

Chapter 11

Current Liabilities and Contingencies

M. Problems

P11-1. *Suggested solution:*

Item	Liability	Financial or non-financial obligation?	Explanation
1.	Accounts payable	F	
2.	Warranties payable	N	Obligation is to deliver goods or services
3.	USD bank loan	F	
4.	Bank overdraft	F	
5.	Sales tax payable	N	Obligation is not contractual in nature
6.	Notes payable	F	
7.	Unearned revenue	N	Obligation is to deliver goods or services
8.	Finance lease obligation	F	
9.	HST payable	N	Obligation is not contractual in nature
10.	Bank loan	F	
11.	Bonds payable	F	
12.	Obligation under customer loyalty plan	N	Obligation is to deliver goods or services
13.	Income taxes payable	N	Obligation is not contractual in nature

P11-2. *Suggested solution:*

To be classified as a liability, the item must: i) be a present obligation; ii) have arisen from a past event; and iii) be expected to result in an outflow of economic benefits. This is an “and” situation as all three criteria must be present before a liability is recorded. The precise amount of the obligation need not be known, provided that a reliable estimate can be made of the amount due. Provisions are liabilities in which there is some uncertainty as to the timing or amount of payment.

Trade accounts payable meet the criteria of a liability as set out below:

- * Present obligation: The debtor is presently contractually obliged to pay for goods or services received.
- * Past event: The trade payable arose from a good or service the debtor previously received or consumed.

- * Outflow of economic benefits: Trade payables are typically settled in cash—an outflow of economic benefits.

P11-3. Suggested solution:

- a. Provisions are liabilities in which there is some uncertainty as to the timing or amount of payment.
- b. Financial liabilities are contracts to deliver cash or other financial assets to another party. They differ from non-financial liabilities as the latter category is typically settled through the provision of goods or services.
- c. A non-exhaustive list of financial liabilities includes accounts payable; bank loans; notes payable; bonds payable; and finance leases. A non-exhaustive list of non-financial obligations includes warranties payable; unearned revenue; and income taxes payable.

P11-4. Suggested solution:

- a. The three broad categories of liabilities are:
 1. Financial liabilities held for trading
 2. Other financial liabilities
 3. Non-financial liabilities
- b.
 - * Held-for-trading liabilities are initially recognized at fair value.
 - * Other financial liabilities are initially reported at fair value minus the transaction costs directly resulting from incurring the obligation.
 - * The initial measurement of non-financial liabilities depends on their nature. For instance, warranties are recorded at management's best estimate of the downstream cost of meeting the entity's contractual obligations, while prepaid magazine subscription revenue is valued at the consideration initially received.
- c.
 - * Held-for-trading liabilities are subsequently recognized at fair value.
 - * Other financial liabilities are subsequently measured at amortized cost using the effective rate method.
 - * Non-financial liabilities are subsequently measured at the initial obligation less the amount earned to date or satisfied to date through performance. For example, a publisher that received \$750 in advance for a three-year subscription and has delivered the magazine for one year would report an obligation of \$500 ($\$750 - \250).

P11-5. Suggested solution:

Item	Liability	Current or non-current liability, or potentially both?	Explanation
1.	Accounts payable	C	
2.	Warranties payable	B	The obligation that is expected to be settled within one year of the balance sheet date is current, the balance non-current
3.	Deposits	B	The classification of the deposit as current or non-current depends upon the expected settlement date. If less than one year after the balance sheet date, the obligation is classified as current
4.	Bank overdraft	C	
5.	Sales tax payable	C	
6.	Bank loan maturing in five years was in default during the year; before year-end, the lender grants a grace period that extends 12 months after the balance sheet date	N	The obligation is reported as a non-current liability because the grace period was granted before the balance sheet date and extends twelve months after year-end
7.	Five-year term loan, amortized payments are payable annually	B	The principal portion of the payments due within one year of the balance sheet date are classified as current, the balance as non-current
8.	Unearned revenue	B	The classification of the obligation as current or non-current depends upon when revenue is the expected to be recognized. If less than one year after the balance sheet date, the obligation is classified as current
9.	Finance lease obligation	B	The principal portion of the payments due within one year of the balance sheet date are classified as current, the balance as non-current
10.	HST payable	C	
11.	90-day bank loan	C	
12.	Bond payable that matures in two years	N	The obligation is reported as non-current as the maturity date is two years after the balance sheet date
13.	Obligation under customer loyalty plan	B	The classification of the obligation as current or non-current depends upon the

			expected redemption date. If less than one year after the balance sheet date, the obligation is classified as current
14.	Income taxes payable	C	
15.	Bank loan that matures in five years that is currently in default	C	
16.	Three-year bank loan that matures six months after the balance sheet date	C	

P11-6. Suggested solution:

Summary journal entries			
1.	Dr. Inventory	10,000	
	Dr. HST recoverable ($\$10,000 \times 12\%$)	1,200	
	Cr. Accounts payable ($\$10,000 + \$1,200$)		11,200
2.	Dr. Equipment ($\$20,000 + \500)	20,500	
	Dr. HST recoverable ($\$20,500 \times 12\%$)	2,460	
	Cr. Accounts payable ($\$20,500 + \$2,460$)		22,960
3.	Dr. Cash [$\$15,000 \times (1 + 12\%)$]	16,800	
	Cr. Sales		15,000
	Cr. HST payable ($\$15,000 \times 12\%$)		1,800
	Dr. Cost of goods sold ($\$15,000 \times 50\%$)	7,500	
	Cr. Inventory		7,500
4.	Dr. Accounts receivable [$\$20,000 \times (1 + 12\%)$]	22,400	
	Cr. Sales		20,000
	Cr. HST payable ($\$20,000 \times 12\%$)		2,400
	Dr. Cost of goods sold ($\$20,000 \times 50\%$)	10,000	
	Cr. Inventory		10,000
5.	Dr. Accounts payable	22,960	
	Cr. Cash		22,960
6.	Dr. HST payable ($\$12,000 + \$1,800 + \$2,400$)	16,200	
	Cr. HST recoverable ($\$8,000 + \$1,200 + \$2,460$)		11,660
	Cr. Cash ($\$16,200 - \$11,660$)		4,540

P11-7. Suggested solution:

Summary journal entries			
1.	Dr. Inventory	12,000	
	Dr. HST recoverable ($\$12,000 \times 15\%$)	1,800	
	Cr. Accounts payable ($\$12,000 + \$1,800$)		13,800
2.	Dr. Equipment ($\$15,000 + \$1,000$)	16,000	
	Dr. HST recoverable ($\$16,000 \times 15\%$)	2,400	
	Cr. Accounts payable ($\$16,000 + \$2,400$)		18,400
3.	Dr. Cash [$\$11,000 \times (1 + 15\%)$]	12,650	
	Cr. Sales		11,000
	Cr. HST payable ($\$11,000 \times 15\%$)		1,650
	Dr. Cost of goods sold ($\$11,000 \times 80\%$)	8,800	
	Cr. Inventory		8,800
4.	Dr. Accounts receivable [$\$20,000 \times (1 + 15\%)$]	23,000	
	Cr. Sales		20,000
	Cr. HST payable ($\$20,000 \times 15\%$)		3,000
	Dr. Cost of goods sold ($\$20,000 \times 80\%$)	16,000	
	Cr. Inventory		16,000
5.	Dr. Accounts payable	13,800	
	Cr. Cash		13,800
6.	Dr. HST payable ($\$22,000 + \$1,650 + \$3,000$)	26,650	
	Cr. HST recoverable ($\$20,000 + \$1,800 + \$2,400$)		24,200
	Cr. Cash ($\$26,650 - \$24,200$)		2,450

P11-8. Suggested solution:

Summary journal entries			
1.	Dr. Inventory (\$42,000 – \$2,000)	40,000	
	Dr. GST recoverable (\$40,000 × 5%)	2,000	
	Cr. Accounts payable [\$40,000 × (1 + 5%)]		42,000
	The purchase of inventory for resale is PST exempt.		
2.	Dr. Cash [\$30,000 × (1 + 5%) × (1 + 10%)]	34,650	
	Cr. Sales		30,000
	Cr. GST payable (\$30,000 × 5%)		1,500
	Cr. PST payable [\$30,000 × (1 + 5%) × 10%]		3,150
	Dr. Cost of goods sold (\$30,000 × 2/3)	20,000	
	Cr. Inventory		20,000
3.	Dr. Accounts receivable [\$60,000 × (1 + 5%) × (1 + 10%)]	69,300	
	Cr. Sales		60,000
	Cr. GST payable (\$60,000 × 5%)		3,000
	Cr. PST payable [\$60,000 × (1 + 5%) × 10%]		6,300
	Dr. Cost of goods sold (\$60,000 × 2/3)	40,000	
	Cr. Inventory		40,000
4.	Dr. GST payable (\$20,000 + \$1,500 + \$3,000)	24,500	
	Dr. PST payable (\$22,000 + \$3,150 + \$6,300)	31,450	
	Cr. GST recoverable (\$21,000 + \$2,000)		23,000
	Cr. Cash (\$24,500 + \$31,450 – \$23,000)		32,950

P11-9. Suggested solution:

