

***Intermediate Accounting Volume 2 Updated
(Canadian) 7th edition Beechy Solutions Manual***

SKU: 9781259654688-SOLUTIONS

Chapter 12: Financial Liabilities and Provisions

Case	12-1	Ski Incorporated	
	12-2	Prescriptions Depot Limited	
	12-3	Camani Corporation	
			Suggested Time
Technical Review			
	TR12-1	Financial liabilities and provisions (IFRS)	10
	TR12-2	Financial liabilities and provisions (ASPE).....	10
	TR12-3	Provision, measurement	10
	TR12-4	Guarantee	10
	TR12-5	Provision, warranty	5
	TR12-6	Foreign currency	5
	TR12-7	Note payable	5
	TR12-8	Discounting, note payable.....	10
	TR12-9	Discounting, provision.....	10
	TR12-10	Classification liabilities.....	10
Assignment	A12-1	Common financial liabilities.....	10
	A12-2	Common financial liabilities: taxes	20
	A12-3	Common financial liabilities: taxes	20
	A12-4	Foreign currency payables (*W).....	10
	A12-5	Common financial liabilities and foreign currency	25
	A12-6	Provisions.....	20
	A12-7	Provisions (*W)	20
	A12-8	Provisions.....	20
	A12-9	Provision measurement.....	15
	A12-10	Provision measurement.....	15
	A12-11	Provisions; compensated absences	15
	A12-12	Provisions; warranty	15
	A12-13	Provisions; warranty	20
	A12-14	Provisions; warranty	25
	A12-15	Discounting; no-interest note.....	15
	A12-16	Discounting; low-interest note (*W)	20
	A12-17	Discounting; low-interest note.....	20
	A12-18	Discounting; provision.....	15
	A12-19	Discounting; provision.....	25
	A12-20	Discounting; provision.....	25
	A12-21	Classification and SCF.....	20
	A12-22	SCF	20
	A12-23	Liabilities - ASPE	10
	A12-24	Liabilities - ASPE (*W).....	20
	A12-25	Liabilities - ASPE	20

*W The solution to this assignment is on the text website, Connect.
The solution is marked **WEB**.

Cases

Case 12-1 Ski Incorporated

To: Members of Board of Directors
From: Accounting Advisor

Overview

Ski Incorporated (SI) is a public company therefore you are using IFRS. The bank loan has a minimum current ratio so you will need to be careful and watch for any impacts on the ratio. You have had a tough year this year with a taxable loss so the bank financing is critical to your operations. Management will be concerned with their bonus based on net income but this will not be a concern this year with the taxable loss since there will not be any bonus.

Issues

1. Taxable loss
2. Revenue recognition memberships
3. Revenue recognition guests
4. Special promotions
5. Coupons
6. Dealer Loan
7. Lawsuit
8. Lease
9. Gasoline storage tanks

Analysis and Recommendations

1. Taxable loss

SI had a taxable loss of \$400,000 in 20X5. Since this is the first ever taxable loss the loss would be carried back for up to three years to recover past taxes paid at the tax rates in those years. Usually you would want to go back three years first so that if you incur another loss next year you can still go back to the other two years if there is taxable income remaining. This will result in an income tax receivable which will increase current assets and have a positive impact on your current ratio.

2. Revenue recognition memberships

The contract with the customer is for the membership in the club. This would be a written agreement between the member and SI. There is one performance obligation, the promised service is membership in the ski club. There is no transfer of the service until

the membership is provided. The contract price is \$10,000. The non-refundable deposit is an advance payment towards this initiation fee and is part of the overall transaction price. The performance obligation for the initiation fee is satisfied over the period of time that the member belongs to the club. The \$10,000 would be recognized over the average period a member belongs. There should be enough historical data available to come up with a reasonable estimate. There would be no cash collection risk since the amount is paid upfront.

The annual fee is a written agreement between the member and SI. There is again one performance obligation the service for this year. The fee of \$2,000 is the total contract price and is received in 20X5 for the 20X6 ski season. This would be unearned revenue when received. Assuming the ski season goes from Dec 1 until March 31 \$500 would be recognized in 20X5 and the remainder in 20X6 which would be the period in which the service is performed. There would be no cash collection risk since the amount is paid upfront.

3. Revenue recognition guests

The contract with the guest is the written contract when they receive the ticket to ski not when the reservation is made since this reservation could be cancelled. The performance obligation is the right to ski that day. The overall contract price is the price of the ski ticket. The performance would be the right to ski on that day. There is no cash collection risk since the guest pays by credit card when they purchase the ticket.

4. Special promotions

The contract with the customer is the written contract when they receive the ticket and the right to a future lesson. There are two separate performance obligations the right to ski and the right to the lesson. The total contract price is \$100. This price would need to be allocated to the two separate performance obligations based on their relative fair value.

Fair value ski pass	$80 = 61.5\% \times 100 = \61.50
Fair value lesson	$\underline{50} = 38.5\% \times 100 = \38.50
Total fair value	<u>130</u>

The \$61.50 for the ski pass the performance obligation would be satisfied on the day that they ski. For the \$38.50 the performance obligation would be satisfied on the day they take the lesson. There would be no cash collection risk assuming a credit card is used to purchase the special pass.

5. Coupons

It must be determined if an economic loss would occur for the coupons. The coupons are for \$5 and the price of a ski pass is \$80. This is a minor amount compared to the price of the ski pass so SI would still be selling the ski pass at a profit. Therefore, the coupons should only be recognized as a cost when they are redeemed.

6. Dealer Loan

The manufacturer of the ski lift has provided a 0% interest loan. This is often referred to as a dealer loan. The loan is either measured in FVTPL or other liabilities. Most liabilities are measured in other liabilities and since there is no mismatch I recommend this loan be recorded in other liabilities. SI is required to record the loan at fair value using the market rate of interest which would be their incremental borrowing rate of 8%. Therefore, the loan would be recorded at \$2.5 million (2 periods, 8%) = \$2,143,350. The loan would then be amortized using the effective interest method and interest expense of \$171,468 would be recorded in 20X5. This would not impact the current ratio in 20X5 because the full amount would be presented as long term.

7. Lawsuit

It must be determined if the lawsuit is probable and if the amount can be measured. The Board has decided to settle the lawsuit therefore it is probable there will be a payment. The amount will be based on managements best estimate. Since there is a range this would be the midpoint of the range or \$250,000 should be accrued as a provision. In addition, there would be note disclosure on the details of the lawsuit. This liability would be current if the payment is made next year which would have a negative impact on the current ratio.

8. Lease

The lease would be an onerous contract since the costs exceed the benefits since the leased property will not be used by SI. A provision should be set up for the \$10,000 – 5,000 = \$5,000 x 24 months = \$120,000. The current portion of the provision would have a negative impact on the current ratio.

9. Gasoline storage tanks

The gasoline storage tanks would be set up as an item of property, plant and equipment and depreciated over the 15 years. The costs to remove the tanks would be a legal obligation and would need to be set up as a decommissioning provision. The provision would be set up at the present value of the \$2.5 million. The PV would be \$2.5 million (15 periods, 8%) = \$788,100. This amount would be debited to the gasoline storage tanks and credited to the provision. Since the life of the storage tanks and the decommission provision are the same the \$10,788,100 would be depreciated over the 15 years which would be \$719,207 of depreciation expense in 20X5. Interest expense of \$63,048 would also be recognized in 20X5 which would increase the decommissioning provision. The asset would be a long term asset and the decommissioning provisions would be a long term liability so this would not impact the current ratio.

Case 12-2

Prescriptions Depot Limited

Overview

Prescriptions Depot Limited (PDL) is a large private company with revenues of \$5.4 billion and earnings of \$295 million. The company complies with IFRS, and is contemplating a public offering in the medium term. GAAP compliance is therefore important. Reporting objectives are to report growth in sales, especially year-over-year same-store sales growth, and stable earnings. Because of possible analyst interest, sales measurement is of critical importance. **Ethical** reporting choices are critical, given the possibility for increased scrutiny in the future; sudden changes in accounting policy at a later date may not be viewed with favor by analysts. Reporting objectives are meant to support a public offering.

Issues

1. Loyalty points program
2. Decommissioning obligations
3. Cash refund program
4. Coupon program

Analysis and recommendations

1. Loyalty points program

PDL operates a loyalty points program, which will impact on the measurement of sales revenue, important for analysts.

Currently, a sale transaction with point value attached is recognized as a sale entirely in the current period. An expense and liability for the cost – not sales value – of goods to be redeemed in the future is recognized in the same time period as the sale.

