

SOLUTION FOR FIRST LEASE PROBLEM

In each case below PV of MLP stands for the present value of the minimum lease payments.

Location A

1. No transfer of title
2. No bargain purchase option
3. 26 years / 30 years = 86.7% of useful life. This is greater than 75%.
4. PV of MLP = $(\$1,500,000 \text{ payment} * 7.896) + (\$120,000 * 0.0525) = \$11,850,300$. 90% of 12,000,000 = \$10,080,000. $\$11,850,300 > \$10,080,000$. Note the guaranteed residual value is included in the calculation of the PV of MLP.

Location A meets the test for a capital lease in tests 3 & 4. It is therefore classified as a capital lease.

Location B

1. No transfer of title
2. No bargain purchase option
3. 20 years / 30 years = 66.7% of useful life. This is less than 75%.
4. PV of MLP = $\$1,300,000 \text{ payment} * 7.469 = \$9,709,700$. 90% of 10,000,000 = \$9,000,000. $\$9,709,700 > \$9,000,000$. Note the unguaranteed residual value is not included in the calculation of the PV of MLP.

Location B meets the test for a capital lease in test 4. It is therefore classified as a capital lease.

Location C

1. No transfer of title
2. No bargain purchase option
3. 20 years / 30 years = 66.7% of useful life. This is less than 75%.
4. PV of MLP = $(\$1,400,000 \text{ payment} * 7.469) + (\$200,000 * 0.104) = \$10,477,400$. 90% of 15,000,000 = \$13,500,000. $\$10,477,400 < \$13,500,000$. Note the guaranteed residual value is included in the calculation of the PV of MLP.

Location C meets none of the tests for a capital lease. It is therefore classified as an operating lease.

SOLUTION FOR SECOND LEASE PROBLEM

1.

There is no transfer of ownership \Rightarrow Does not meet criteria.

There is no bargain purchase option \Rightarrow Does not meet criteria.

75% of 6 years = 4.5 years $>$ 4 years \Rightarrow Does not meet criteria.

Present value of the minimum lease payments:

$$\$75,000 + (\$75,000 * 2.673) + (\$85,000 * 0.792) = \$342,795$$

90% of 300,000 = 270,000 $<$ \$342,795 \Rightarrow Meets this criteria for a capital lease.

Because the lease meets one of the lease classification criteria is must be accounted for as a capital lease.

2.

Leased Equipment	\$342,795	
Lease Obligation		\$342,795
<i>to record the lease at signing</i>		

Lease Obligation	\$75,000	
Cash		\$75,000
<i>To record the first payment</i>		

3.

Sting Company
Lease Amortization Schedule--Lessee

Rate = 6%

Date	Description	Payment	Interest Expense	Principal Reduction	Ending Balance
30-Sep-08	Initial Balance				\$ 342,795
30-Sep-08	Payment	\$ 75,000	\$ -	\$ 75,000	\$ 267,795
30-Sep-09	Payment	\$ 75,000	\$ 16,068	\$ 58,932	\$ 208,863
30-Sep-10	Payment	\$ 75,000	\$ 12,532	\$ 62,468	\$ 146,394
30-Sep-11	Payment	\$ 75,000	\$ 8,784	\$ 66,216	\$ 80,178
30-Sep-12	Return Equipment	\$ 85,000	\$ 4,811	\$ 80,189	\$ (11)

Interest expense = $\$267,795 * 6\% * \frac{3}{12} = \$4,017$

Interest expense	\$4,017	
Cash		\$4,017

to record year end interest accrual.

Depreciation = $\$342,795 \div 4 * \frac{3}{12} = \$21,425$

Depreciation (or amortization)	\$21,425	
Accumulated amortization		\$21,425

to record first year depreciation on leased asset

4.

Interest Expense = $\$208,863 * 6\% * \frac{9}{12} = \$9,399$

Interest Expense	\$9,399	
Interest Payable	\$3,133	
Lease Obligation	\$62,468	
Cash		\$75,000

To record lease payment made September 30, 2010

SOLUTION FOR THIRD LEASE PROBLEM

Sum of minimum lease payments = $(129,786 * 6) + (1,000 * 10) = \$788,716$.

Cost of Goods Sold = $(54,000 * 10) + 2,000 = 542,000$

Present Value of Minimum Lease Payments = $(129,786 * 4.623) + (10,000 * 0.630) = \$606,301$.

Unearned Interest Revenue = $788,716 - 606,301 = 182,415$

July 1, 2007

Lease Receivable	788,716	
Cost of Goods Sold	542,000	
Sales Revenue		606,301
Deferred Initial Direct Costs		2,000
Inventory		540,000
Unearned Interest Revenue		182,415

Silas Corporation
Lease Amortization Schedule--Lessor

Rate = 8%

Date	Description	Payment	Interest Revenue	Receivable Balance	Unearned Interest Revenue	Lease Book Value
1-Jul-07	Initial Balance			\$ 788,716	\$ 182,415	\$ 606,301
30-Jun-08	Payment	\$ 129,786	\$ 48,504	\$ 658,930	\$ 133,911	\$ 525,019
30-Jun-09	Payment	\$ 129,787	\$ 42,002	\$ 529,143	\$ 91,909	\$ 437,234
30-Jun-10	Payment	\$ 129,788	\$ 34,979	\$ 399,355	\$ 56,931	\$ 342,424
30-Jun-11	Payment	\$ 129,789	\$ 27,394	\$ 269,566	\$ 29,537	\$ 240,029
30-Jun-12	Payment	\$ 129,790	\$ 19,202	\$ 139,776	\$ 10,334	\$ 129,442
30-Jun-13	Payment & Bar	\$ 139,786	\$ 10,355	\$ (10)	\$ (21)	\$ 11

December 31, 2007

Interest Receivable	24,252	
Interest revenue		24,252

June 30, 2008

Cash	129,786	
Lease Payments Receivable		129,786
Unearned Interest Revenue	48,504	
Interest revenue		24,252
Interest receivable		24,252

June 30, 2009

Cash	129,786	
Lease Payments Receivable		129,786
Unearned Interest Revenue	42,001	
Interest revenue		21,001
Interest receivable		21,000