Summary journal entries			
1.	Dr. Inventory	30,000	
	Dr. GST recoverable ($\$30,000 \times 5\%$)	1,500	
	Cr. Accounts payable [$\$30,000 \times (1 + 5\%)$]		31,500
	The purchase of inventory for resale is PST exempt.		
2.	Dr. Cash [$\$20,000 \times (1 + 5\% + 5\%)$]	22,000	
	Cr. Sales		20,000
	Cr. GST payable ($\$20,000 \times 5\%$)		1,000
	Cr. PST payable ($\$20,000 \times 5\%$)		1,000
	Dr. Cost of goods sold ($\$20,000 \times 75\%$)	15,000	
	Cr. Inventory		15,000
3.	Dr. Accounts receivable [$\$50,000 \times (1 + 5\% + 5\%)$]	55,000	
	Cr. Sales		50,000
	Cr. GST payable ($\$50,000 \times 5\%$)		2,500
	Cr. PST payable ($\$50,000 \times 5\%$)		2,500
	Dr. Cost of goods sold ($\$50,000 \times 75\%$)	37,500	
	Cr. Inventory		37,500
4.	Dr. GST payable ($\$18,000 + \$1,000 + \$2,500$)	21,500	
	Dr. PST payable ($\$14,000 + \$1,000 + \$2,500$)	17,500	
	Cr. GST recoverable ($\$15,000 + \$1,500$)		16,500
	Cr. Cash ($\$21,500 + \$17,500 - \$16,500$)		22,500

P11-10. Suggested solution:

Oct. 31, 2015	Dr. Retained earnings	30,000	
	Cr. Dividends payable on preferred shares (10,000 sh × \$1.00/sh × 2) + (5,000 sh × \$2.00/sh)		30,000
	The preferred shares B are non-cumulative in nature and as such are not entitled to dividends for 2014 as they were not declared.		
Nov. 30, 2015	Dr. Retained earnings	50,000	
	Cr. Dividends payable on common shares (100,000 sh × \$0.50 sh)		50,000
Dec. 1, 2015	Dr. Dividends payable on preferred shares	30,000	
	Cr. Cash		30,000
Jan. 2, 2016	Dr. Dividends payable on common shares	50,000	
	Cr. Cash		50,000

P11-11. Suggested solution:

Oct. 31, 2016	Dr. Retained earnings	175,000	
	Cr. Dividends payable on preferred shares (50,000 sh × \$2.00/sh) + (25,000 sh × \$1.00/sh × 3)		175,000
	The preferred shares A are non-cumulative in nature and as such are not entitled to dividends for 2014 or 2015 as they were not declared.		
Nov. 30, 2016	Dr. Retained earnings	300,000	
	Cr. Common stock dividends distributable (200,000 sh × 10%/sh × \$15.00)		300,000
Dec. 1, 2016	Dr. Dividends payable on preferred shares	175,000	
	Cr. Cash		175,000
Jan. 2, 2017	Dr. Common stock dividends distributable	300,000	
	Cr. Common shares		300,000

P11-12. Suggested solution:

Jan. 31	Dr. Franchise fee expense Cr. Royalty fee payable (\$50,000 × 5%)	2,500	2,500
	Dr. Sales and marketing expense Cr. Royalty fee payable (\$50,000 × 2.5%)	1,250	1,250
Feb. 15	Dr. Royalty fee payable Cr. Cash (\$2,500 + \$1,250)	3,750	3,750
Feb. 28	Dr. Franchise fee expense Cr. Royalty fee payable (\$40,000 × 5%)	2,000	2,000
	Dr. Sales and marketing expense Cr. Royalty fee payable (\$40,000 × 2.5%)	1,000	1,000
Mar. 15	Dr. Royalty fee payable Cr. Cash (\$2,000 + \$1,000)	3,000	3,000
Mar. 31	Dr. Franchise fee expense Cr. Royalty fee payable (\$60,000 × 5%)	3,000	3,000
	Dr. Sales and marketing expense Cr. Royalty fee payable (\$60,000 × 2.5%)	1,500	1,500
Apr. 15	Dr. Royalty fee payable Cr. Cash (\$3,000 + \$1,500)	4,500	4,500

P11-13. Suggested solution:

a.	Jan. 1, 2016	Dr. Franchise agreement Cr. Cash	30,000	30,000
	Dec. 31, 2016	Dr. Amortization expense - franchise Cr. Franchise agreement (\$30,000/10 years)	3,000	3,000
	Dec. 31, 2016	Dr. Royalty fee expense Cr. Royalty fee payable (\$850,000 × 7%)	59,500	59,500
	Dec. 31, 2016	Dr. Sales and marketing expense Cr. Royalty fee payable (\$850,000 × 2%)	17,000	17,000
b.	Jan. 15, 2017	Dr. Royalty fee payable Cr. Cash (\$59,500 + \$17,000)	76,500	76,500

P11-14. Suggested solution:

a. Summary journal entries				
2014	Dr. Cash (6 × \$2,000)		12,000	
	Cr. Deferred revenue			12,000
2014	Dr. Cash (2 × \$3,000)		6,000	
	Dr. Deferred revenue (2 × \$2,000)		4,000	
	Cr. Revenue (2 × \$5,000)			10,000
	Dr. Cost of goods sold (2 × \$2,300)		4,600	
	Cr. Cash			4,600
2015	Dr. Cash (4 × \$3,000)		12,000	
	Dr. Deferred revenue (4 × \$2,000)		8,000	
	Cr. Revenue (4 × \$5,000)			20,000
	Dr. Cost of goods sold (4 × \$2,300)		9,200	
	Cr. Cash			9,200
b. The balance in the deferred revenue account as at December 31, 2014 was \$8,000 (\$12,000 – \$4,000 or \$2,000 × 4)				

P11-15. Suggested solution:

1.

Dr. Warranty expense	30,000	
Cr. Provision for warranty obligations		30,000
2,500 × (\$5 + \$7) = \$30,000		

2.

Dr. Provision for warranty obligations	6,000	
Cr. Wage expense		6,000

3. The total provision for warranty obligations that will be reported at year-end is \$24,000 (\$30,000 – \$6,000). Of this amount, \$6,500 will be reported as a current obligation [(2,500 × \$5) – \$6,000 = \$6,500] and the \$17,500 balance as a non-current liability (2,500 × \$7 = \$17,500) or (\$24,000 – \$6,500 = \$17,500).

4. Companies offer warranties that their products will be free from defects for a specified period to facilitate the sale of their merchandise.

P11-16. Suggested solution:

The obligation is initially valued at the spot exchange rate evident on the transaction date and revalued at period end using the period ending spot rate.

May 1, 2016	Dr. Cash (US\$140,000 × \$1.02)	142,800	
	Cr. Bank loan		142,800
Dec. 31, 2016	Dr. Foreign exchange loss (US\$140,000 × (\$1.04 – \$1.02))	2,800	
	Cr. Bank loan		2,800

P11-17. Suggested solution:

The obligation is initially valued at the spot exchange rate evident on the transaction date and revalued at period end and payment date using the applicable spot rate.

Dec. 15, 2015	Dr. Supplies expense (US\$5,000 × \$1.04) Cr. Trade account payable	5,200	5,200
Dec. 31, 2015	Dr. Trade account payable Cr. Foreign exchange gain (US\$5,000 × (\$1.04 – \$1.01))	150	150
Jan. 3, 2016	Dr. Foreign exchange loss Cr. Trade account payable (US\$5,000 × (\$1.03 – \$1.01)) Dr. Trade account payable (\$5,200 - \$150 + \$100) Cr. Cash (US\$5,000 × \$1.03)	100 5,150	100 5,150

P11-18. Suggested solution:

- Revenue is recognized for the award portion of company-offered rewards when the customer claims their reward. Revenue is recognized for the award portion of third-party rewards at the time of sale.
- The awards portion is determined using fair value techniques. Sales revenue is a residual amount equal to the price charged less that allocated to awards revenue.

P11-19. Suggested solution:

Summary journal entries			
To recognize the sales-related revenue in 2015			
a.	Dr. Cash (20,000 × \$600)	12,000,000	
	Cr. Sales		12,000,000
	Dr. Cost of goods sold (20,000 × \$350)	7,000,000	
	Cr. Inventory		7,000,000
	Dr. Manufacturer's rebate expense ((20,000 × \$50 × 30%)	300,000	
	Cr. Provision for manufacturer's rebates		300,000
To recognize the issuance of the rebate cheques in 2016			
b.	Dr. Provision for manufacturer's rebates	300,000	
	Cr. Cash		300,000

P11-20. Suggested solution:

a.	Dr. Computer system	19,231	
	Cr. Note payable (\$20,000 / 1.04)		19,231
	Using a BAII PLUS financial calculator		
	1N, 4 I/Y, 20000 FV, CPT PV PV = -19,231		
b.	Dr. Interest expense	769	
	Cr. Note payable		769
	\$19,231 × 4% = \$769		
c.	Dr. Note payable	20,000	
	Cr. Cash		20,000
	No entry for interest is required as it had been accrued on December 31, 2014.		