This policy maximizes the sales value recorded with the initial transaction. It does not reflect the substance of the transaction, though, which is that PDL has rendered multiple deliverables in sale: both the initial sale, and the subsequent sale based on points value are being sold.

Accordingly, PDL must consider an alternate approach to its loyalty point program:

1. The sale in the store is a contract with the customer but there are two separate performance obligations. There is the sale of the goods now and the future redemption of points. This loyalty program provides the customer with a material right. On a sale that involves issuance of points, the consideration received must be allocated between the sale of the product and the points on a

relative stand alone basis. The value of points to be redeemed in the future is recorded as unearned revenue.

2. As is now the case, careful measurement of the amount - unearned revenue, now - includes analysis of redemption, bonus offers, breakage, expiry, and the like.
3. When points are redeemed, the sales value of the redemption transaction is recorded as sales revenue and cost of goods sold reflects the merchandise purchased.

This approach defers sales revenue and gross profit to later periods.

As a result, current earnings (and sales) are lower, but future periods show higher sales and earnings. Trends may be affected. Analysts will react better to accurate information, and there is time for this to be assessed since plans to offer shares to the public are described as “medium term”.

2. Decommissioning obligation

PDL has an obligation to remove its customized, specialized pharmacy installations in leased premises. This is a future obligation based on a past action, and represents a provision in the financial statements. It is not now recorded. This is essentially a decommissioning obligation, and standards require recognition.

Accordingly, PDL must estimate the cost to restore premises, removing the custom set-up. PDL must also estimate when restoration is likely to happen; lease renewal must be assessed. Finally, a borrowing rate for the appropriate term and amount must be estimated, and a discounted liability calculated.

The discounted liability is recognized as an asset and a liability. The asset is depreciated over the life of the leased premises. Interest is accrued annually on the liability. These two charges will decrease earnings, but represent appropriate accounting measurement.

Note also that estimates must be revised, and any changes in estimate are reflected in a revised present value and asset balance.

3. Cash refund program

The cash refund program is now accounted for when the refund takes place, recording a reduction to cash and a reduction to sales.

Since the promotion involves a cash refund, an obligation exists to pay cash in the future, based on a past transaction.

If there was a refund period open over the end of a reporting period, this accounting policy would not capture the obligation to provide refunds. That is, if the six week documentation window were open, after a given promotion, there would be refunds to be made based on recorded sales of the period. This obligation to provide refunds would not be reflected in the financial statements.

Therefore, PDL must estimate the extent of cash refunds waiting to be filed and record them as a liability when the promotion weekend ends. Estimates can be based on past practice.

The amount refunded to customers should be reported as a sales discount (a contra-sales account), not as a direct decrease to sales. It should also not be recorded as a promotion expense, as it is a reduction in sales value. Recording the amounts as a sales discount is preferable to directly reducing sales, because it may help preserve information about the extent of program use for internal tracking. Analyses of sales trends may focus on net sales, so this accounting treatment may not improve sales trends, a corporate reporting objective.

The policy will record refunds earlier, and may decrease earnings in the short term. Over time, there will be no cumulative difference to earnings.

4. Coupon program

The coupon program is now accounted for by recording sales at the amount of cash received from customers. PDL then reduces inventory – and thus cost of goods sold – for manufacturer rebates given for coupons redeemed. (i.e., debit accounts payable, and credit inventory which becomes cost of goods sold). This has the correct impact on gross profit (give or take some timing issues of inventory sale), but understates sales.

Since PDL is increasingly concerned with correct measurement of sales, the accounting policy for coupons must be revisited. The correct treatment:

1. Sales is measured at the retail price, regardless of whether the value is received from customers (\$20,000, in the case example) or from the manufacturer in the form of coupons (\$5,000). The coupons are in essence an account receivable, used to reduce an account payable.
2. Merchandise is recorded at the invoice cost (\$98,000) not the amount of cash paid (\$93,000).

Using the existing accounting policy, sales are recorded at \$20,000, and cost of goods sold (for many products, one assumes) at \$93,000. With the revised system, sales are \$25,000 and cost of goods sold is \$98,000.

There is no overall change to earnings, but sales are more accurately stated, which is preferable for PDL.

Conclusion

Any company with an eye on public markets must carefully assess its reporting practices and ensure appropriate accounting is followed. PDL has several policies, for loyalty points, cash refunds and coupon transactions that impact on reporting of sales and timing of earnings. In addition, they have unrecorded decommissioning obligations. Appropriate accounting demonstrates the ethical commitment of management.

Case 12-3

Camani Corporation

Overview

Camani Corporation has been negatively affected by economic conditions, and the 20X3 financial results are under particular scrutiny to determine the viability of the existing strategic model. The executive team will receive a “return to profitability” bonus if 20X3 earnings are positive. Under these circumstances, there is obvious pressure to shade reporting policies and estimates to support higher earnings. There are significant **ethical** pressures on all stakeholders in the company, but especially management.

Issues

1. Calculate cash from operating activities, based on current draft financial statements.
2. Analyse reporting implications of identified estimated financial statements elements: legal issues, depreciation policy, technology contract, inventory valuation, restructuring and environmental liability.
3. Re-calculate cash from operating activities, based on revised financial statements

Analysis and conclusions

1. Cash flow from operating activities, existing draft financial statements

Exhibit 1 shows that cash flow from operating activities is a negative, at (\$1,721). Earnings of \$1,535 reflect cash flows of (\$800), and dividends on common shares are another (\$921). The negative operating cash flows are caused by large build-ups in account receivable and inventory. The increase in accounts payable and accrued liabilities works to mitigate this, but is not as large as the inventory build-up.

This is contrary to a return to profitability implied by positive earnings, and calls into question the declaration of common dividends.

2. Analysis of accounting policies and estimates

- a. Legal issues

The accrual has been made based on one set of expected values, resulting in the accrual of \$830. If a different, less optimistic set of probabilities is used, the accrual is \$1,110:

Total payment (in 000's)	Alternate probability	Expected value
-----------------------------	--------------------------	-------------------

		(000's)
\$ 100	0%	0
500	20	\$ 100
700	30	210
1,200	30	360
2,200	20	<u>440</u>
		\$ 1,110

This is an additional liability and expense of \$280 (See Exhibit 2).

b. Depreciation policy

Retaining prior years' estimates for depreciation amounts would result in \$200 additional depreciation. (See Exhibit 2).

c. Technology services

CC had recorded \$1,200 as an estimate for technology services rendered; if the \$4,000 contract is considered 45% complete (rather than 30%), another \$600 (15%) must be recorded. This is a liability and presumably an expense. (See Exhibit 2).

d. Inventory valuation

Retaining prior years' estimates for inventory valuation would result in \$775 additional write-down (\$3,125 - \$2,350.) Note that inventory levels are higher in 20X3, which is not consistent with less need for a valuation adjustment. Much might depend on the state of the economy, though, and a thorough review of the analysis the CC has prepared. (See Exhibit 2).

e. Restructuring

No accrual has yet been recorded for a restructuring. The plan has not been announced or approved, and the plan is not formal the plan at this stage. Only a formal plan, once communicated, would meet the requirements of a constructive liability. At this stage, recording is premature, and no accrual has been recorded.

f. Environmental liability

If the liability had been recorded at 5%, rather than 7%, \$329 (\$400, 4 years, 5%) would have been recorded, rather than \$306. Interest would have been \$16, not \$21 (a \$5 difference), and depreciation, over four years, would have been \$82, rather than \$77 (a \$5 difference). These adjustments are minor, and are summarized in Exhibit 2.

Effect on financial performance

The adjustments indicated by these areas have been included in the revised draft statement of financial position and financial performance shown in Exhibit 3. The statement of earnings now reflects a loss of \$320. This would eliminate any return to profitability bonus, and means that the operating strategy of the company needs to be assessed.

3. Cash flow from operating activities, revised draft financial statements

The reported loss of \$320 is more consistent with the negative cash flow from operating activities. Exhibit 4 shows the revised operating activities section of the SCF. Cash used by operating activities is unchanged, at (\$1,721). This demonstrates the reason that many focus on the SCF, since it is unaffected by estimates that underlie earnings measurement.

Conclusion

Additional information should be requested by the audit committee in each these areas, to gather evidence to support the accrual that has been made, or suggest a more appropriate amount. Since profits are marginal and there is significant incentive for management to show profit in 20X3, very careful evaluation of these areas is warranted.

