Vol. 2, Chapter 14 – Accounting for Payroll-Related Liabilities

Problem 1

1.	Prepaid Lease	2,000	
	Deferred Lease	2,000	
	Cash		4,000
2.	Lease Expense	2,000	
	Prepaid Lease		2,000
3.	Prepaid Lease	2,000	
	Cash		2,000

Problem 2

1. 10,000 + 10,000(3.6408) = $ 46,048

2.

Date of Payment	Accrual Lease Payment	Interest Expense	Reduction in Liability	Balance
At time 0				$ 36,048.00
End of Yr. 1	$10,000	$4,325.76	$5,674.24	30,373.76
2	10,000	3,644.85	6,355.15	24,018.61
3	10,000	2,882.23	7,117.77	16,900.84
4	10,000	2,028.10	7,971.90	8,928.95
5	10,000	1,071.47	8,928.53	0.42

Problem 3

Purchase

	0	1	2	3	4	5
Cost	25,000					
Salvage Value						(5,000)
Tax Shield (1)		(960)	(960)	(960)	(960)	(960)
Total	25,000	(960)	(960)	(960)	(960)	(5,960)
PV Factor	1.0000	0.8929	0.7972	0.7118	0.6355	0.5674
PV	25,000	(857)	(765)	(683)	(610)	(3,382)

Total PV $ 18,702

Leasing

Lease Payments	5,000	5,000	5,000	5,000	5,000	
Tax Shield (2)		(1,200)	(1,200)	(1,200)	(1,200)	(1,200)
Total	5,000	3,800	3,800	3,800	3,800	(1,200)
PV Factor	1.0000	0.8929	0.7972	0.7118	0.6355	0.5674
PV	5,000	3,393	3,029	2,705	2,415	(681)
Total PV	$ 15,861					

(1) Depreciation × Marginal Tax Rate = Tax Shield

$$\frac{25{,}000 - 5{,}000}{5} = 4{,}000 \times .24 = 960$$

(2) Rental Payment × Marginal Tax Rate

$$5{,}000 \times .24 = 1{,}200$$

Lease item, since present value of lease is less than the present value of purchase.