P11-21. Suggested solution:

a.	Dr. Automobile	40,000	
	Cr. Note payable		30,000
	Cr. Cash		10,000
b.	Dr. Interest expense	605	
	Cr. Accrued interest payable		605
	\$30,000 × 4% × 184 / 365 = \$605 (rounded)		
c.	Dr. Interest expense	296	
	Dr. Accrued interest payable	605	
	Dr. Note payable	30,000	
	Cr. Cash (\$30,000 + \$296 + \$605)		30,901
	\$30,000 × 4% × 90 / 365 = \$296 (rounded)		

P11-22. Suggested solution:

a.			
Nov. 15, 2017	Dr. Supplies inventory Cr. Trade payables [\$5,000 × (100% – 2%)]	4,900	4,900
Nov. 22, 2017	Dr. Equipment—washing machines Cr. Notes payable Recorded at face value as it is a short-term note and the interest component is immaterial	8,000	8,000
Nov. 28, 2017	Dr. Cash Cr. Notes payable	20,000	20,000
Nov. 30, 2017	Dr. Interest expense (bank loan) Cr. Cash (\$20,000 × 4% × 3/365 = \$7 (rounded))	7	7
Dec. 18, 2017	Dr. Supplies inventory Cr. Trade payables (\$4,000 × (100% – 2%))	3,920	3,920
Dec. 21, 2017	Dr. Equipment—dryers Cr. Notes payable (\$10,000 / 1.04) Using a BAII PLUS financial calculator 1 N, 4 I/Y, 10,000 FV, CPT PV PV = –9,615 (rounded) 4% is an appropriate discount rate to use as the question identifies this as the market rate of interest for NVL's short-term borrowings	9,615	9,615
Dec. 22, 2017	Dr. Trade payables Dr. Purchase discounts lost Cr. Cash	4,900 100	5,000
Dec. 22, 2017	Dr. Trade payables Cr. Cash	3,920	3,920
Dec. 31, 2017	Dr. Payroll expense Cr. Cash Cr. Employee remittances payable	20,000	18,600 1,400
Dec. 31, 2017	Dr. Interest expense (bank loan) Cr. Cash (\$20,000 × 4% × 31/365 = \$68 (rounded))	68	68
Dec. 31, 2017	Dr. Interest expense (note payable) Cr. Note payable [\$9,615 × 4% × 11/365 = \$12 (rounded)]	12	12

b. When the gross method is used, the payable is recorded at the invoiced amount, as is the asset acquired. If the discount is taken, the book value of the asset acquired is reduced by an equivalent amount. If the discount is not taken, an adjustment is not required.

When the net method is used, the payable is recorded at the invoiced amount less the discount, as is the asset acquired. If the discount is taken, an adjustment is not required. If the discount is not taken, an income statement account “purchase discounts lost” is debited for the amount of the discount forgone.

From a theoretical perspective, the net method should be used as forgone discounts are a financing cost. From a practical perspective, the gross method is widely used as it is simpler to use and as the forgone discounts are usually immaterial.

P11-23. Suggested solution:

Aug. 15	Dr. Equipment—inventory monitoring system	6,000	
	Cr. Notes payable		6,000
	Recorded at face value as it is a short-term note and the interest component is immaterial		
Aug. 18	Dr. Cash	10,000	
	Cr. Notes payable		10,000
Aug. 21	Dr. Inventory	8,000	
	Cr. Trade payables		8,000
Aug. 30	Dr. Interest expense (bank loan)	15	
	Cr. Cash ($\$10,000 \times 4\% \times 14/365 = \15 (rounded))		15
Sept. 20	Dr. Equipment—waste management system	7,619	
	Cr. Notes payable ($\$8,000 / 1.05$)		7,619
	Using a BAII PLUS financial calculator 1 N, 5 I/Y, 8,000 FV, CPT PV PV = -7,619 (rounded) 5% is an appropriate discount rate to use as the question identifies this as the market rate of interest for MEI's unsecured short-term borrowings		
Sept. 23	Dr. Inventory	3,000	
	Cr. Trade payables		3,000
Sept. 24	Dr. Trade payables ($\$8,000 + \$3,000$)	11,000	
	Cr. Inventory ($\$3,000 \times 3\%$)		90
	Cr. Cash		10,910
	The discount was lost on the \$8,000 payable as the invoice was outstanding for more than 10 days.		

Sept. 30	Dr. Utilities expense	1,700	
	Cr. Accrued trade payables		1,700
Sept. 30	Dr. Interest expense (bank loan)	33	
	Cr. Cash ($\$10,000 \times 4\% \times 30/365 = \33 (rounded))		33
Sept. 30	Dr. Interest expense (note payable)	11	
	Cr. Note payable [$\$7,619 \times 5\% \times 11/365 = \11 (rounded)]		11

P11-24. Suggested solution:

Maturing obligations are classified as either current or non-current liabilities depending on the circumstances.

- * If a renewal agreement is entered into before year-end, the obligation is classified as a non-current liability.
- * If the loan is renewed after year-end, but before the statements are approved for issue, the obligation is classified as a current liability. The renewal is disclosed in the notes to the financial statements.
- * If the loan is not renewed or renewed after the statements are approved for issue, the obligation is classified as a current liability.

P11-25. Suggested solution:

Loans in default are classified as either current or non-current liabilities depending on the circumstances.

- * If, before year-end, the lender agrees to a grace period to cure the defaults that extends at least twelve months after the balance sheet date, the obligation is classified as a non-current liability.
- * If the lender agrees to a grace period to cure the default after year-end but before the statements are approved for issue, the obligation is classified as a current liability. Providing the grace period is for one year or more, the waiver of default is disclosed in the notes to the financial statements.
- * If the lender does not agree to a grace period or its approval is received after the statements are approved for issue, the obligation is classified as a current liability.

P11-26. Suggested solution:

a.			
Jan. 1	Dr. Cash	1,800,000	
	Cr. Deferred revenue		1,800,000
	10,000 × \$180 = \$1,800,000		
Apr. 1	Dr. Cash	900,000	
	Cr. Deferred revenue		900,000
	5,000 × \$180 = \$900,000		
Nov. 1	Dr. Cash	2,160,000	
	Cr. Deferred revenue		2,160,000
	12,000 × \$180 = \$2,160,000		

b.			
Dec. 31	Dr. Deferred revenue	945,000	
	Cr. Revenue		945,000
Dec. 31	Dr. Magazine expense	378,000	
	Cr. Cash		378,000

\$180/36 = \$5 in revenue per magazine sold

Sales date	Number sold— A	Months delivered— B	Revenue—A × B × \$5	Expense—A × B × \$2
Jan. 1	10,000	12	\$600,000	\$240,000
Apr. 1	5,000	9	225,000	90,000
Nov. 1	12,000	2	<u>120,000</u>	<u>48,000</u>
Revenue and expense to be recognized			<u>\$945,000</u>	<u>\$378,000</u>

P11-27. Suggested solution:

a.			
Jan. 1	Dr. Cash	576,000	
	Cr. Deferred revenue		576,000
	8,000 × \$72 = \$576,000		
Feb. 1	Dr. Cash	432,000	
	Cr. Deferred revenue		432,000
	6,000 × \$72 = \$432,000		
Aug. 1	Dr. Cash	648,000	
	Cr. Deferred revenue		648,000
	9,000 × \$72 = \$648,000		
Dec. 1	Dr. Cash	864,000	
	Cr. Deferred revenue		864,000
	12,000 × \$72 = \$864,000		

b.			
Dec. 31	Dr. Deferred revenue	1,314,000	
	Cr. Revenue		1,314,000
Dec. 31	Dr. Production and delivery expense	657,000	
	Cr. Cash		657,000

\$72/12 = \$6 in revenue per month per newspaper subscription sold

Sales date	Number sold— A	Months delivered— B	Revenue—A × B × \$6	Expense—A × B × \$3
Jan. 1	8,000	12	\$ 576,000	\$288,000
Feb. 1	6,000	11	396,000	198,000
Aug. 1	9,000	5	270,000	135,000
Dec. 1	12,000	1	72,000	36,000
Revenue and expense to be recognized			<u>\$1,314,000</u>	<u>\$657,000</u>

P11-28. Suggested solution:

To recognize the provision in 2013			
a.	Dr. Warranty expense	240,000	
	Cr. Provision for warranty payable		240,000
	[\$4,800,000 × (1% + 2% + 2%)]		
To recognize partial satisfaction of the warranty obligation in 2013			
	Dr. Provision for warranty payable	240,000	
	Cr. Parts inventory		150,000
	Cr. Wage expense		90,000
To recognize the provision in 2014			
	Dr. Warranty expense	378,000	
	Cr. Provision for warranty payable		378,000
	(\$5,400,000 × 7%)		
To recognize partial satisfaction of the warranty obligation in 2014			
	Dr. Provision for warranty payable	300,000	
	Cr. Parts inventory		180,000
	Cr. Wage expense		120,000

b. The balance in the warranty payable account as at December 31, 2014 was \$338,000 as set out in the T-account that follows:

Provision for Warranty Payable			
		260,000	Balance Dec. 31, 2012
		240,000	Provision 2013
Claims 2013	240,000		
		378,000	Provision 2014
Claims 2014	<u>300,000</u>		
		<u>338,000</u>	Balance Dec. 31, 2014

P11-29. Suggested solution:

Summary journal entries		
To recognize the flight-related revenue in 2015		
a. Dr. Cash	8,000,000	
Cr. Flight revenue		7,910,000
Cr. Unearned revenue (award points)		90,000
To recognize reward point revenue in 2016		
b. Dr. Unearned revenue (award points)	36,000	
Cr. Award revenue		36,000
To recognize reward point revenue in 2017		
b. Dr. Unearned revenue (award points)	45,000	
Cr. Award revenue		45,000
Supporting computations and notes		
<p>- 6,000,000 miles are expected to be redeemed ($8,000,000 \times 75\% = 6,000,000$). This translates into 500 flights ($6,000,000 / [(15,000 + 25,000) / 2] = 300$).</p> <p>- To obtain the amount of reward revenue to recognize, the denominator is the number of miles expected to be redeemed rather than the number awarded. ($\\$90,000 / 300 \text{ flights} = \\300), which is the fair value of each flight expected to be awarded.</p> <p>- 120 reward flights are redeemed in 2016. ($120 / 300 \times \\$90,000 = \\$36,000$).</p> <p>- 150 reward flights are redeemed in 2017. ($150 / 300 \times \\$90,000 = \\$45,000$).</p>		