Exhibit 1
Operating activities, SCF
Existing draft summarized financial statements

Camani Corporation
Operating Activities Section of the Statement of Cash Flow
Year ended 31 December 20x3

<i>Operating Activities:</i>		
Net income	\$1,535	
Adjustments for non-cash items:		
Depreciation.....	3,900	
Interest	<u>21</u>	
	5,456	
Changes in current assets and current liabilities:		
Increase in accounts receivable	(3,740)	
Increase in inventory	(6,950)	
Increase in prepaids	(87)	
Increase in accounts payable and accrued liabilities	<u>4,521</u>	
		(800)
Cash paid for common dividends (\$1,535 + \$643 = \$2,178- \$1,257)		<u>(921)</u>
Net cash provided (used) by operations.....		<u><u>\$(1,721)</u></u>

Exhibit 2
Camani Corporation
Adjustments based on estimated amounts

1) Expense (\$1,110 - \$830).....	280	
Accrued liabilities.....		280
2) Depreciation Expense (\$4,100 - \$3,900)	200	
Plant and equipment (net).....		200
3) Expense	600	
Accrued liabilities.....		600
4) Expense (\$3,125 - \$2,350).....	775	
Inventory.....		775
5) None		
6) Depreciation expense (\$82 - \$77).....	5	
Asset (\$329-\$306) less \$5 extra depreciation.....	18	
Interest expense (\$21 - \$16)		5
Accrued liabilities (\$329 - \$306) less \$5 change in interest.....		18

Exhibit 3
Camani Corporation
REVISED Summarized Draft 20X3 Financial Statements

REVISED Summarized Draft Statement of Financial Position
At 31 December (in 000's)

	20X3	20X2
<i>Assets</i>		
Cash	\$ 2,340	\$ 1,680
Accounts receivable	16,780	13,040
Inventory (-\$775)	61,145	54,970
Prepays	542	455
Land	5,860	5,860
Plant and equipment (net) (-\$200 +\$18)	19,538	18,650
Other assets	<u>650</u>	<u>290</u>
Total debits	<u>\$106,855</u>	<u>\$94,945</u>
<i>Liabilities</i>		
Accounts payable and accrued liabilities(+ \$280 + \$600)	48,268	42,867
Long-term debt (+\$18)	53,545	46,200
<i>Equity</i>		
Common shares	5,640	5,235
Retained earnings (\$643 -\$320 loss - \$921 divs)	<u>(598)</u>	<u>643</u>
Total credits	<u>\$106,855</u>	<u>\$94,945</u>

REVISED Summarized Draft Statement of Earnings
For the year ended 31 December 20X3

Sales revenue	\$104,910
Cost of goods sold (+\$775)	(67,005)
Depreciation expense (+\$200 + \$5)	(4,105)
Operating, administration and marketing (+\$280 + \$600 - \$5)	<u>(34,120)</u>
Earnings and comprehensive income	<u>\$ (320)</u>

Exhibit 4
 REVISED Operating activities, SCF
 Revised draft summarized financial statements

Camani Corporation
Operating Activities Section of the Statement of Cash Flow
Year ended 31 December 20x3

<i>Operating Activities:</i>		
Net income (loss)	(\$320)	
Adjustments for non-cash items:		
Depreciation.....	4,105	
Interest	<u>16</u>	
	3,801	
Changes in current assets and current liabilities:		
Increase in accounts receivable	(3,740)	
Increase in inventory	(6,175)	
Increase in prepaids	(87)	
Increase in accounts payable and accrued liabilities	<u>5,401</u>	
		(800)
Cash paid for common dividends (unchanged)		<u>(921)</u>
Net cash provided (used) by operations.....		<u><u>\$(1,721)</u></u>

Technical Review

Technical Review 12-1

1. T
2. F – The effective interest method is required in IFRS.
3. F – The gain or loss is recognized in earnings.
4. T – if each point in the range is equally likely
5. F – the refinancing must be completed by the year-end date for the mortgage to be classified as long term

Technical Review 12-2

1. F – only legal obligations are included not constructive obligations
2. T
3. T
4. F – if each point in the range is equally likely the lower end of the range not the midpoint would be used
5. T

Technical Review 12-3

<i>Case</i>	<i>Most likely outcome</i>	<i>Expected value</i>	<i>To record</i>
1.	Most likely outcome is 0, p = 70%	Expected value is $(\$100,000 \times 10\%) +$ $(\$200,000 \times 10\%) +$ $(\$300,000 \times 5\%) +$ $(\$400,000 \times 5\%) =$ \$65,000. (Still less than one payout)	No accrual based on most likely outcome
2.	Likely (90%) The most likely payout is \$200,000	Expected value is $(\$100,000 \times 10\%) +$ $(\$200,000 \times 60\%) +$ $(\$300,000 \times 5\%) +$ $(\$400,000 \times 15\%) =$ \$205,000. (Very close to most likely outcome)	Accrual of \$200,000, most likely outcome
3.	Likely (90%) The most likely payout is \$100,000	Expected value is $(\$100,000 \times 30\%) +$ $(\$200,000 \times 20\%) +$ $(\$300,000 \times 20\%) +$ $(\$400,000 \times 20\%) =$ \$210,000. (NOT close to most likely outcome)	Accrual of \$210,000 60% chance that payout is higher than \$100,000 so accrual of most likely outcome is not adequate.

Technical Review 12-4

A guarantee is measured at its fair value. It would be measured at $\$300,000 \times 30\% = \$90,000$.

Technical Review 12-5

Requirement 1

Warranty expense in April, \$24,750 ($\$550,000 \times 4.5\%$)

Requirement 2

Balance in the warranty provision account at the end of April is \$18,450
($\$16,400 + \$24,750 - \$8,700 - \$14,000$)

Technical Review 12-6

1) The Canadian equivalent of the payable when it is first recorded is US \$150,000 x Cdn @ .75 = \$112,500. The inventory would be valued at \$112,500.

2) The amount in the exchange gain or loss account at the end of the year would be year end US \$150,000 x Cdn @ .72 = \$108,000. Therefore, the difference of \$112,500 – 108,000 = 4,500 would be in the exchange gain or loss account. The \$4,500 represents a foreign exchange gain (credit to the account).

Technical Review 12-7

1 October 20x6

Cash	120,000	
Note payable		120,000

31 December 20x6

Interest expense ($\$120,000 \times 9\% \times 3/12$)	2,700	
Interest payable		2,700

30 September 20x7

Interest expense ($\$120,000 \times 9\% \times 9/12$)	8,100	
Interest payable	2,700	
Cash ($120,000 \times 9\%$)		10,800

31 December 20x7

Interest expense ($\$120,000 \times 9\% \times 3/12$)	2,700	
Interest payable		2,700

30 September 20x8

Interest expense ($\$120,000 \times 9\% \times 9/12$)	8,100	
Interest payable	2,700	
Cash ($120,000 \times 9\%$)		10,800
Note payable	120,000	
Cash		120,000

Technical Review 12-8

Requirement 1

Principal \$250,000 (P/F, 7%, 2) = \$250,000 × (0.87344)	\$218,360
Interest \$5,000 (P/A, 7%, 2) = \$5,000 × (1.80802)	<u>9,040</u>
	<u>\$227,400</u>

Requirement 2

(1) Opening Net Liability	(2) Interest Expense 7% Market Rate	(3) Interest Paid	(4) Discount Amortization (2) – (3)	(5) Closing Net Liability (1) + (4)
\$227,400	\$15,918	\$5,000	\$10,918	\$238,318
238,318	16,682	5,000	11,682	250,000

Technical Review 12-9

Requirement 1

Present value \$420,000 (P/F, 6%, 10) = $\$420,000 \times (0.55839)$ \$234,524

Requirement 2

(1) Opening Net Liability	(2) Interest Expense @ Market Rate (1) $\times$ 6%	(3) Closing Net Liability (1) + (2)
\$234,524	\$14,071	\$248,595
248,595	14,916	263,511
263,511	15,811	279,322

(three years only)

Requirement 3

Revised present value \$490,000 (P/F, 8%, 7) = $\$490,000 \times (0.58349)$ \$285,910

Interest expense, 20X8 (line 3 of table above) \$ 15,811

Adjustment to asset and obligation (\$285,910 less \$279,322 (Table, above))..... \$ 6,588

Technical Review 12-10

1. Current
2. Current
3. Current
4. Non-current
5. Current

Assignments

Assignment 12-1

Requirement 1

a. Office supplies inventory	5,200	
Accounts payable.....		5,200
b. Cash.....	30,000	
Note payable		30,000
c. Inventory	143,000	
Accounts payable.....		143,000
d. Utilities expense.....	2,600	
Accounts payable.....		2,600
e. Dividends, preferred (or retained earnings)	6,000	
Dividends, common (or retained earnings).....	5,000	
Dividends payable		11,000
f. Accounts payable	35,200	
Inventory.....		35,200
g. Accounts payable	53,900	
Cash (\$143,000 - \$35,200) x 50%		53,900
h. Interest expense (\$30,000 x 10 % x 1/12).....	250	
Interest payable.....		250
i. Rent expense	2,400	
Accounts payable.....		2,400

Note: Students may record utilities and rent as separate payable accounts, or in accounts payable. Both are acceptable.

