

SOLUTIONS TO EXERCISES

EXERCISE 21-1 (15–20 minutes)

- (a) This is a finance lease to Adams since the lease term (5 years) is greater than 75% of the economic life (6 years) of the leased asset. The lease term is a major part [$83\frac{1}{3}\%$ ($5 \div 6$)] of the asset's economic life.
- (b) Computation of present value of minimum lease payments:
 $\$9,968 \times 4.16986^* = \$41,565$

*Present value of an annuity due of 1 for 5 periods at 10%.

(c)	1/1/15	Leased Equipment	41,565		
		Lease Liability			41,565
		Lease Liability	9,968		
		Cash			9,968
	12/31/15	Depreciation Expense	8,313		
		Accumulated Depreciation— Leased Equipment ($\$41,565 \div 5 = \$8,313$)			8,313
		Interest Expense	3,160		
		Interest Payable [($\$41,565 - \$9,968$) \times .10]			3,160
	1/1/16	Lease Liability	6,808		
		Interest Payable	3,160		
		Cash			9,968

EXERCISE 21-2 (20–25 minutes)

(a) To Brecker, the lessee, this lease is a finance lease because the terms satisfy the following criteria:

1. The lease term is greater than 75% of the economic life of the leased asset; that is, the lease term is $83\frac{1}{3}\%$ (50/60) of the economic life.
2. The present value of the minimum lease payments is greater than 90% of the fair value of the leased asset; that is, the present value of €10,515 (see below) amounts to substantially all (96%) of the fair value of the leased asset:

(b) The minimum lease payments in the case of a guaranteed residual value by the lessee include the guaranteed residual value. The present value therefore is:

Monthly payment of €250 for 50 months	€ 9,800
Residual value of €1,180.....	<u>715</u>
Present value of minimum lease payments	<u>€10,515</u>

(c) Leased Equipment	10,515	
Lease Liability		10,515

(d) Depreciation Expense	186.70	
Accumulated Depreciation—Leased Equipment [(€10,515 – €1,180) ÷ 50 months = €186.70].....		186.70

(e) Lease Liability	144.85	
Interest Expense (1% X €10,515).....	105.15	
Cash		250.00

EXERCISE 21-3 (20–30 minutes)

Capitalized amount of the lease:

Yearly payment	€90,000.00
Executory costs	<u>(3,088.14)</u>
Minimum annual lease payment	<u>€86,911.86</u>

EXERCISE 21-3 (Continued)

Present value of minimum lease payments

$$€86,911.86 \times 6.32825 = €550,000.00$$

1/1/15	Leased Building.....	550,000.00	
	Lease Liability		550,000.00
1/1/15	Property Tax Expense	3,088.14	
	Lease Liability.....	86,911.86	
	Cash.....		90,000.00
12/31/15	Depreciation Expense	55,000.00	
	Accumulated Depreciation— Leased Building (€550,000 ÷ 10).....		55,000.00
12/31/15	Interest Expense (See Schedule 1).....	55,570.58	
	Interest Payable		55,570.58
1/1/16	Property Tax Expense	3,088.14	
	Interest Payable	55,570.58	
	Lease Liability.....	31,341.28	
	Cash.....		90,000.00
12/31/16	Depreciation Expense	55,000.00	
	Accumulated Depreciation— Leased Building		55,000.00
12/31/16	Interest Expense.....	51,809.62	
	Interest Payable		51,809.62

EXERCISE 21-3 (Continued)

Schedule 1

**STORA ENSO CORP.
Lease Amortization Schedule
(Lessee)**

Date	Annual Payment Less Executory Costs	Interest (12%) on Liability	Reduction of Lease Liability	Lease Liability
1/1/15				€550,000.00
1/1/15	€86,911.86	€ 0	€86,911.86	463,088.14
1/1/16	86,911.86	55,570.58	31,341.28	431,746.86
1/1/17	86,911.86	51,809.62	35,102.24	396,644.62

EXERCISE 21-4 (20–25 minutes)

Computation of annual payments

Cost (fair value) of leased asset to lessor	£240,000.00
Less: Present value of residual value (residual value in this case) £16,000 X .82645 (Present value of 1 at 10% for 2 periods)	13,223.20
Amount to be recovered through lease payments.....	<u>£226,776.80</u>
Two periodic lease payments $£226,776.80 \div 1.73554^*$	<u>£130,666.42</u>

*Present value of an ordinary annuity of 1 for 2 periods at 10%

**KRAUSS LEASING COMPANY (Lessor)
Lease Amortization Schedule**

Date	Annual Payment Less Executory Costs	Interest on Lease Receivable	Recovery of Lease Receivable	Lease Receivable
1/1/15				£240,000.00
12/31/15	£130,666.42	£24,000.00	£106,666.42	133,333.58
12/31/16	130,666.42	<u>13,332.84*</u>	117,333.58	16,000.00
		<u>£37,332.84</u>		

*Difference of £.52 due to rounding.

EXERCISE 21-4 (Continued)

(a)	1/1/15	Lease Receivable	240,000.00	
		Equipment.....		240,000.00
	12/31/15	Cash (£130,666.42 + £7,000)	137,666.42	
		Property Taxes		
		Payable.....		7,000.00
		Lease Receivable		106,666.42
		Interest Revenue		24,000.00
	12/31/16	Cash.....	137,666.42	
		Property Taxes		
		Payable.....		7,000.00
		Lease Receivable		117,333.58
		Interest Revenue		13,332.84