P11-30. Suggested solution:

Summary journal entries		
To recognize the sales-related revenue in 2014		
a. Dr. Cash	15,000,000	
Cr. Sales		14,895,000
Cr. Unearned revenue (premiums)		105,000
Dr. Cost of goods sold [14,895,000 / (1 + 50%)]	9,930,000	
Cr. Inventory		9,930,000
To recognize premium revenue in 2015		
b. Dr. Unearned revenue (premiums)	30,000	
Cr. Sales		30,000
Dr. Cost of goods sold [30,000 / (1 + 50%)]	20,000	
Cr. Inventory		20,000
To recognize premium revenue in 2016		
b. Dr. Unearned revenue (premiums)	45,000	
Cr. Sales		45,000
Dr. Cost of goods sold [45,000 / (1 + 50%)]	30,000	
Cr. Inventory		30,000
Supporting computations and notes		
- 10,500,000 point are expected to be redeemed ($15,000,000 \times 70\% = 10,500,000$); $10,500,000$ points / $1,000 = 10,500$ gift cards; $10,500 \times \$10 = \$105,000$ fair value to customer of premiums.		
- 3,000,000 points are redeemed in 2016. ($3,000,000 / 1,000 \times \$10 = \$30,000$).		
- 4,500,000 points are redeemed in 2017. ($4,500,000 / 1,000 \times \$10 = \$45,000$).		

c. Companies offer incentive programs to increase sales.

P11-31. Suggested solution:

a.			
	Dr. Cash	5,000,000	
	Cr. Earned revenue		5,000,000
	(1,000 × \$5,000 = \$5,000,000)		
	Dr. Cost of goods sold	4,000,000	
	Cr. Inventory		4,000,000
	[\$5,000,000 / (1 + 25%) = \$4,000,000]		
	Dr. Warranty expense	400,000	
	Cr. Provision for warranty payable		400,000
	(1,000 × \$400 = \$400,000)		
	Dr. Provision for warranty payable	170,000	
	Cr. Parts inventory		50,000
	Cr. Wage expense		120,000

b.			
	Dr. Cash	5,000,000	
	Cr. Earned revenue		5,000,000
	(1,000 × \$5,000 = \$5,000,000)		
	Dr. Cost of goods sold	4,000,000	
	Cr. Inventory		4,000,000
	[\$5,000,000 / (1 + 25%) = \$4,000,000]		
	Dr. Warranty expense	170,000	
	Cr. Parts inventory		50,000
	Cr. Wage expense		120,000

c. The cash basis cannot normally be used to account for warranty expenses as it does not properly match expenses to revenues. In the example above, 2014's profitability is overstated \$230,000 (\$400,000 – \$170,000) when the cash basis is used.

d. If management's provision subsequently proves to be incorrect, the change in estimate is adjusted for prospectively in the manner discussed in Chapter 3. Essentially Stanger will debit warranty expense for an additional \$70,000 in 2015 when the new information (claims in excess of the provision) becomes known. Stanger is not required to restate 2014's results as this is a change in estimate, rather than an error.

P11-32. Suggested solution:

a. Sales occurred evenly during the year, therefore in 2018 GHF earned, on average, six months of revenue on the maintenance contracts. As per the chart below, GHF earned revenues of \$14,520.

a.	One year	Two year	Three year	Contract value	Revenue earned	Unearned revenue
Photocopiers	\$240	\$420	\$600			
# of contracts sold	<u>24</u>	<u>12</u>	<u>36</u>			
\$ value of contracts sold	\$5,760	\$5,040	\$21,600	\$32,400		
Revenue earned (%)*	<u>50%</u>	<u>25%</u>	<u>16²/₃%</u>			
Revenue earned (\$)	\$2,880	\$1,260	\$3,600		\$7,740	
Unearned revenue (\$)	\$2,880	\$3,780	\$18,000			\$24,660
Fax machines	\$180	\$320	\$450			
# of contracts sold	<u>24</u>	<u>24</u>	<u>36</u>			
\$ value of contracts sold	\$4,320	\$7,680	\$16,200	<u>\$28,200</u>		
Revenue earned (%)	<u>50%</u>	<u>25%</u>	<u>16²/₃%</u>			
Revenue earned (\$)	\$2,160	\$1,920	\$2,700		<u>\$6,780</u>	
Unearned revenue (\$)	\$2,160	\$5,760	\$13,500			<u>\$21,420</u>
				<u>\$60,600</u>	<u>\$14,520</u>	<u>\$46,080</u>
* 6 months earned / 12 month contract = 50%; 6 month / 24 month contract = 25%; 6 month / 36 month contract = 16 ² / ₃ %						

b. and c. Deferred revenue is \$46,080 (\$60,600 – \$14,520 = \$46,080). Of this, the remaining services to be provided under the one-year contract are current liabilities and the services to be provided in the next 12 months under the two- and three-year contracts are current liabilities. As per the chart below, \$24,000 of GHF's deferred revenue should be reported as a current liability and \$22,080 reported as a non-current liability.

b. and c.	Total deferred	Current	Non-current
Photocopiers			
One year	\$2,880	\$2,880	\$0
Two year*	\$3,780	\$2,520	\$1,260
Three year**	<u>\$18,000</u>	<u>\$7,200</u>	<u>\$10,800</u>
Total	\$24,660	\$12,600	\$12,060
Fax machines			
One year	\$2,160	\$2,160	\$0
Two year***	\$5,760	\$3,840	\$1,920
Three year****	<u>\$13,500</u>	<u>\$5,400</u>	<u>\$8,100</u>
Total	<u>\$21,420</u>	<u>\$11,400</u>	<u>\$10,020</u>
Total	<u>\$46,080</u>	<u>\$24,000</u>	<u>\$22,080</u>

* The value of the two-year photocopier contracts sold was \$5,040. One year of the two year agreement is a current liability – $\$5,040 / 2 = \$2,520$

** The value of the three-year photocopier contracts sold was \$21,600. One year of the three year agreement is a current liability – $\$21,600 / 3 = \$7,200$

*** The value of the two-year fax machine contracts sold was \$7,680. One year of the two year agreement is a current liability – $\$7,680 / 2 = \$3,840$

**** The value of the three-year fax machine contracts sold was \$16,200. One year of the three year agreement is a current liability – $\$16,200 / 3 = \$5,400$

P11-33. Suggested solution:

a.

Dr. Unearned revenue	6,300	
Cr. Earned revenue		6,300
Passage of time—one-year memberships ($180 \times \$420 / 12 = \$6,300$)		
Dr. Unearned revenue	3,600	
Cr. Earned revenue		3,600
Passage of time—two-year memberships ($120 \times \$720 / 24 = \$3,600$)		
Dr. Cash	9,240	
Cr. Earned revenue		9,240
Pay as you go memberships ($220 - 34 + 45 = 231$; $231 \times \$40 = \$9,240$)		
Dr. Cash	8,400	
Cr. Unearned revenue		8,400
Sale of 20 new one-year memberships ($20 \times \$420 = \$8,400$)		
Dr. Cash	7,200	
Cr. Unearned revenue		7,200
Sale of 10 new two-year memberships ($10 \times \$720 = \$7,200$)		
Dr. Unearned revenue	8,400	
Cr. Earned revenue		8,400
Obligation fulfilled—112 personal trainer coupons redeemed ($112 \times \$750 / 10 = \$8,400$)		
Dr. Cash	7,500	
Cr. Unearned revenue		7,500
Sale of 10 new personal trainer packages ($10 \times \$750 = \$7,500$)		

b. The balance in the deferred revenue account as at January 31, 2017 was \$117,150 as set out in the T-account that follows:

Unearned revenue			
		112,350	Balance Dec. 31, 2016
Passage of time—one year	6,300		
Passage of time—two years	3,600		
		8,400	Sale of one-year packages
		7,200	Sale of two-year packages
Redemption of PTP	8,400		
		7,500	Sale of PTP
		117,150	Balance Jan. 31, 2017

The two-year membership is the only product offered that gives rise to a non-current liability. In January, 10 new memberships were sold and five expired. Thus, the total obligation pertaining to the two-year memberships increased \$3,600 [$\$720 \times (10 - 5)$]. Twelve months, or 50% of each membership, is a current obligation with the remainder being a non-current obligation. The non-current portion of the liability is \$13,500 ($\$3,600 \times 50\% = \$1,800$; $\$11,700 + \$1,800 = \$13,500$). The current portion of the liability is \$103,650 ($\$117,150 - \$13,500$).

This is the shortcut way of doing this. You will obtain the same result if you construct a spreadsheet tracking the months remaining for all two-year memberships sold, segregating them as to currency.