Requirement 2

Accounts payable	64,100 cr.	(1)
Note payable	30,000 cr.	
Interest payable	250 cr.	
Dividends payable	11,000 cr.	(1)

- (1) See note above; utilities and rent may be in separate payables accounts. Similarly, dividends payable may be two accounts, one for common and one for preferred.

Assignment 12-2

a. Cash	3,780,000	
Sales revenue		3,600,000
GST payable ($\$3,600,000 \times 5\%$)		180,000
b. Cash	13,020,000	
Sales revenue		12,400,000
GST payable ($\$12,400,000 \times 5\%$)		620,000
c. Equipment	1,250,000	
GST payable ($\$1,250,000 \times 5\%$)	62,500	
Cash		1,312,500
d. Salaries expense	85,800	
Employee income tax payable		7,400
EI payable		1,400
CPP payable		1,200
Cash		75,800
e. Cash	2,940,000	
Sales revenue		2,800,000
GST payable ($\$2,800,000 \times 5\%$)		140,000
f. Inventory (or purchases)	12,200,000	
GST payable ($\$12,200,000 \times 5\%$)	610,000	
Cash		12,810,000
g. Salaries expense	85,800	
Employee income tax payable		7,400
EI payable		1,400
CPP payable		1,200
Cash		75,800
h. Salary expense	6,320	
CPP payable ($\$1,200 \times 2$)		2,400
EI payable ($\$1,400 \times 2 \times 1.4$)		3,920
i. Employee income tax payable	14,800	
EI payable ($\$1,400 \times 2$) + \$3,920	6,720	
CPP payable	4,800	
Cash		26,320
j. GST payable	267,500	
Cash		267,500

Balance: $(\$180,000 + \$620,000 + \$140,000) - (\$62,500 + \$610,000) = \$267,500$

Assignment 12-3

Liabilities:

GST payable (1).....	\$122,000
Income tax deductions payable (2)	47,400
CPP payable (3)	13,500
EI payable (4).....	13,280

(1) $\$43,000 + \$708,000 - (\$1,920,000 \times 5\%) - \$533,000 = \$122,000$

(2) $\$2,600 + \$21,400 + \$23,400 = \$47,400$

(3) $\$1,900 + \$2,800 + \$3,000 + \text{employer, } \$5,800 = \$13,500$

(4) $\$800 + \$2,400 + \$2,800 + \text{employer, } (\$5,200 \times 1.4) = \$13,280$

Assignment 12-4 (WEB)

a)	Inventory (70,000 x \$2.11)	147,700	
	Accounts payable.....		147,700
b)	Inventory (150,000 x \$1.11)	166,500	
	Accounts payable.....		166,500
c)	Inventory (20,000 x \$2.13)	42,600	
	Accounts payable.....		42,600
d)	Accounts payable.....	166,500	
	Foreign exchange loss	9,000	
	Cash (150,000 x \$1.17).....		175,500
e)	Accounts payable.....	42,600	
	Foreign exchange loss	1,400	
	Cash (20,000 x \$2.20).....		44,000
f)	Accounts payable.....	147,700	
	Foreign exchange loss	4,200	
	Cash (70,000 x \$2.17).....		151,900

Assignment 12-5

Requirement 1

Cash.....	1,029,000	
Sales revenue		980,000
GST payable		49,000
Salary expense	117,000	
EI payable		3,800
CPP payable.....		2,200
Employee income tax payable		12,200
Cash		98,800
Salary expense	7,520	
EI payable (\$3,800 x 1.4)		5,320
CPP payable.....		2,200
Inventory	1,520,000	
GST payable (\$1,520,000 x 5%).....	76,000	
Accounts payable.....		1,596,000
Cash	3,297,000	
Sales revenue		3,140,000
GST payable (\$3,140,000 x 5%)		157,000
Accounts receivable (\$176,000 x \$1.03)	181,280	
Sales revenue		181,280
The US customer has been billed in US dollars, and \$176,000 is owing.		
Cash (\$140,000 x \$1.07).....	149,800	
Accounts receivable (\$140,000 x \$1.03)		144,200
Foreign exchange gains and losses		5,600
GST Payable	192,800	
Cash (\$62,800 + \$49,000 + \$157,000 - \$76,000).....		192,800
Accounts payable	957,600	
Cash (60% of \$1,596,000).....		957,600
Accounts receivable	1,080	
Foreign exchange gains and losses		1,080
(\$176,000 - \$140,000) = \$36,000 still owing. Recorded at \$1.03; now worth \$1.06		
\$36,000 x \$.03 = \$1,080		

Requirement 2

Accounts receivable	38,160 dr.	(1)
Accounts payable	638,400 cr.	(2)
CPP payable	8,300 cr.	(3)
EI payable	14,320 cr.	(4)
Income tax deductions payable	28,520 cr.	(5)

(1) $\$181,280 - \$144,200 + 1,080$

(2) $\$1,596,000 - \$957,600$

(3) $\$3,900 + \$2,200 + \$2,200$

(4) $\$5,200 + \$3,800 + \$5,320$

(5) $\$16,320 + \$12,200$

Assignment 12-6

<i>Item</i>	<i>Accounting treatment</i>
a.	Record; specific plan that has been communicated in a substantive way
b.	Record; cash rebate is a required payout; liability for $65\% \times 500 \times \$10$
c.	Do not record; plans not yet concrete.
d.	Record; legislative requirement; amount has to be estimated and discounted for the time value of money
e.	Record; announced intent that can be relied on by outside parties; amount has to be estimated and discounted for the time value of money
f.	Do not record; executory contract until time passes. Disclosure as commitment.
g.	Record when tower is built; remediation required under contract; amount has to be discounted for the time value of money
h.	Do not record; no firm offer or acceptance of out-of-court settlement. Disclosure.
i.	Do not record; no obligation is established because the case has not been settled and the company will likely successfully defend itself. Disclosure unless probability of payment is remote.
j.	Record; obligation for the expected value of \$4 million
k.	Record; some might claim that the expectation of successful defense means that the amount might simply be disclosed, and this is an acceptable response. However, the author is pessimistic about the success of appeals on CRA rulings and thus suggests recording.

Assignment 12-7 (WEB)

<i>Item</i>	<i>Accounting treatment</i>
a.	Do not record; executory contract until goods are delivered.
b.	Loss and liability recognized; record \$40,000 loss from decline in market value (onerous contract.)
c.	Liability for \$105,000 at year-end; originally recorded at \$110,000 Cdn. amount received and \$5,000 foreign exchange gain recognized to reflect change in exchange rate.
d.	Probable that there will be payout Record loss and liability at most likely outcome of \$500,000. Expected value; \$425,000(\$2 million x 5%) + (\$500,000 x 65%); appropriate to record higher value of \$500,000, reflecting payout.
e.	Record loss and liability at expected value; company stands ready to make payment in the event of default; amount is \$300,000 x 10%. Note: because this is a financial instrument, expected value or fair value is used for valuation. Most likely outcome is not used for valuation.
f.	Record loss and liability at expected cash outflow; obligation to make payment; amount is \$10,000 (\$100 x 1,000 x 10%).
g.	Record as a liability; part of initial sales price allocated to liability; Amount is expected fair value of merchandise to be distributed.

