:

Jan.1,20x2	Lease liability	200,000	
	Cash		200,000
Dec.31,20x2	Depreciation expense	58,274.27	
	Right –of-use asset		58,274.27
Dec.31,20x2	Interest expense	46,106.536	
	Lease liability		46,106.536

3. On January 1,20x1, Lessee enters into a 5-year lease of equipment. Annual rent is ₱300,000 payable at the end of each year. The implicit interest rate in the lease is 9%. The contract provides for a purchase option with an exercise price of ₱500,000. Lessee is reasonably certain to exercise the purchase option at the end of the lease term. The remaining useful life of the underlying asset is 8 years. Lessee uses the straight line method of depreciation.

Requirements:

- Prepare the amortization table for the lease liability.
- Provide the journal entries on the following dates: January 1, 20x1 and December 31, 20x1.

Initial measurement

Lease payment	PV factors @9%,n=5	PV
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Fixed payments	300,000	PV of an annuity due ₱1	3.8896544	
	1,166,896.3			
Purchased option	500,000	PV of ₱1	0.6499311	324,965.55
				<u>1,491,861.8</u>

Jan.1,20x1	Right-of-use assets	1,491,861.8	
	Lease liability		1,491,861.8

Subsequent Measurement:

Date	Payments	Interest Expense	Amortization	PV
Jan. 1,20x1				1,491,861.8
Dec.31,20x1	300,000	134,267.562	165,732.438	1,326,129.362
Dec.31,20x2	300,000	119,351.64258	180,648.35742	1,145,481.00458
Dec.31,20x3	300,000	103,093.2904	196,906.7096	948,574.2950
Dec.31,20x4	300,000	85,371.6866	214,628.3134	733,945
Dec.31,20x5	800,000	66,055.1383	233,945	0

The entries on December 20x1 are as follow:

Dec.31,20x1	Interest expense	134,267.562	
	Lease liability	165,732.438	
	Cash		300,000
Dec.31,20x1	Depreciated Expense(1,491,861.8/8)	186,482.73	
	Accumulated depreciation		186,482.73

Dec.31,20x5	Interest expense	66,055.14	
	Lease liability	733,945	
	Cash		800,000

4. On January 1, 20x1, Lessee enters into a 6-year lease of equipment. Annual rental is ₱400,000 payable at beginning of each year. Lessee does not know the lessor's implicit interest rate. Lessee's incremental borrowing rate is 8%. Lessee provides a residual value guarantee and expects to pay ₱50,000 on this guarantee. The remaining useful life of the underlying asset is 8 year. Lessee uses the straight line method of depreciation.

Requirements:

- Prepare the amortization table for the lease liability.
- Provide the journal entries on the following dates: January 1, 20x1, December 31,20x1 and January 1, 20x2.

Initial Measurements

Lease payments	PV factors @8%,n=6	PV
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Fixed payments	400,000	PV of annuity due of ₱1	4.6228825	1,849,153
Payable on guaranteed RV	50,000	PV of ₱1	0.6301694	<u>(31,508.47)</u>
				<u>1,880,661.4</u>

Jan. 1, 20x1	Right-of-use asset	1,880,661.4	
	Cash		400,000
	Lease liability		1,480,661.4

Subsequent Measurements:

Date	Payments	Interest Expense	Amortization	Present Value
Jan.1,20x1				1,880,661.4
Dec.31,20x1	400,000	150,452.912	294,547.088	1,631,114.312
Dec.31,20x2	400,000	130,489.1450	269,510.855	1,361,603.457
Dec.31,20x3	400,000	108,928.277	291,071.723	1,070,531.734
Dec.31,20x4	400,000	85,642.539	314,357.461	756,174.273
Dec.31,20x5	400,000	60,493.942	339,506.058	416,668.215
Dec.31,20x6	400,000	33,333.457	366,666.543	50,000
Jan.1,20x7	50,000			0

Dec. 31, 20x1 and Jan. 1, 20x2	Interest expense	150,452.912	
	Lease liability	249,547.088	
	Cash		400,000
	Depreciation expense(1,880,661.4/8)	235,082.68	
	Accumulated depreciation		325,082.68

5. On January 1, 20x1, DEMENTED Co. leased office furniture from INSANE, Inc. Payments on the lease will be made as follows:

YEAR	RENTAL PAYMENTS
December 31, 20x1	200,000
December 31, 20x2	240,000
December 31, 20x3	260,000
	<u>700,000</u>

- As an inducement to enter to the lease, INSANE granted DEMENTED the first six months of the lease rent-free.
- Additional rent (contingent rent) of 10% is to be paid for any excess of sales of DEMENTED over ₱2,000,000. DEMENTED's sales for 20x1, 20x2, and 20x3 are ₱1,800,000, ₱2,000,000, and ₱3,000,000, respectively.
- DEMENTED Co. opts to use the recognition exemption for leases of low value asset.