\$720 / 24 = \$30 per month revenue						
Month sold	# sold	Months left	Current	Non-current	\$ current	\$ non-current
Feb. 2015	5	1	1	0	\$ 150	\$ -
Mar. 2015	5	2	2	0	\$ 300	\$ -
Apr. 2015	5	3	3	0	\$ 450	\$ -
May 2015	5	4	4	0	\$ 600	\$ -
Jun. 2015	5	5	5	0	\$ 750	\$ -
Jul. 2015	5	6	6	0	\$ 900	\$ -
Aug. 2015	5	7	7	0	\$ 1,050	\$ -
Sep. 2015	5	8	8	0	\$ 1,200	\$ -
Oct. 2015	5	9	9	0	\$ 1,350	\$ -
Nov. 2015	5	10	10	0	\$ 1,500	\$ -
Dec. 2015	5	11	11	0	\$ 1,650	\$ -
Jan. 2016	5	12	12	0	\$ 1,800	\$ -
Feb. 2016	5	13	12	1	\$ 1,800	\$ 150
Mar. 2016	5	14	12	2	\$ 1,800	\$ 300
Apr. 2016	5	15	12	3	\$ 1,800	\$ 450
May 2016	5	16	12	4	\$ 1,800	\$ 600
Jun. 2016	5	17	12	5	\$ 1,800	\$ 750

Jul. 2016	5	18	12	6	\$ 1,800	\$ 900
Aug. 2016	5	19	12	7	\$ 1,800	\$ 1,050
Sep. 2016	5	20	12	8	\$ 1,800	\$ 1,200
Oct. 2016	5	21	12	9	\$ 1,800	\$ 1,350
Nov. 2016	5	22	12	10	\$ 1,800	\$ 1,500
Dec. 2016	5	23	12	11	\$ 1,800	\$ 1,650
Jan. 2017	10	24	12	12	\$ 3,600	\$ 3,600
					\$ 35,100	\$ 13,500

The current portion of the obligation is $\$117,150 - \$13,500 = \$103,650$

P11-34. Suggested solution:

Summary journal entries			
To recognize the flight-related revenue in 2014			
a.	Dr. Cash	10,000,000	
	Cr. Flight revenue		9,925,000
	Cr. Unearned revenue (award points)		75,000
To recognize reward point revenue in 2015			
b.	Dr. Cash	20,000	
	Dr. Unearned revenue (award points)	30,000	
	Cr. Award revenue		30,000
	Cr. Flight revenue		20,000
To recognize reward point revenue in 2016			
b.	Dr. Cash	15,000	
	Dr. Unearned revenue (award points)	22,500	
	Cr. Award revenue		22,500
	Cr. Flight revenue		15,000
Supporting computations and notes			
- 7,500,000 miles are expected to be redeemed ($9,375,000 \times 80\% = 7,500,000$). This translates into 500 flights ($7,500,000 / 15,000 = 500$).			
- 200 reward flights are redeemed in 2015. ($200 / 500 \times \$75,000 = \$30,000$). A \$100 service charge is levied for each award flight. ($200 \times \$100 = \$20,000$)			
- 150 reward flights are redeemed in 2016. ($150 / 500 \times \$75,000 = \$22,500$). A \$100 service charge is levied for each award flight. ($150 \times \$100 = \$15,000$)			
- To obtain the amount of reward revenue to recognize, the denominator is the number of miles expected to be redeemed rather than the number awarded.			

- ($\$75,000 / 500 \text{ flights} = \150), which is the fair value of each flight expected to be awarded. From an accounting perspective this is the net amount. The gross cost of providing the flight minus the costs to be recovered equals the fair value of the award ($\$250 - \$100 = \$150$)

c. Management expects to award a total of 500 flights. On December 31, 2016, 150 flights remain to be taken [500 flights – 200 (flights taken in 2015) – 150 (flights taken in 2016)]. As these 150 flights are expected to be taken evenly during 2017–2019, this means it is anticipated that 50 flights will be taken each year ($150 / 3 = 50$).

The current liability to be reported for unearned award miles revenue on December 31, 2016 is \$7,500 ($50 \times \$150 = \$7,500$).

P11-35. Suggested solution:

To provide for the expected liability settlement

Dr. Lawsuit settlement expense	8,400,000	
Cr. Provision for liability settlement costs		8,400,000
[$(\$8,000,000 \times 80\%) + (\$10,000,000 \times 20\%) = \$8,400,000$]		

To allocate a portion of the ticket sales proceeds to the award program

Dr. Flight revenue	720,000	
Cr. Unearned revenue (award miles)		720,000
As the award portion of the flights has not previously been allowed for, an entry is required to reverse a portion of the ticket sales revenue from flight revenue to award revenue		

To recognize award point revenue in 2016

Dr. Unearned revenue (award miles)	144,000	
Cr. Award revenue		144,000
($30,000,000 \times 80\% = 24,000,000$) miles expected to be redeemed. ($4,800,000 / 24,000,000 \times \$720,000 = \$144,000$)		

P11-36. Suggested solution:

- a. A contingent liability is either i) a present obligation, the amount of which cannot be measured with sufficient reliability; or ii) a possible obligation. Possible obligations are amounts that may be owed depending on the outcome of future event(s). A contingent asset is a possible asset. Possible assets are amounts that may be due depending on the outcome of future event(s).
- b. There are two factors that govern accounting for contingent liabilities: i) the likelihood of the outcome and ii) the measurability of the obligation. If the outcome is probable and the obligation is measurable, the entity provides for the obligation using expected value techniques. “Probable” is defined as likelihood greater than 50%. If the outcome is probable, but the obligation cannot be reliably measured, or the outcome is only possible, then the entity does not provide for a liability. Rather, the entity discloses the details of

- the contingency in the notes to its financial statements. If the possibility of the outcome is remote, the entity neither provides for an obligation nor discloses the details.
- c. The likelihood of the outcome is the sole factor that governs accounting for contingent assets. If the likelihood is virtually certain, the asset is provided for in the financial statements. If it is probable, the details of the contingency are disclosed in the notes to the financial statements. If the outcome is possible or remote, the entity neither provides for an asset nor discloses the details.

P11-37. Suggested solution:

The terms “probable”, “possible”, and “remote” as they pertain to contingencies collectively describe the likelihood of a possible liability or asset being confirmed as a liability or asset. Probable is a likelihood of occurrence greater than 50%. Remote is not expected to occur, with the maximum likelihood being in the range of 5% to 10%. The likelihood of possible falls between probable and remote.

As accounting for contingent assets and contingent liabilities differs somewhat, they are discussed separately.

Contingent liabilities:

Whether a contingent obligation can be measured with sufficient reliability must also be considered, although IFRS suggests that it will be only in extremely rare situations that a potential obligation cannot be reliably measured. The spectrum of possible accounting treatments for contingent liabilities is detailed in the matrix below.

Contingent liabilities	Obligation can be reliably measured	Obligation cannot be reliably measured
Probable: 50%+	Provide for using expected value techniques	Note disclosure
Possible: 5–10% to 50%	Note disclosure	Note disclosure
Remote: <5 to 10%	Neither provide nor disclose	Neither provide nor disclose

Contingent assets:

Contingent assets are recognized in the financial statements only if realization is virtually certain. When realization is probable (50 %+), note disclosure is appropriate.

P11-38. Suggested solution:

1. (A) The asset is provided for as the outcome is virtually certain. Supreme Court decisions cannot be appealed. The supporting journal entry is:

Dr. Other receivables (lawsuit)	100,000	
Cr. Lawsuit award		100,000

2. (B) The outcome is possible but not probable, so note disclosure is required.

3. (A) A \$1,000,000 liability is provided for as the loss is probable and can be reliably measured. While the final settlement may be as low as \$5 million or as high as \$10 million, Canless is responsible only for the \$1,000,000 deductible.

Dr. Environmental cleanup expense	1,000,000	
Cr. Provision for environmental cleanup costs		1,000,000

4. (A) The loss is probable and has to be provided for. Expected value techniques may be used to determine the amount of the obligation based on legal counsel's best estimate of the amount required to settle the obligation. The midpoint of the range has been used as a starting point as if the plaintiff is successful all payouts in the stipulated range are equally likely.

Dr. Contract settlement expense	770,000	
Cr. Provision for contract settlement costs		770,000
$\{[(\$1,000,000 + \$1,200,000) / 2] \times 70\% \} + (\$0 \times 30\%) = \$770,000$		

5. (A) The loss is probable and so the company must make a provision. Expected value techniques should be used to determine the amount of the obligation based on legal counsel's best estimate of the amount required to settle the obligation. If Threlfall subsequently accepts the \$100,000 offer, this is a change in estimate that will be dealt with prospectively.

Dr. Lawsuit settlement expense	180,000	
Cr. Provision for liability settlement costs		180,000
$(\$200,000 \times 90\%) + (\$0 \times 10\%) = \$180,000$		

6. (C or possibly B) The outcome is certainly possible but as the appeal process has not yet been exhausted it is not virtually certain. Whether the outcome is probable (requiring disclosure) or possible (neither provided for nor disclosed) is a matter of professional judgment.

P11-39. Suggested solution:

The loss is likely and so the company must recognize a contingent loss for the minimum in the range less the net amount covered by insurance, and disclose the remainder in the notes to the financial statements.

Dr. Lawsuit settlement expense	1,500,000	
Cr. Lawsuit liability settlement costs		1,500,000
[\$6,000,000 - (\$5,000,000 - \$500,000)]		

P11-40. Suggested solution:

a. Assuming that the reporting company prepares its financial statements in accordance with IFRS

1. (A) The loss is probable and has to be provided for. Expected value techniques may be used to determine the amount of the obligation based on legal counsel's best estimate of the amount required to settle the obligation. The midpoint of the range has been used as a starting point as if the plaintiff is successful all payouts in the stipulated range are equally likely.