Assignment 12-8

<i>Item</i>	<i>Accounting treatment</i>
A.	Constructive obligation: Record costs of recall; may be an additional \$1,800,000 expense and liability ($\$1,200,000 \div 0.4 \times 0.6$) if costs are linear with progress. Company likely liable for any settlements or lawsuits for product damages, but testing must be completed to ascertain if there is indeed a problem with existing product.
B.	Not recorded; all that can be recorded is loss events of the year; no amount can be recorded to smooth out losses expected
C.	Record at expected value; a warranty expense and a warranty provision are recorded at the expected \$100,000 outflow. Subsequent payments reduce the provision.
D.	Record since the company has decided to settle to avoid negative publicity. Since there is a range and no amount in the range is more likely than another, the midpoint of the range \$375,000 would be managements best estimate.
E.	Record at expected value; company is required by legislation to remediate the site. Amount must be estimated, both timing and amount, even though uncertain. Amount to be discounted for interest rate over correct risk and term.

Assignment 12-9

<i>Claim</i>	<i>Outcome</i>
1.	Not likely; <50% probability of payout; no accrual. Disclosure.
2.	Likely Accrual at best estimate, which is the most likely payout informed by expected value \$ 5,000,000 recorded
3.	Likely Accrual at best estimate, which is the most likely outcome informed by expected value. Combined odds: 40% settlement (60% x 30%) = 18% court dismissed (60% x 70%) = 42% court payout Overall, most likely outcome (42%) is \$1,600,000 payout. Expected value is $(\$1,000,000 \times 40\%) + (\$1,600,000 \times 42\%) = \$1,072,000$. More information about the success of the settlement offer should be obtained before the financial statements are issued, but an accrual of \$1,000,000 or \$1,600,000 is supportable based on the information provided.

Assignment 12-10

<i>Product</i>	<i>Outcome</i>
1.	Probability of payout, therefore accrual needed $75 \text{ claims} \times (1/3) \times \$1,000 \times 90\%$ $25 \text{ claims} \times \$5,000 \times 70\%$ $25 \text{ claims} \times 12,000 \times 60\%$ = <u>\$290,000</u>
2.	Nothing recorded for the eight claims to be dismissed Claim #9 is likely to be paid (60%) Accrued at most likely outcome, <u>\$50,000</u>
3.	Payout is not likely (60% chance of dismissal) No accrual; most likely outcome

Assignment 12-11

Requirement 1

31 December 20x5—Adjusting entry to accrue vacation salaries not yet taken or paid:

Salary expense	6,000	
Liability for compensated absences.....		6,000

During 20x6—Vacation time carryover taken and paid:

Liability for compensated absences.....	6,000	
Cash (included in payroll entry)		6,000

Requirement 2

Total wage expense:

20x5: \$700,000 + \$6,000 = \$706,000

20x6: \$740,000 - \$6,000 = \$734,000

20x5 statement of financial position:

Current liabilities:

Liability for compensated absences.....	\$6,000
---	---------

Retained earnings would have decreased by \$6,000.

Assignment 12-12

Requirement 1

A provision is a liability of uncertain timing or amount.

Requirement 2

The warranty is both current and non current since about half was utilized this year and about half is remaining.

Requirement 3

A constructive liability is one that is not caused by contract or legislation. Instead, it arises because of a pattern of past action, established policy, or public statement upon which others rely. For a warranty, a constructive liability might arise because the company has announced a repair program in excess of current warranty requirements.

Requirement 4

The \$1,164 of additional provision created is the expense for the year, the warranty expense associated with sales or actions of the period.

Requirement 5

The \$1,164 of current expense is based on the best estimate of cost to be incurred in the future. This is an expected value for a large population.

Requirement 6

The \$690 utilized during the year is the amount spent on warranty work during the year.

Requirement 7

The \$80 unwinding of the discount is the interest expense for the year. The provision for warranty must be a discounted amount, reflecting a multi-year warranty.

Assignment 12-13

Requirement 1

20X5

Cash, accounts receivable.....	4,600,000	
Sales revenue		4,600,000
Warranty expense (6% of sales)	276,000	
Provision for warranty		276,000
Provision for warranty	31,000	
Inventory.....		9,000
Cash		22,000

20X6

Cash, accounts receivable.....	6,100,000	
Sales revenue		6,100,000
Warranty expense (6% of sales)	366,000	
Provision for warranty		366,000
Provision for warranty	415,000	
Inventory.....		126,000
Cash		289,000
Warranty expense (8% - 6% of total 20X5 and 20X6 sales)	214,000	
Provision for warranty		214,000
Warranty expense (1% of total 20X5 and 20X6 sales)	107,000	
Provision for warranty		107,000

Requirement 2

31 December 20x5

Provision for warranty (\$145,000 + 276,000 - \$31,000).....\$390,000

31 December 20x6

Provision for warranty (\$390,000 + \$366,000 - \$415,000
+ \$214,000 + \$107,000)

\$662,000

Assignment 12-14

Requirement 1

20X5

Cash, accounts receivable (\$610 x 700 units)	427,000	
Sales revenue		427,000
Warranty expense (\$75 x 700 units).....	52,500	
Cash		52,500
Cash, accounts receivable (\$700 x 600 units)	420,000	
Sales revenue		420,000
Warranty expense (10% of sales)	42,000	
Provision for warranty		42,000
Provision for warranty	10,000	
Inventory, cash, etc.		10,000

20X6

Cash, accounts receivable (\$660 x 1,000 units)	660,000	
Sales revenue		660,000
Warranty expense (\$75 x 1,000 units).....	75,000	
Cash		75,000
Cash, accounts receivable (\$750 x 800 units)	600,000	
Sales revenue		600,000
Warranty expense (10% of sales)	60,000	
Provision for warranty		60,000
Provision for warranty	31,600	
Inventory, cash, etc.		31,600

20X7

Provision for warranty	42,000	
Inventory, cash, etc.		42,000

Requirement 2

	20x5	20x6	20x7
Warranty expense			
Line A	\$ 52,500	\$ 75,000	
Line B	<u>42,000</u>	<u>60,000</u>	
Total	\$ 94,500	\$135,000	nil

Requirement 3

31 December 20x5

Provision for warranty (\$42,000 - \$10,000) \$32,000

31 December 20x6

Provision for warranty (\$32,000 + \$60,000 - \$31,600)..... \$60,400

31 December 20x7

Provision for warranty (\$60,400 - \$42,000) \$18,400

Requirement 4

At the end of 20X7, the company obligations for Line B warranty work are as follows:

20X5 - some year 3 warranty obligation for goods sold in (later) 20X5

20X6 - some year 2 warranty obligation and all the year 3 warranty obligation

Assignment 12-15

Requirement 1

No, Bay Lake Mining Ltd does not have a no-interest loan. The substance of the transaction is that part of the amount they pay in three years' time is interest, and part is principal. The value of the equipment is overstated at \$425,000.

Requirement 2

Present value:

$$\$425,000 (P/F, 6\%, 3) = \$425,000 \times (0.83962) \dots\dots\dots \underline{\underline{\$356,839}}$$

Requirement 3

The discount rate should be a borrowing rate for similar amount, term and security.

(If the equipment had a determinable cash fair value (i.e., what amount of cash would have to be paid to buy the equipment outright in 20X6), then this could be used as a discounted amount, and then the interest rate could be imputed.)

Requirement 4

(1) Opening Net Liability	(2) Interest Expense @ Market Rate (1) × 6%	(3) Closing Net Liability (1) + (2)
\$356,839	\$21,410	\$378,249
378,249	22,695	400,944
400,944	24,056	425,000

Requirement 5

1 August 20x6

Equipment.....	356,839	
Discount on note payable	68,161	
Note payable		425,000

31 December 20x6

Interest expense (\$21,410 x 5/12).....	8,921	
Discount on note payable		8,921

31 July 20x7

Interest expense (\$21,410 x 7/12)	12,489	
Discount on note payable		12,489

31 December 20x7

Interest expense (\$22,695 x 5/12).....	9,456	
Discount on note payable		9,456

Requirement 6

31 December 20x6

Note payable	\$425,000	
Less: Discount (\$68,161 - \$8,921)	<u>(59,240)</u>	\$365,760

31 December 20x7

Note payable	\$425,000	
Less: Discount (\$59,240 - \$12,489 - \$9,456)	<u>(37,295)</u>	\$387,705

Assignment 12-16 (WEB)

Requirement 1

Principal \$90,000 (P/F, 8%, 2) = $\$90,000 \times (0.85734)$	\$77,161
Interest \$1,800 (P/A, 8%, 2) = $\$1,800 \times (1.78326)$	<u>3,209</u>
	<u>\$80,370</u>

Requirement 2

(1) Opening Net Liability	(2) Interest Expense 8% Market Rate	(3) Interest Paid	(4) Discount Amortization (2) – (3)	(5) Closing Net Liability (1) + (4)
\$80,370	\$6,430	\$1,800	\$4,630	\$85,000
\$85,000	6,800	1,800	5,000	90,000