Requirements: Provide all the journal entries in the books of DEMENTED (Lessee).

SOLUTION:

Date	Sales	Allocation	
20x1	1,800,000	(2,000,000-1,800,000)	(200,000)
20x2	2,000,000	(2,000,000-2,000,000)	0
20x3	3,000,000	(2,000,000-3,000,000)	(1,000,000x10%)=100,000

*1,000,000x10%=100,000 additional rent

The annual expense is computed as follows:

Dec.31, 20x1 (200,000 x 6/12)	100,000
Dec.31, 20x2	240,000
Dec.31, 20x3 (260,000+100,000)	<u>360,000</u>
Total lease payment	700,000
Divide by: Lease Term (including rent free period)	<u>3</u>
Annual expense	<u>233,333</u>

The entries are as follow:

Jan.1,20x1	No entry		
Dec.31,20x1	Rent expense(lease expense)	233,333	
	Cash		100,000
	Rent Payable		133,333
Dec.31,20x2	Rent expense	233,333	
	Rent payable	6,667	
	Cash		240,000
Dec.31,20x3	Rent expense	233,333	
	Rent payable	126,667	
	Cash		360,000

PROBLEM 4. CLASSROOM ACTIVITY

Identifying a Lease

1. Entity X enters into a five-year contract with an aviation company for the exclusive use of a particular executive jet. The contract details the interior and exterior specifications for the jet. The aviation company is permitted to use a alternative aircraft but this would be uneconomic due to various factors such as the cost of customizing the aircraft to meet the contractual specifications. Subject to certain restrictions, the customer decides where the executive jet will fly and which passengers will use it. The aviation company operates the aircraft using its own crew.

Requirements:Determine if the contract is a lease using the guidelines in PFRS 16. Provide a brief explanation for your answer.

Analysis:the contract contains a lease because there is an identified asset and Entity X has the right to obtain substantially all of the economic benefits due to the exclusive use of jet.

Measurement

2. On January 1, 20x1, Lessee enters into a three-year lease of equipment. Lessee agrees to make the following annual payments at the end of the year.

YEAR	PAYMENTS
20x1	200,000

20x2	240,000
20x3	280,000

The implicit interest rate in the lease, known to Lessee, is 6%. Lessee uses the straight line method of depreciation.

Requirements: Provide all the journal entries over the lease term.

SOLUTION FOR #2 and 3.

The annual expense is computed as follows:

20x1	200,000
20x2	240,000
20x3	280,000
Total lease payments	<u>720,000</u>
Divide by: Lease term	3
Annual Expense	<u>240,000</u>

Initial Measurements:

Lease payments	PV factors @6%,n=3	PV
Fixed payments 240,000	PV of an annuity due of ₱1	2,673013
		641,523.192

Jan.1,20x1	Right-of-use asset	641,523.19	
	Lease liability		641,523.19

The entries are as follow:

Jan. 1,20x1	NO ENTRY		
Dec.31,20x1	Rent expense	240,000	
	Cash		200,000
	Rent Payable		40,000
Dec.31,20x2	Rent expense	240,000	
	Cash		240,000
Dec.31,20x3	Rent Expense	240,000	
	Rent Payable		40,000
	Cash		280,000

2. Use the facts in Problem #2 above except that Lessee opts to use the allowed recognition exemption for leases of low value asset.

Requirements:

- Provide all the journal entries over the lease term.
- Prepare a table comparing the total expenses recognized under Problem #2 above (general recognition) and this problem(recognition exemption).

The answer is attached in number 2 SOLUTION.