Dr. Contract settlement expense	385,000	
Cr. Provision for contract settlement costs		385,000
$\{[(\$600,000 + \$800,000) / 2] \times 55\% + (\$0 \times 45\%) = \$385,000$		

2. (A) The loss is probable and so the company must make a provision. Expected value techniques should be used to determine the amount of the obligation based on legal counsel's best estimate of the amount required to settle the obligation. If Morton subsequently accepts the \$200,000 offer, this is a change in estimate that will be dealt with prospectively.

Dr. Lawsuit settlement expense	187,500	
Cr. Provision for liability settlement costs		187,500
$\{[(\$200,000 + \$300,000) / 2] \times 75\% + (\$0 \times 25\%) = \$187,500$		

b. Assuming that the reporting company prepares its financial statements in accordance with ASPE

1. (B) The probability of loss is 55% which is less than the 70% threshold commonly used in ASPE to determine whether payout is likely. Note disclosure is required.

2. (A) The loss is likely and so the company must recognize a contingent loss for the minimum in the range and disclose the remainder in the notes to the financial statements.

Dr. Lawsuit settlement expense	200,000	
Cr. Lawsuit liability settlement costs		200,000

P11-41. Suggested solution:

Financial guarantees are initially recognized at their fair value. ZSK must also disclose its \$150,000 maximum exposure to the underlying credit risk.

P11-42. Suggested solution:

Onerous contracts are obligations in which the unavoidable costs of fulfilling the contract exceed the expected benefits to be received. As the expected benefit may be greater than the current market value of the item, a contract to purchase assets for more than fair value is not necessarily onerous.

Onerous contracts must be provided for in the financial statements. The loss recognized equals the unavoidable costs less the expected economic benefit.

P11-43. Suggested solution:

Economic analysis		
	Situation a	Situation b
Expected economic benefit	$10,000 \times \$3.20 = \$32,000$	$10,000 \times \$2.75 = \$27,500$
Unavoidable costs	$10,000 \times \$3.00 = \underline{\$30,000}$	$10,000 \times \$3.00 = \underline{\$30,000}$
Profit (Loss)	<u>\$ 2,000</u>	<u>\$ (2,500)</u>
Result	Non-onerous contract	Onerous contract for which the expected loss must be provided

- While Kitchener has contracted to pay more for the oil than the current market price, it remains that the expected economic benefit exceeds the unavoidable costs. The contract is thus non-onerous and does not need to be provided for.
- The expected economic benefit is less than the unavoidable costs and must be provided for.

Dr. Loss on onerous contract	2,500	
Cr. Provision for loss on onerous contract		2,500

P11-44. Suggested solution:

Economic analysis				
	Situation a		Situation b	
Expected economic benefit	1,000 × \$36.00 =	\$36,000	1,000 × \$45.00 =	\$45,000
Unavoidable costs	1,000 × \$40.00 =	<u>\$40,000</u>	1,000 × \$40.00 =	<u>\$40,000</u>
Profit (Loss)		<u>\$ (4,000)</u>		<u>\$ 5,000</u>
Result	Onerous contract for which the expected loss must be provided		Non-onerous contract	

a. The expected economic benefit is less than the unavoidable costs and must be provided for.

Dr. Loss on onerous contract	4,000	
Cr. Provision for loss on onerous contract		4,000

b. While Waterloo has contracted to pay more for the silica than the current market price, it remains that the expected economic benefit exceeds the unavoidable costs. The contract is thus non-onerous and does not need to be provided for in the financial statements.

P11-45. Suggested solution:

1. This contingent liability does not need to be provided for as it is only possible (20%–30%), not probable (>50%). Note disclosure of the underlying circumstances is required.

2.

Dr. Cash	5,000	
Cr. Liability for financial guarantee		5,000

Calgary must also disclose its \$500,000 maximum exposure to the underlying credit risk.

3. This contingent asset cannot be recognized as realization is not virtually certain. As realization is probable, note disclosure of the underlying circumstances is appropriate.

4. The loss is probable and has to be provided for. Expected value techniques may be used to determine the amount of the obligation.

Dr. Loss on lawsuit (breach of contract)	93,000	
Cr. Provision for lawsuit settlement costs		93,000
[(100,000 × 50%) + (90,000 × 30%) + (80,000 × 20%) = \$93,000]		

5. A journal entry is not required. Rather, the \$5,000,000 must be disclosed as a current liability in the 2018 financial statements as renewal was not effected before year-end. The fact that the bank agreed to renew the loan after year-end, but before the statements were authorized for issue, is disclosed as a non-adjusting event in the notes to the financial statements.

P11-46. Suggested solution:

1. The inventory is recorded at cost and a payable established for the Canadian dollar equivalent of the obligation.

Dr. Television inventory	9,900	
Cr. Trade accounts payable (20 × US \$500 × C\$0.99/US\$1.00)		9,900

2. A journal entry is not required. The solvent is a relatively low cost component of the chromatography process. While the market price is now much lower than the price previously contracted for, it is inferred that the expected benefits to Regina still exceed the unavoidable costs. Accordingly, the contract is non-onerous and does not need to be provided for in Regina's financial statements.

3. A journal entry is not required. The loan may be reported as a non-current liability as the grace period extends 12 months after the balance sheet date.

4. The loss is probable and has to be provided for. Expected value techniques may be used to determine the amount of the obligation.

Dr. Loss on lawsuit (customer injury)	260,000	
Cr. Provision for lawsuit settlement costs [($\$300,000 \times 60\%$) + ($\$200,000 \times 40\%$) = $\$260,000$]		260,000

5. This contingent liability does not need to be provided for as it is only possible (10%–32%), not probable (>50%). Note disclosure of the underlying circumstances is required.

P11-47. Suggested solution:

1. A journal entry is not required as the outstanding amount of the liability has not changed. From a reporting perspective, the loan will be reported as a non-current obligation as the lender agreed to a 12-month grace period before year-end.

2. IFRS allows for short-term, zero-interest-rate notes to be measured at the original invoice amount if the effect of discounting is immaterial. This is the case here as the note is due in 30 days and the imputed interest amount is immaterial (about \$30).

Dr. Storage bins	20,000	
Cr. Notes payable		20,000

3. While Port Mellon has contracted to pay more for the phosphorus than the year-end market price, it remains that the expected economic benefit exceeds the unavoidable costs. The contract is thus non-onerous and does not need to be provided for.

4. This is a third-party reward. As Gander is not an agent of the airline, revenue and expense pertaining to the award are separately recognized.

May 24, 2017	Dr. Cash	25,000	
	Cr. Parking revenue (\$25,000 – \$1,000)		24,000
	Cr. Award revenue (50,000 × \$0.02)		1,000
May 24, 2017	Dr. Award expense (50,000 × \$0.02)	1,000	
	Cr. Cash (50,000 × \$0.02)		1,000

5.

Dec. 31, 2013	Dr. Interest expense	256	
	Cr. Accrued interest payable		256
	\$20,000 × 6% × 78 / 365 = \$256 (rounded)		

N. Mini-Cases

Case 1: Cool Look Limited. *Suggested solution:*

This memo presents an analysis of the going-concern assumption as it relates to this case and discusses the accounting issues that need to be resolved before the financial statements can be finalized.

Memo to: Audit file

From: CA

Subject: Accounting issues for discussion with the partner in charge of the CLL audit

Going concern

There is a need to assess the going-concern assumption in the 2015 audit of CLL as IAS 1 requires that management shall make an assessment of an entity's ability to continue as a going concern.

CLL's bank has extended CLL's credit up to February 29, 2016, at which time it reserves the right to call its loan if the covenants are not met. Being in breach of covenants in and of itself does not automatically result in CLL not being a going concern. However, there are a number of other factors that do suggest CLL is not a going concern. CLL has lost money for at least the past two years. It also has stretched its accounts payable from just under \$1 million a year ago to over \$2.3 million. It currently cannot afford to upgrade and refit its equipment, and is not maintaining its equipment or maintaining its insurance coverage. Furthermore, the board passed a resolution to temporarily delay remitting taxes until cash flows improved. These points indicate serious liquidity problems.

The financial ratios are not currently met by CLL. Before making any adjustments for audit findings, the November 30, 2015 statements show CLL is on the edge of one of the two ratio requirements. The current ratio is 1.7:1, which is more than the minimum 1:1 allowed. However, reclassifying the long-term debt as a current liability (a possibility discussed later in my memo) would reduce the current ratio to 0.4: 1, which is less than the bank's requirement. It is also possible that the bank will not consider the \$500,000 loan to Martin Roy in its current-ratio calculation, which would reduce the ratio further. In addition, the

debt-to-equity ratio is 86%, while the bank is asking for a maximum debt-to-equity ratio of 80%. This ratio will require improvement in order to meet the covenants set out by the bank in its November 1 letter.

We need to discuss the extent of the problem with management. Evidently management and the Board are concerned about the cash position since they have taken steps to reduce spending. But they also increased their risk exposure by delaying payments and cancelling the insurance. We need additional information before concluding on the validity of the going-concern assumption. For example, we need to see future cash flow forecasts, sales forecasts, and future sales contracts.

There are a number of positive factors that suggest CLL is a going concern. CLL has \$1,094,000 cash on hand as of November 30. If the equipment can be refitted using that cash in the next three months, CLL may remain a going concern. Also, CLL still has a positive equity, and our review of the minutes shows that the company has a new, large contract. These factors suggest that CLL remains a going concern, despite the possibility of the bank calling its loan any time after February 29, 2016.