Requirement 3

1 September 20x7

Inventory	80,370	
Discount on note payable	9,630	
Note payable		90,000

31 December 20x7

Interest expense ($\$6,430 \times 4/12$)	2,143	
Discount on note payable ($\$4,630 \times 4/12$)		1,543
Interest payable ($\$1,800 \times 4/12$)		600

31 August 20x8

Interest expense ($\$6,430 \times 8/12$)	4,287	
Interest payable	600	
Discount on note payable ($\$4,630 \times 8/12$)		3,087
Cash		1,800

31 December 20x8

Interest expense ($\$6,800 \times 4/12$)	2,267	
Discount on note payable ($\$5,000 \times 4/12$)		1,667
Interest payable ($\$1,800 \times 4/12$)		600

31 August 20x9

Interest expense ($\$6,800 \times 8/12$)	4,533	
Interest payable	600	
Discount on note payable ($\$5,000 \times 8/12$)		3,334
Cash		1,800
Note payable	90,000	
Cash		90,000

Assignment 12-17

Requirement 1

Principal \$1,600,000 (P/F, 6%, 3) = $\$1,600,000 \times (0.83962)$	\$1,343,392
Interest \$32,000 (P/A, 6%, 3) = $\$32,000 \times (2.67301)$	<u>85,536</u>
	\$1,428,928

Requirement 2

1 January 20x9		
Cash	1,428,928	
Discount on notes payable	171,072	
Notes payable		1,600,000
31 December 20x9		
Interest expense ($\$1,428,928 \times .06$)	85,736	
Discount on notes payable		53,736
Cash		32,000
31 December 20x10		
Interest expense ($\$1,428,928 + \$53,736 = \$1,482,664 \times .06$)	88,960	
Discount on notes payable		56,960
Cash		32,000
31 December 20x11		
Interest expense ($\$1,482,664 + \$56,960 = \$1,539,624 \times .06$)	92,376	
Discount on notes payable		60,376
Cash		32,000
(rounding in 20x9 and 20x10 causes \$1 difference in 20x11 rounded down)		
Notes payable	1,600,000	
Cash		1,600,000

Assignment 12-18

Requirement 1

Discounting is required to reflect the substance of the transaction. Because the time period is longer than one year and there is no stated interest rate, the eventual payment is partially principal and partly interest. The two elements must be separately recognized.

Requirement 2

Present value \$500,000 (P/F, 7%, 2) = $\$500,000 \times (0.87344)$ \$436,720

Requirement 3

The discount rate should be a borrowing rate for similar amount, term and security.

Requirement 4

(1) Opening Net Liability	(2) Interest Expense @ Market Rate (1) $\times$ 7%	(3) Closing Net Liability (1) + (2)
\$436,720	\$30,570	\$467,290
467,290	32,710	500,000

Requirement 5

30 September 20x6

Loss on legal issue (expense, etc.).....	436,720	
Provision for legal loss		436,720

31 December 20x6

Interest expense (\$30,570 x 3/12).....	7,643	
Provision for legal loss		7,643

30 September 20x7

Interest expense (\$30,570 x 9/12).....	22,927	
Provision for legal loss		22,927

31 December 20x7

Interest expense (\$32,710 x 3/12).....	8,178	
Provision for legal loss		8,178

30 September 20x8

Interest expense (\$32,710 x 9/12).....	24,532	
Provision for legal loss		24,532

Provision for legal loss	500,000	
Cash		500,000

Requirement 6

31 December 20x6

Provision for legal loss (\$436,720 + \$7,643)	<u>\$444,363</u>
--	------------------

31 December 20x7

Provision for legal loss (\$444,363 + \$22,927 + \$8,178)	<u>\$475,468</u>
---	------------------

Requirement 7

The provision would not be discounted if there was significant uncertainty about amounts or timing. It would be recorded at its undiscounted amount.

Assignment 12-19

Requirement 1

Present value \$2,700,000 (P/F, 8%, 5) = $\$2,700,000 \times (0.68058)$ \$1,837,566

Requirement 2

(1) Opening Net Liability	(2) Interest Expense @ Market Rate (1) × 8%	(3) Closing Net Liability (1) + (2)
\$1,837,566	\$147,005	\$1,984,571
1,984,571	158,766	2,143,337
2,143,337	171,467	2,314,804
2,314,804	185,184	2,499,988
2,499,988	200,012 *	2,700,000

* Adjusted by \$12 to balance

Requirement 3

Revised present value \$3,400,000 (P/F, 8%, 3) = $\$3,400,000 \times (0.79383)$\$2,699,022

Interest expense, 20x6 (line 2 of table above)\$ 158,766

Adjustment to asset and obligation (\$2,699,022 less \$2,143,337 (Table, above))..\$ 555,685

Table

(1) Opening Net Liability	(2) Interest Expense @ Market Rate (1) × 8%	(3) Closing Net Liability (1) + (2)
\$2,699,022	\$215,922	\$2,914,944
2,914,944	233,196	3,148,140
3,148,140	251,860*	3,400,000

* Adjusted by \$9 to balance

Requirement 4

Revised present value \$2,900,000 (P/F, 7%, 1) = $\$2,900,000 \times (0.93458)$\$2,710,282

Interest expense, 20x8 (line 2 of table above)\$ 233,196

Adjustment to asset and obligation (\$2,710,282 less \$3,148,140 (Table, above))..\$ (437,858)

Requirement 5

Balance in decommissioning obligation, 31 December:

20X5	<u>\$1,984,571</u>
20X6	<u>\$2,699,022</u>
20X7	<u>\$2,914,944</u>
20X8	<u>\$2,710,282</u>

Assignment 12-20

Requirement 1

January 20x2

Mine site 1	408,150	
Decommissioning obligation, mine site 1		408,150
\$500,000 (P/F, 7%, 3)		

30 September 20x2

Mine site 2	855,588	
Decommissioning obligation, mine site 2		855,588
\$1,200,000 (P/F, 7%, 5)		

31 December 20x2

Interest expense (\$408,150 x 7%)	28,570	
Decommissioning obligation, mine site 1		28,570
Balance: \$408,150 + \$28,570 = \$436,720		
Interest expense (\$855,588 x 7% x 3/12)	14,973	
Decommissioning obligation, mine site 2		14,973

30 September 20x3

Interest expense (\$855,588 x 7% x 9/12)	44,918	
Decommissioning obligation, mine site 2		44,918
Balance: \$855,588 + \$14,973 + \$44,918 = \$915,479		

31 December 20x3

Interest expense (\$436,720 x 7%)	30,570	
Decommissioning obligation, mine site 1		30,570
Balance: \$436,720 + \$30,570 = \$467,290		

Mine site 1	100,446	
Decommissioning obligation, mine site 1		100,446
\$500,000 (1.3) = \$650,000(P/F, 7%, 2) = \$567,736 versus \$467,290		

Interest expense (\$915,479 x 7% x 3/12)	16,021	
Decommissioning obligation, mine site 2		16,021

30 September 20x4

Interest expense (\$915,479 x 7% x 9/12)	48,063	
Decommissioning obligation, mine site 2		48,063
Balance: \$915,479 + \$16,021 + \$48,063 = \$979,563		

Decommissioning obligation, mine site 2.....	193,467	
--	---------	--

Mine site 2	193,467
\$900,000 (P/F, 7%, 2) = \$786,096 versus \$979,563	

31 December 20x4

Interest expense (\$567,736 x 7%)	39,742	
Decommissioning obligation, mine site 1		39,742
Balance: \$567,736 + \$39,742 = \$607,478		

Interest expense (\$786,096 x 7% x 3/12)	13,757	
Decommissioning obligation, mine site 2		13,757

Requirement 2

31 December 20x2

Decommissioning obligation (\$436,720 + \$855,588 + \$14,973).\$1,307,281

31 December 20x3

Decommissioning obligation (\$567,736 + \$915,479 + \$ 16,021).\$1,499,236

31 December 20x4

Decommissioning obligation (\$607,478 + \$786,096 + \$13,757)..\$1,407,331

Assignment 12-21

Requirement 1

	Classification
Trade accounts payable	Current liability*
Dividends payable	Current liability*
Provision for restructuring	Current liability; 20X6 payment
Provision for coupon refunds	Current liability*
Decommissioning obligation	Long-term liability; 20X9 payment
Note payable, 8%	Current liability; refinancing negotiations not complete. Refinancing must be completed by year end to be classified as non current.
Note payable, net, 6%	Long-term**

*Most logical assumption is 20X6 payment

** Multi-year note payable issued in 20X5; not yet current.

Requirement 2

SFP items:

Classification	Item	Amount
Operating	Increase in accounts payable	\$ 283,300
Financing	Paid dividends	(90,000)
Operating	Add back: non-cash restructuring	260,000
Operating	Add back: increase in coupon liability	35,000
Operating	Add back: non-cash interest expense	6,000
Financing	Borrowed under note payable	400,000
Operating	Add back: non-cash interest expense	4,000

Note: the non-cash \$89,000 acquisition of equipment would be included in the disclosure notes.