PROBLEM 5. MULTIPLE CHOICE

B. 1. Which of the following is not one of the criteria when determining whether a contract is or contains a lease?

- a. Identified asset
 - b. Identified liability**
 - c. Right to obtain substantially all of the economic benefits from use of an identified asset throughout the period of use.
 - d. Right to direct the use of the identified asset throughout the period of use.
- D.** 2. If the supplier has substitution right,
- a. A customer shall not account for the contract as a lease.
 - b. A customer shall account for the contract as a lease.
 - c. A customer shall not account for the contract as a lessee if it has the right to direct the use of the asset.
 - d. A customer shall account for the contract as a lease if the supplier's substitution right is not substantive.**
- C.** 3. According to PFS 16 lease payments exclude which of the following?
- a. Rentals
 - b. Purchase option that is reasonably certain as to exercise
 - c. Payments of non-lease elements, except when the lessee opts to use the allowed practical expedient.**
 - d. Amount expected to be paid under a residual value guarantee.
- D.** 4. The discount rate used by the lessee in accounting for leases is the
- a. Interest rate implicit in the lease
 - b. Lessee's incremental borrowing rate of interest
 - c. Lease contract stated interest rate
 - d. Choice (a) if this is determinable, if not determinable, then Choice (b)**
- D.** 5. Initial direct costs incurred by a lessee are
- a. Expensed immediately
 - b. Capitalized as cost of right-of-use asset
 - c. Included in the initial measurement of lease liability
 - d. B and c**
- C.** 6. When a lease transfer ownership to the lessee by the end of the lease term, the underlying asset is depreciated
- a. Over its useful life
 - b. Over the lease term
 - c. Over the shorter of a and b**
 - d. Not depreciated

7. A six-year lease expiring on December 31 specifies equal annual lease payments. Part of this payment represents interest and part represents a reduction in the net lease liability. The portion of the lease payment in the fifth year applicable to the reduction of the net lease liability should be.

ANSWER: MORE THAN IN THE FOURTH YEAR

- a. Less than in the fourth year
 - b. Less than in the sixth year
 - c. The same as in sixth year
 - d. Less than in the fourth year
- A. 8. Which of the following is incorrect regarding the accounting for lease by a lessee?
- a. **A lessee recognizes the same total amount of expense on a lease whether it uses the general recognition or the recognition exemption under PFRS 16.**
 - b. The interest expense on a lease liability decreases each period.
 - c. According to PFRS 16, executory costs, such as insurance and real property taxes, are always excluded from lease payments regardless of whether these costs transfer goods or services to the lessee.
 - d. A lessee shall allocate the total consideration in a contract to the lease components and non-lease components of the contract.
- D. 9. Which of the following is not included in the lease payments for purposes of computing for the lease liability?
- a. Fixed payments less any lease incentives receivable
 - b. Variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date.
 - c. Guaranteed date.
 - d. **Contingent rent based on level of sales.**
- A 10. A right of use asset is initially measured at cost and subsequently measured using the
- a. **Cost method**
 - b. Fair value method
 - c. Revaluation model
 - d. Any of these

PROBLEM 6. MULTIPLE CHOICE-COMPUTATION

1. On December 30, 20x5, Haber Co. leased a new machine from Gregg Corp. The following data relate to the lease transaction at the inception of the lease:

Lease term	10 years
Annual rental payable at the end of each lease year	₱100,000
Useful life of machine	12 years
Implicit interest rate	10 %

The lease has no renewal option, and the possession of the machine reverts to Gregg when the lease terminates. At the inception of the lease, Haber should record a lease liability of

ANSWER: B.

- a. 0
- b. 615,000**
- c. 630,000
- d. 676,000

SOLUTION:

Initial measurement of lease liability	
Annual rental payable at the year end lease year	100,000
PV of annuity rate due 1@ 10%,n=10	<u>6.15</u>

Total **615,000**

2. On January 2, 20x6, Ashe Company entered into a ten-year non cancellable lease requiring year-end payments of ₱100,000. Ashe's incremental borrowing rate is 12% while the lessor's implicit interest rate, known to Ashe, is 10%. Ownership of the property remains with the lessor at expiration of the lease. There is no bargain purchase option. The leased property has an estimated economic life of 12 years. What amount should Ashe capitalized for this leased property on January 2, 20x6?

ANSWER: B

- a. 1,000,000 **b. 614,500** c. 565,000 d. 0

SOLUTION:

100,000 (periodic payment x 6.145) = **614,500**

3. Neal Corp. entered into a nine-year lease on a warehouse on December 31, 20x1. Lease payments of ₱52,000, which includes payment for non-lease component of ₱2,000 (at stand-alone selling price) are due annually, beginning on December 31, 20x1, and every December 31 thereafter. Neal does not know the interest rate implicit in the lease; Neal's incremental borrowing rate is 9%. What amount should Neal report as lease liability at December 31, 20x1?

ANSWER: A

- a. 280,000** b. 291,200 c. 450,000 d. 468,000

SOLUTION:

Initial measurement of lease of liability	
Annual payments	50,000
PV of annuity due to 1@9%, n= 9	<u>5.6</u>
	<u>280,000</u>

4. Robbins, Inc., leased a machine from Ready Leasing Co. The lease requires 10 annual payments of ₱10,000 beginning immediately. The lease specifies an interest rate of 12% and a purchase option of ₱10,000 at the end of the tenth year, even though the machine's estimated value on that date is ₱20,000. It is reasonably certain the Robbins will exercise the purchase options. Robbins' incremental borrowing rate is 14%. What amount should Robbins record the right-of-use asset at the beginning of the lease term?