Although further investigation is required, it is probable that the company will be judged to be a going concern given the positive factors identified. If there are material uncertainties related to events or conditions that may cast significant doubt upon the entity's ability to continue as a going concern, the company is required to disclose those uncertainties.

Accounting issues requiring resolution

Capital assets

CLL has \$1.3 million (book value) of capital assets that are apparently not usable. A determination must be made as to whether an impairment loss should be recorded. The question is whether these assets have been abandoned by CLL or temporarily stored. Management will likely argue that the assets are simply being stored and that each asset's value is not impaired because refitting the assets makes them usable again. However, the assets are not currently being used, and CLL may not have the immediate financial resources to refit them. Therefore, the assets' recoverable value may be less than its carrying amount. The assets should be tested for impairment.

The first question to resolve is which Cash Generating Unit (CGU) or units the dormant equipment belongs to. IFRS defines CGUs as the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. Based on the information I have, I assume the dormant equipment can be treated as a CGU. However, these unused assets could also be considered as the larger asset group of all CLL's equipment.

After determining an appropriate CGU(s), the next step is to determine the recoverable amount of the CGU(s). If the book value of the equipment is greater than the recoverable amount, then it should be written down to the recoverable amount. The impairment loss is applied firstly to goodwill, if any, pertaining to the CGU, but this does not apply here. With respect to the idle equipment, it is possible that it has some value, due to the fact that refitting can be performed on the equipment to make it usable again. This aspect needs to be explored further so as to arrive at an accurate estimate of the CGU's recoverable value.

Inventory transaction

Finished goods inventory at a cost of \$565,000 was shipped by CLL to Big Bargain Clothing (BBC), a national retail clothing outlet store, on November 29, 2015. The shipment was recorded as sales revenue of \$1 million, generating a gross profit of \$435,000.

BBC can return unsold inventory to CLL at any time after February 1, 2016. This suggests that the transaction is more like a consignment. Goods on consignment should not be recognized as sold until purchased by the final customer. At this time, we have no information as to whether BBC has sold any of the finished goods inventory. However, given that the inventory was shipped on November 29, it is very unlikely that any would have been sold by the November 30 year-end. In addition, revenue-recognition standards (IAS 18) indicate that a right of return may preclude recognition of revenue. Given the special nature of the arrangement (meaning that CLL has no experience with this type of transaction and so will not be able to reasonably estimate returns), it is inappropriate for CLL to recognize the revenue.

Secured operating line of credit

The secured operating line of credit is classified as long-term debt. This classification is in doubt. Until now the bank has waived its right to call the loan, justifying the long-term classification. Now that the December 1 date is passed (and considering the letter from the bank indicating that it may in fact call the loan if certain ratios do not improve), it is clear that the loan should be classified as current. Also, IAS 1 addresses situations where an entity would be in violation of debt covenants at the balance sheet date. The fact that CLL is in clear violation of covenants now and is unlikely to be able to correct the situation by February 29, 2016, provides additional support for treating the loan as current.

Tax/GST liabilities

The Board passed a resolution to temporarily delay remitting taxes until cash flows improved. We need to assess the amount of the unrecorded liabilities, including interest and penalties, and make sure they are recorded in the financial statements.

Case 2: Earth Movers Ltd. *Suggested solution:*

Dear Mr. Donnelly:

You asked us to determine the amount of financing that Earth Movers Ltd. can expect to obtain from S&L Bank. The bank intends to base its loan on EML's audited financial statements.

This report first explains our assumptions and also the adjustments we had to make to EML's unaudited balance sheet in order to calculate the amount of financing available. You should examine these assumptions carefully, since you may or may not agree with them. As you requested, we have explained the accounting policies that caused us concern and have stated how they should be changed.

The report then sets out our calculations and their results. We need additional information from you before we can make final calculations. Further, you should be aware that the bank may make assumptions and adjustments that differ from ours and may, therefore, arrive at a different loan figure.

By our preliminary calculations, S&L Bank can be expected to lend you approximately \$2.6 million, which will be sufficient to repay EML's existing bank loan but not sufficient to repay your loan to EML.

We will contact you to arrange a meeting to discuss our report and obtain the information we need.

Yours truly,

WB, Chartered Accountants

Draft report to Earth Movers Ltd. (EML) on financing available from S&L Bank

Basis of calculations: the financial statements

The amount of financing from S&L is calculated using the figures reported in the audited financial statements, which have to be in accordance with International Financial Reporting Standards (IFRS). Before the financing can be calculated, EML's statements must be adjusted. Please bear in mind that the financial statements have not been audited; therefore, the account balances may change. In that case, the amount of financing available will also change.

IFRS permits choices in the selection of certain accounting policies. When possible, EML should select policies that will improve the working capital ratio and the capital assets, both of which are used in the bank's formulae to calculate the amount of financing available. At the same time, the financial statements should not mislead the bank, the primary user. Moreover, existing accounting policies can be changed only if it is either required by IFRS or results in the financial statements providing reliable and more relevant financial information.

Working capital ratio

The first step in calculating the amount of financing is to determine the working capital ratio since it determines which of the bank's two formulae is to be used. Formula 2 requires EML to have a higher working capital ratio than Formula 1 does, but is the more favourable formula to use since it results in a larger loan.

The working capital ratio is the ratio of current assets to current liabilities. Calculating it is straightforward, but problems can arise in determining precisely what should be classified as current assets and as current liabilities. Because this is open to interpretation, any loan agreement that EML signs with S&L Bank should specify the formula used for calculating the loan and the EML assets and liabilities that the bank accepts as current. In addition, the nature of the assets should be clearly described in the agreement.

Our calculation of the working capital ratio excludes spare parts inventory since, contrary to what is reported on the EML balance sheet, it is not a current asset. This asset relates to the earth movers that are included in equipment. Even though the spare parts inventory is excluded from the calculation of the working capital ratio, it will increase the capital assets on which money will be lent.

The income taxes payable, also listed on the EML balance sheet, are excluded from the calculation of working capital. This amount, while current in nature, is a personal liability rather than a corporate liability. Its exclusion improves the working capital ratio.

Accounting policies: underlying assumptions or adjustments

To prepare the appropriate balance sheet figures, it was necessary to make some assumptions about what accounting policies to apply. Some estimates were also necessary. These are explained below.

Accounts receivable

Accounts receivable include an amount of \$85,000 in disputed invoices, relating to the operations of a gravel pit. Unless the owner of the gravel pit has given an assurance that the amount will be paid, we are assuming for the purposes of this report that EML will not be paid. Part of the amount or the full amount should be written off your books. If the probability of collection cannot be determined, the full amount should be written off. If an agreement is reached, then the receivable will stay on the books.

Amount owed to the previous auditor

The accounts payable include an amount of \$146,000 owing to Fred Spot for services rendered over a period of three years. Has he been pressing for collection? If not, it may be possible to persuade Mr. Spot to reduce the amount. You should settle this billing with him and reach an amount agreeable to both parties, thereby decreasing the accounts payable and increasing the working capital. We have made no assumptions concerning the accounts payable and will wait to hear from you.

Parts of scrapped earth movers held for resale—\$60,000

If there are buyers for the scrapped earth movers, and providing that the requirements of IFRS 5 are met, then this item should be carried on the balance sheet as a current asset. It would then be segregated from equipment as “non-current assets held for resale.” This treatment will have a favourable impact on the working capital ratio and the amount of financing available will increase. The drawback is that these assets do not fall within S&L’s funding formula, although you may be able to negotiate something in this respect.

Spare parts inventory

The spare parts inventory, which apparently consists solely of wheels, appears to be overvalued. First, only two earth movers out of a fleet of 21 use size 250H wheels. Second, the wheels are replaced infrequently. Thus EML seems to have more 250H wheels on hand than are needed in the ordinary course of business. In addition, the average cost of 350H wheels is \$30,000, while that of 250H wheels is \$81,429. The carrying value of equipment is impaired if the carrying amount of the assets exceeds the recoverable amount, which is the higher of an asset’s fair value less costs to sell and its value in use.

We have arrived at a value for the 250H wheels that we consider reasonable as follows. The one wheel that was in inventory before the additional six were added was carried at \$20,000. (Book value of \$550,000 was transferred on the addition of the six wheels, raising the total book value to \$570,000. The difference of \$20,000 is presumably the amount at which the single original wheel was carried.) Using the \$20,000 as the appropriate value for a 250H wheel, we have valued the seven 250H at \$140,000. The amount on the balance sheet should be revised to show this amount.

Besides the overvaluation of the wheels, we had to consider the question of whether the spare parts should be classified as inventory or as equipment. We decided to classify the spare parts as equipment. Inventory by definition is merchandise held for resale or supplies to be consumed in the production process, which is not the case here.

As noted earlier, EML and the bank must agree on definitions to be included in the agreement—for example, the definitions of such terms as “inventory” and “equipment.” Their definition affects the amount of financing available since the bank proposes to lend money at different percentages on these two categories (for instance, it will lend 30% of the value of inventory under Formula 1). In addition, inventory is a current asset and is therefore included in the calculation of the working capital ratio. Equipment, however, is a long-term asset, so it is excluded from the calculation of the working capital ratio.

Capital assets

A gain of \$90,000 from an insurance claim was recorded. The asset appears to have been fully depreciated since a gain was recorded for the total amount to be received from the insurance company. If the asset was not fully depreciated, then the net book value of the asset should be written off, which would reduce the amount of the gain to be recorded. If you intend to repair the asset you should either accrue an amount payable for the repair or reduce the receivable by \$90,000. Reducing the value of the receivables will reduce the amount of financing available.