Assignment 12-22

SFP items:

Classification	Item	Amount
Operating	Decrease in accounts payable	\$ (193,300)
Financing	Paid dividends*	(115,000)
Operating	Add back: non-cash litigation expense	160,000
Operating	Add back: non-cash interest expense	6,700
Financing	Repaid note payable	(200,000)
Operating	Add back: non-cash interest expense	4,400

*(25,000 balance in 20X1 + 100,000 declared – 10,000 closing balance)

Assignment 12-23 ASPE

Requirement 1

Under IFRS, the loan would be short-term. Classification is based on the legal status on the balance sheet date, and refinancing agreement is not complete at that point.

Requirement 2

Under IFRS, the \$200,000 donation commitment would be recorded as a provision, because there has been a public announcement which is being relied upon. This is a constructive liability.

Requirement 3

Under ASPE, the loan would be long-term. Classification is based on the legal status when the statements are finalized, and the refinancing agreement was completed in January before the financial statements were released.

The \$200,000 commitment would not be recorded as a liability under ASPE, since it is a constructive obligation, not a legal liability. Constructive obligations are not recorded under ASPE.

Assignment 12-24 ASPE (WEB)

Requirement 1

Present value (unchanged from 12-16)

Principal \$90,000 (P/F, 8%, 2) = $\$90,000 \times (0.85734)$ \$77,161
Interest \$1,800 (P/A, 8%, 2) = $\$1,800 \times (1.78326)$ 3,209
\$80,370

Discount: (\$90,000 - \$80,370) = \$9,630

Allocated evenly over two years = \$4,815 per year

Table:

(1) Opening Net Liability	(2) Interest Expense	(3) Interest Paid	(4) Discount Amortization	(5) Closing Net Liability (1) + (4)
\$80,370	\$6,615	\$1,800	\$4,815	\$85,185
\$85,185	6,615	1,800	4,815	90,000

Entries:

1 September 20x7

Inventory 80,370
Discount on note payable 9,630
Note payable 90,000

31 December 20x7

Interest expense (\$6,615 x 4/12) 2,205
Discount on note payable (\$4,815 x 4/12) 1,605
Interest payable (\$1,800 x 4/12) 600

31 August 20x8

Interest expense (\$6,615 x 8/12) 4,410
Interest payable 600
Discount on note payable (\$4,815 x 8/12) 3,210
Cash 1,800

31 December 20x8

Interest expense (\$6,615 x 4/12).....	2,205	
Discount on note payable (\$4,815 x 4/12).....		1,605
Interest payable (\$1,800 x 4/12).....		600

31 August 20x9

Interest expense (\$6,615 x 8/12)	4,410	
Interest payable.....	600	
Discount on note payable (\$4,815 x 8/12).....		3,210
Cash		1,800
Note payable	90,000	
Cash		90,000

Requirement 2

The effective interest method is the more accurate measure of interest expense, because it provides a constant yield on the opening liability balance. ASPE allows straight-line amortization because it is simple, and the restricted user group is felt to be adequately served by the policy.

Assignment 12-25 ASPE

Requirement 1

Present value (unchanged from 12-17)

Principal \$1,600,000 (P/F, 6%, 3) = $\$1,600,000 \times (0.83962)$	\$1,343,392
Interest \$32,000 (P/A, 6%, 3) = $\$32,000 \times (2.67301)$	<u>85,536</u>
	\$1,428,928

Entries:

1 January 20x9		
Cash	1,428,928	
Discount on notes payable	171,072	
Notes payable		1,600,000
31 December 20x9		
Interest expense	89,024	
Discount on notes payable (\$171,072 / 3)		57,024
Cash		32,000
31 December 20x10		
Interest expense	89,024	
Discount on notes payable (\$171,072 / 3)		57,024
Cash		32,000
31 December 20x11		
Interest expense	89,024	
Discount on notes payable (\$171,072 / 3)		57,024
Cash		32,000
Notes payable	1,600,000	
Cash		1,600,000

Requirement 2

The effective interest method is the more accurate measure of interest expense, because it provides a constant yield on the opening liability balance. ASPE allows straight-line amortization because it is simple, and the restricted user group is felt to be adequately served by the policy.

CHAPTER 12

LIABILITIES

Learning Objectives

After you have studied this chapter, you should:

LO-1	Define the meaning of a liability and distinguish between financial, non-financial liabilities and constructive obligations.
LO-2	Classify financial liabilities and explain the recognition and measurement requirements initially and in subsequent reporting periods.
LO-3	Account for common financial liabilities.
LO-4	Explain how provisions are measured.
LO-5	Illustrate various examples of provisions and explain issues related to timing of recognition.
LO-6	Explain the impact of discounting liabilities.
LO-7	Demonstrate how liabilities are presented and disclosed in the statements
LO-8	Compare and contrast the reporting and measurement of liabilities under ASPE and IFRS

1. WHAT IS A LIABILITY? LIABILITY DEFINITION

The liabilities of a business are its obligations (debts). According to the conceptual framework, it is defined as a *present obligation arising from past events*, the settlement of which is expected to result in an *outflow* of economic benefits. Settlement could be through *future transfer or use of assets, provision of services, or other yielding of economic benefits*.

The characteristics of a liability are:

- an expected *future* sacrifice of assets or services,
- constituting a *present* obligation,
- the result of a *past* transaction or event.

There must be a past transaction that is an **obligating event**, which is an event that creates an obligation where there is no other realistic alternative but to settle the obligation.

Constructive Obligations

A constructive obligation is a liability because there is a pattern of past practice or established policy, unlike a legal obligation that is a liability arising from a contract or legislation. A constructive obligation can exist because if a company makes a public statement that it will accept certain responsibilities, the statement creates a valid expectation that the company will honour those responsibilities. Therefore a liability can be created when a company reacts to moral or ethical factors.

Categories of Liabilities

There are two basic types of liabilities, financial and non-financial.

Financial liabilities are financial instruments where a financial liability is a contract that gives rise to a financial liability of one party and a financial asset of another party. That is, one party has an accounts payable and the other party has an accounts receivable with the two transactions mirroring each other.

Non-financial liabilities are liabilities that do not meet the definition of a financial liability. Deferred revenues, or costs expected to arise in the future related to current periods are the common examples of non-financial liabilities. Decommissioning obligations such as the required repair of an asset after use are an example of a non-financial liability required to be recognized by the accounting standards.

Provisions, recorded only under IFRS standards, are liabilities of uncertain timing or measurement such as warranties included with the sale of goods or services.

2. CATEGORIES OF FINANCIAL LIABILITIES

Financial liabilities fall into two categories:

- a. “Other” financial liabilities – includes most of the financial liabilities which are initially valued at fair value of the consideration received plus transaction costs and then are carried at this value over their lives. Examples are: bank indebtedness, trade and other payables, loans payable and long-term debt.
- b. Fair value through profit or loss (FVTPL) –mostly for liabilities that will be sold in the short term - recorded at fair value initially and at subsequent valuations with gains and losses recorded to earnings.

Discounting – liabilities of all categories must be valued at the present value of cash flows, where the time value of money is material. The discount rate will reflect the risk-adjusted market rate.

3. COMMON FINANCIAL LIABILITIES

The financial liabilities discussed in this section are all classified as *other financial liabilities*. These financial liabilities are initially measured at fair value of the consideration received, plus transaction costs, and then carried at this value, cost or amortized cost, over their lives.

Accounts Payable (also known as trade accounts payable)

Accounts payable are obligations to suppliers arising from ongoing operations, which includes purchases of materials, supplies and services. Current payables, such as income tax payable and the current portion of long-term debt should be reported separate from accounts payable as they are not trade payables.