ANSWER: C

- a. 62,160 b. 64,860 **c. 66,500** d. 69,720

SOLUTION:

Initial measurements				
<u>Lease payments</u>		<u>PV factors</u>		<u>PV</u>
Annual payments	10,000	PV of ordinary annuity of ₱1	6.328	63,280
Purchase option	10,000	PV of ₱1	0.322	<u>3,220</u>
				<u>66,500</u>

5. On January 1, 20x7, Babson, Inc., leased two automobiles for executive use. The lease requires Babson to make five annual payments of ₱13,000 beginning January 1, 20x7. At the end of the lease term, Babson guarantees the residual value of the automobiles will total ₱10,000. The interest rate implicit in the lease is 9%. Babson's recorded lease liability on initial recognition is

ANSWER: A

- a. **48,620** b. 44,070 c. 35,620 d. 31,070

SOLUTION:

Initial measurement:	
PV of rentals (13,000x4.240)	55,120
PV of residual(10,000x0.650)	<u>(6,500)</u>
	48,620

6. On January 1, 20x8, Harrow Co. as lessee signed a five-year non cancellable equipment lease with annual payments of ₱100,000 beginning December 31,20x8. The implicit interest rate is 10%. How much is the interest expense for the year ended December 31,20x8?

ANSWER: A

- a. **37,900** b. 27,900 c. 24,200 d. 0

SOLUTION:

Capitalized liability (100,000X 3.79)	379,000
Interest rate	<u>10%</u>
Interest expense	<u>37,900</u>

7. On January 1, 20x7, Blaugh Co. signed a long-term lease for an office building. The terms of the lease required Blaugh to pay ₱10,000 annually, beginning December 30, 20x7 and continuing each year for 30 years. On January 1, 20x7, the present value of the lease payments is ₱112,500 at the 8% interest rate implicit in the lease. In Blaugh's December 31, 20x7, balance sheet, the lease liability should be

ANSWER: B

- a. 102,500 b. **111,500** c. 112,500 d. 290,000

SOLUTION:

The entry at Dec.31,20x5

Interest expense(112,500x0.08)	9,000	
Lease liability	1,000	
Cash		10,000

*The ending lease liability for 20x5 is (112,500 – 1,000= **111,500**) based from the entry.

8. On January 1, 20x6, Day Corp. entered into a 10 year lease agreement with Ward, Inc. for industrial equipment. Annual lease payments of ₱ 10,000 are payable at the end of each year. Day knows that the lessor expects a 10% return on the lease. Day has a 12% incremental borrowing rate. The equipment is expected to have an estimated useful life of 10 years. In addition, a third party, unrelated to Day, has guaranteed to pay Ward a residual value of ₱5,000 at the end of the lease. In Day's January 1, 20x6 balance sheet, the principal amount of the lease obligation was

ANSWER: B

- a. 63,374 b. **61,446** c. 58,112 d. 56,502

SOLUTION:

Initial measurement	
Annual payment at the end of each year	10,000
PV of annuity 1 @10%,n=10	<u>6.1446</u>
	<u>61,446</u>

9. On December 30, 20x8, Rafferty Corp. leased equipment. Annual lease payments of ₱20,000 are due December 31 for 10 years. The equipment's useful life is 10 years, and the interest rate implicit in the lease is 10%. The present value of the lease payments on December 20, 20x8 before the first lease payment is ₱135,000. The first lease payment was made on that date. What amount should Rafferty include in current liabilities for this lease in its December 31, 20x8, balance sheet?

ANSWER: B

- a. 6,500 **b. 8,500** c. 11,500 d. 20,000

SOLUTION:

December 30, 20X8

Initial lease obligation	135,000
Annual lease payments	(20,000)
Total	115,000
Interest rate	10%
Total	11,500
Lease payments	<u>20,000</u>
	<u>8,500</u>

10. On January 2, 20x8, Cole Co. signed an eight-year non cancellable lease for a new machine, requiring ₱15,000 annual payments at the beginning of each year. The machine has a useful life of 12 years, with no salvage value. Title passes to Cole at the lease expiration date. Cole uses straight line depreciation for all of its plant assets. Aggregate lease payments have a present value on January 2, 20x8, of ₱108,000, based on an appropriate rate of interest. For 20x8, Cole should record depreciation (amortization) expense for the leased machine at

ANSWER: B

- a. 0 **b. 9,000** c. 13,500 d. 15,000

SOLUTION:

Initial measurement	
Annual payments	108,000
Divide by: Useful life	<u>12</u>
Amortization expense	<u>9,000</u>