A sum of \$15,800 was spent to make the earth mover operational. This amount should be capitalized to equipment since the expenditure will have future benefit. This will result in an increase in the amount of financing available.

The cost of cleaning and painting the shop should be considered a regular maintenance expense and cannot be capitalized.

The Eckleforth site has a remaining life of two years and is unlikely to be offered to the City of Eckleforth in the current year. Therefore, the Eckleforth site should not be classified as a current asset.

Landfill sites

It was necessary to decide whether landfill sites should be classified as land and included in the calculation of the financing. The landfill sites should be recorded at the lower of the net recoverable amount and the net carrying value. EML's plan to offer the Eckleforth site to the City of Eckleforth suggests that landfill sites may have no market value and may even have a negative value since the cost of cleaning up the Eckleforth site is higher than its net book value. We have assumed that the landfill sites would not be included as land. In the case of the Eckleforth site, even if it were included, its value would be nil.

Funds due to shareholder

Our biggest concern was how to classify the amount owed to you by EML. You have made it very clear that you want EML to repay the loan, which means that this debt is current for the company, i.e., will be paid within one year. If this amount is considered current, then the working capital ratio will be lower than 1 and no financing will be available. In order to obtain the financing you need, repayment of the amount owed to you will have to be postponed until the following year. The bank will want a written commitment from you stating that you will not ask for the repayment of the debt within a year. We have assumed that you will agree to this condition in order to obtain the financing.

Other

Income taxes payable are your personal expenses and should not be included on EML's balance sheet. This elimination results in a more favourable working capital ratio.

The current portion of long-term debt is a current liability; however, the terms of S&L's offer specify that the working capital ratio excludes any financing from the bank. Accordingly, we have excluded this amount for the purpose of determining the working capital ratio.

Calculation of financing available

We have restated the balance sheet in accordance with the preceding analysis, as follows:

	As stated in unaudited balance sheet, June 30, 2014	Revised under the given assumptions
Cash	\$ 84,000	\$ 84,000
Accounts receivable	585,000	410,000
Non-current assets held for resale	0	60,000
Spare parts inventory	907,000	477,000
Land, building, and equipment	2,759,000	2,705,100

As noted earlier, these numbers are preliminary since an audit has not been performed and the numbers could change after an audit is performed. Furthermore, you may disagree with some of the assumptions we have made, and further information is needed to confirm some of the assumptions.

Financing available

On the basis of the revised balance sheet, the working-capital ratio is 1.60:1 (the current assets being \$554,000 and current liabilities \$347,000). We have not included taxes payable or the current portion of long-term debt in the calculation of the ratio. Even with the revised numbers, including the amount due to you from EML would reduce the ratio to less than 1.00.

Formula 2 should be used to calculate the amount of financing available (000s).

- 80% × AR (410) =	\$ 328
- 70% × capital assets (477 + 2,705.1) =	<u>2,227</u>
- Total available	<u>\$2,555</u>

With financing of this amount, EML will be able to repay the loan to the Dominion Royal Bank but will not have enough to repay the loan due to you.

The actual amount that S&L Bank is willing to lend EML will depend on the Bank's own definitions of assets and liabilities. The Bank may disagree with the assumptions and policies we have used in defining assets and liabilities. If the bank's definitions differ from ours, its conclusion will differ from ours.

Sensitivity analysis

Since the numbers may change, we have made calculations using some changed assumptions. The first scenario includes the \$90,000 from the insurance claim, since EML might not repair the truck. The second includes \$290,000 for the Banbury site but excludes the Eckleforth site since it has no value.

1. If we include the amount of \$90,000 receivable from the insurance company, the amount of financing you can expect to receive will increase by \$63,000 ($\$90,000 \times 70\%$) under Formula 1 and by \$72,000 ($\$90,000 \times 80\%$) under Formula 2. Under neither formula will the amount received from the bank cover the amount owed to you.

2. If the Banbury landfill site is included in the calculation, the loan would increase by \$145,000 ($\$290,000 \times 50\%$) or \$203,000 ($\$290,000 \times 70\%$). This scenario is very unlikely to materialize. No provision for site restoration costs has been made for this site, and the bank would probably question the value assigned to the site.

Before you begin negotiating a loan agreement with S&L, you should consider whether a lower interest rate is more beneficial to you. The existing loan is long term and is for 10 years. What S&L is offering you is partly a short-term loan and partly a long-term loan. S&L's long-term loan could be recalled as soon as the next set of financial statements is available. The S&L Bank has the right to recall the loan based on the audited financial statements. You could be put in the same situation next year, i.e., looking for financing again.

Case 3: Lisa's Insurance Services Ltd. Suggested solution:**Analysis and recommendations**

1. The liability to the vendor will be recorded at \$17,589, determined as set out below. The accrued interest of \$682 will be reported as a current liability, while the principal portion of \$16,907 will be reported as long-term debt.

- Present value of the note at origination using a BAII PLUS financial calculator: 3 N; 8 I/Y; 20000 FV; 400* PMT; CPT PV PV = -16,907 rounded. The computer asset will be recorded at \$16,907.

$$*\$20,000 \times 2\% = \$400$$

- Accrued interest to December 31, 2013 = $\$16,907 \times 8\% \times 184 / 365 = \682 (rounded)
- The liability to be recorded = $\$16,907 + \$682 = \$17,589$.

2. The key word in the facts given in the question is “possible.” As legal counsel advises that the outcome is possible, rather than probable, a liability is not provided for. Rather, the nature and details of the lawsuit should be disclosed in the notes to the financial statements. Had counsel determined the outcome to be probable, an obligation would be provided for using present value techniques.

3. IAS 39 paragraph 43 requires that the guarantee be initially reported at its fair value. The fair value considers the amount of the guarantee, the prevailing discount (interest) rate, and the probability of default. Subsequently the guarantee is measured at the higher of the best estimate to settle and the remaining provision recorded in the financial statements. IFRS 7 requires that LISL disclose the nature of the guarantee including the maximum risk exposure (\$100,000).

4. Because LISL was granted the waiver before year-end, the term loan with the bank may be reported as a non-current liability. Had the waiver been received after year-end but before the statements are issued, the liability must be presented as a current obligation with the details of the grace period disclosed.

Case 4: Current liabilities and contingencies. Suggested solution:

To: Mr. Robert Watt, CEO

From: Ranjit Sidhu, CFO

Date: February 15, 2013

Re: Contemplated changes to the company's warranty and reward programs

As requested, I have analyzed the changes that you have been considering to the company's warranty and reward programs. My findings follow:

Warranties: Revenues from the warranties sold separately are deferred and recognized over the three years of coverage. If the warranties are bundled with the product there will be two effects.

- The full price of the warranty will be recognized as revenue in the year of the sale. These revenues will be partially offset by the expected cost of servicing the warranty during the coverage period; however this provision will be lower than before as it no longer includes unearned profits.

- We currently sell warranties covering about 70% of our products. In a bundled sale, this will increase to 100%. Assuming that our sales levels of appliances remain unchanged—which, as discussed below, is by no means certain—then revenues and profit will increase incrementally from the (bundled) sale of the additional warranties.

The net effect on the income statements will be that the net profits from the warranties will be recognized in the year the warranties are sold, rather than over the three-year warranty period. The additional after-tax profit will flow through to retained earnings.

Reward program: Under the current program, because the rewards are supplied by our company, the revenues from sales to the retailers are considered “multiple deliverables”. Thus, we estimate the value of the future benefits the retailers are entitled to, and this portion of the revenue is deferred to the following year. If the program is changed such that the rewards will be provided by a third party, then in the year of the sale, the full amount of the sale will be recognized as revenue at the time the appliances are delivered to the retailer. This increase will be offset, however, as the cost of the rewards the retailers are entitled must now be expensed in the year of sale. The change will immediately impact the financial statements.

All revenue will be realized at time of sale, rather than deferring a portion to the following year, these incremental revenues will be offset by the expense for the cost of the reward program. Net income and hence retained earnings will be largely unaffected. The contemplated change will also impact the balance sheet. Currently a provision for unearned revenues is established for the expected future benefits to be provided to the retailer. Under the new approach a liability will not normally be recorded. Rather, the cost of the program will be remitted to Rewards Plus on an ongoing basis, reducing our cash position.

As the analysis above shows, under both proposed changes all the revenue is recognized up front. Thus, if these changes are implemented next year, in this transition year, gross revenues will increase. In the case of the warranties it is due to the combination of the acceleration of earnings on the warranty product and higher revenue for the additional warranty sales, and in the case of the rewards program it is because the reward portion of the revenues will no longer be deferred to the following year.

The foregoing analysis only examines the accounting effects of the proposed changes. These changes can have unintended economic consequences that warrant careful consideration. For example, a change in the way warranties are sold may negatively impact appliance sales as the customer will no longer be able to choose whether or not to purchase a warranty. Similarly, retailers may not be receptive to the proposed amendments to the reward program as they may prefer cash discounts to rewards of products and/or services that they may not need. Moreover, the change to an external rewards supplier will initially negatively impact our cash position. Lastly, for the most part the apparent increase in revenues does not reflect real growth, but rather the effect of changes to the timing of revenue recognition. The increase in sales (and in profits) is largely a one-time event in the transition year and is not sustainable on an ongoing basis.

I will be pleased to discuss this with you at your convenience.