Notes Payable

Notes payable result from borrowing from a lender or supplier. They are a written promise to pay a specified amount at a specified future date. Notes payable can be either interest-bearing or non-interest-bearing. If they are short term they are recorded at the stated value. If the note is more than one year and the stated interest rate is not the same as the market interest rate, then present value is calculated to determine the value at which the note payable is recorded.

Loan Guarantees

A loan guarantee requires the guarantor to pay the loan if the borrower defaults. The financial instrument rules require these guarantees to be recorded at their fair value with the fair value considered against the probability of payout.. *Loan guarantees would not be recorded if there was a zero percent chance of payout.*

Cash Dividends Payable

Declared dividends are reported as a liability between the date of declaration and payment because declaration results in an enforceable contract. Undeclared dividends in arrears for preferred shares are not recorded as a liability as the obligation can be avoided.

Monetary Accrued Liabilities

Monetary accrued liabilities are recorded in the accounts by making adjusting entries at the end of the accounting period and include wages and benefits earned by employees, interest earned by creditors but not yet paid, and the costs of goods and services received but not yet invoiced by the supplier.

Advances and Returnable Deposits

These liabilities are reported as current or long-term, depending on the time involved between date of deposit and expected termination of the relationship. If they are interest bearing, accrual of interest expense is required to increase the liability.

Taxes

Current liabilities are recorded for collection of certain taxes from customers and employees, such as sales tax, payroll taxes (income tax withheld from employees, CPP, EI, and Insurance premiums) and property taxes. Monthly property taxes require estimates as they are based on assessed value of the property which is set by the taxing authority partway through the fiscal year.

Conditional Payments

Some liabilities are established on the basis of a firm's periodic income. They are either legal liabilities or constructive liabilities, but as their amount cannot be firmly established until year-end, estimates are required for quarterly or monthly statements.

Examples of conditional payments include income tax payable and bonuses based on earnings.

4. FOREIGN CURRENCY PAYABLES

If a company has accounts or notes payable in foreign currencies, they must be restated to Canadian dollars at the year-end currency exchange rate. Any gains or losses that arise as a result of the exchange are offset or net over the period and recorded in earnings (through profit and loss).

5. NON-FINANCIAL LIABILITIES: PROVISIONS

Provisions are the major category of non-financial liabilities. **Provisions** can be caused by both legal and constructive obligations and are uncertain in timing or amount.

If they are *probable* ("more likely than not"), they are recognized as a liability called a provision. If *not probable*, they are a contingency and not recognized but the information about contingencies is included in the disclosure notes.

Measurement of a Provision

When a liability is characterized by a degree of uncertainty, the uncertainty often is centred on the amount involved. A provision is recorded at the best estimate. The **most likely outcome** (highest probability alternative) should be considered as a measurement option.

If there is a range of outcomes, the **expected value** is used (the sum of outcomes multiplied by their probability distribution).

A summary of measurement estimates is included in the textbook.

Re-estimate Annually

If a provision is estimated, the amounts are re-estimated at each reporting date.

Discounting

Liabilities, including provisions, must be discounted where the time value of money is material, using current market interest rates, and reflecting the risk level. An **exception** is if the amount and timing of cash flows is highly uncertain, *and discounting cannot be accomplished meaningfully*, then amounts are recorded on an undiscounted basis.

Contingency

In *rare* cases, it may not be possible to estimate a provision and thus the provision is reclassified as a contingency and disclosed only.

Contingencies exist when:

- The obligation is possible but not probable
- There is a present obligation but no economic resources are attached
- There is a present obligation but *rare circumstances* dictate that an estimate cannot be established.

Contingent Assets

When the contingency involves a possible future inflow rather than outflow, note that an asset is not recorded until a company is *virtually certain* of the related benefits to be obtained. At that point it is an asset not a contingent asset. *Virtual certainty* is a much higher degree of certainty than just *certainty*. Contingent assets are usually disclosed.

Prohibited Practices

It is not permitted to use a provision set up for one purpose to offset expenditures for another purpose.

6. EXAMPLES OF PROVISIONS

Lawsuits

Based on the certainty of payout, an unsettled court case may result in a provision (probable payout) or a contingency (not probable).

Recorded provisions for lawsuits are often rare as defence teams are not often willing to admit their clients' likelihood in losing the case. Settlements, particularly if an announcement is made that they are being sought, may result in a recorded constructive obligation.

See summary chart in the textbook.

Executory Contracts and Onerous Contracts

Companies can have contracts that require them to pay another party in the future, after the other party has performed some service or obligation. These are **executory contracts** as they are not *liabilities* until they have been executed by one party or the other.

If the unavoidable costs of meeting the contract exceed the economic benefits under the contract, it is classified as an **onerous contract**. A *provision* must be recorded with respect to the onerous contract, for the lesser of the costs to fulfill the contract and the costs from cancellation.

An example is provided in the textbook.

Restructuring

A *provision for restructuring* is an estimate of the money that will be paid out in connection with a future restructuring program. A liability will be recorded if the entity has a detailed formal plan for the restructuring *and* has started to implement the plan.

Warranty

For warranties that provide assurance that the product will meet agreed-upon specifications and the warranty is not sold separately, there is no distinct service provided. The *cost deferral method* is used for these warranties. Warranties may also be in force as a *constructive obligation* based on a company's announced intentions. For example, in the case of a hazardous recall, the company may offer a refund to preserve its reputation.

An example of the cost deferral method for warranties is in the textbook.

Restoration and Environmental Obligations

If there are legislative remediation requirements, the cost must be estimated and accrued. If these are *pending*, the provision is accrued only if there is **virtual certainty** that the legislation will be enacted.

Sales Returns and Refunds

A company may allow merchandise to be returned for a cash refund or a credit on account. This may be a legal obligation, with stated return policies, or a constructive obligation based on past practice. If returns are predictable the obligation must be estimated and recorded at the time of the sale.

Coupons and Gift Cards

Coupons are often used as sales incentives. A provision for outstanding coupons may be recorded, but only in limited circumstances. The key to a coupon offer is whether economic benefits are transferred. A reliable measurement for the provision includes estimating the take-up rate for the coupons; the **breakage** (unused) rate can be estimated based on past history or other valid evidence.

An example is provided in the textbook.

Loyalty Programs

A common sales incentive is a customer loyalty program where the customer is awarded loyalty points. A loyalty program is an example of a sales contract involving multiple deliverables, as we saw in Chapter 6. No separate expense is recognized—the *loyalty program is an allocation of original revenue*. An unearned revenue account, or provision for rewards, is created, measured according to the value of the awards to the customer, not the cost of the goods to the company. The provision is reduced when the points are redeemed.

Repairs and Maintenance

These costs are expensed as incurred, not accrued which could smooth out earnings. They are not accrued as there has been no obligating event.

Self-Insurance

A provision for estimated losses must be established for *events (fire and theft) taking place prior to the reporting date*, but also for *loss events that have happened during the year but are not yet known*, such as undiscovered damage. Such damage might be discovered after the year-end, and it must be accrued. This allows for a reasonable delay based on known events. *A provision must be justified based on a loss event.* If there is no such event, no accrual can be made, even if the odds suggest that a future year will have heavier incidence of loss events.

Compensated-Absence Liabilities

Any expense due to employees compensated absences (paid vacations, holidays and medical leave) must be accrued in the year in which it is earned.

A **Summary** chart of these possible provisions and the recording considerations is provided in the textbook.

7. The Impact of Discounting

Liabilities must be discounted where the time value of money is material. Common examples are low-interest loans.

The **nominal interest rate** is the rate stated for a liability. The **effective interest rate**, or yield, is the market interest rate. The effective interest rate is used to calculate the present value of the debt (i.e. discount the liability).

If the liability pays the effective market interest rate, the discounted amount is equal to the maturity amount and there is no need to discount.

WATCH!

To calculate the present value of the face value, use the appropriate table at the end of the textbook (Present Value of 1:P/F). Locate the appropriate “effective interest” column then follow it down to “number of periods”. This will give you the factor you multiply the face value by.

WATCH!

To calculate the present value of periodic interest payments, use the appropriate table at the end of the textbook (Present Value of an Ordinary Annuity: P/A, or Present Value of an Annuity Due: P/AD). Locate the “effective interest” column, then follow it down to the “number of periods”. This will give you the factor you multiply the periodic interest payments by.

An example is provided in the textbook..

Also, an illustration follows:

Illustration

A company purchased inventory and agreed to pay the vendor sold \$12,000 in 2-years, plus annual accrued interest of 4% . The market interest rate for similar term and security is 10%.

Required

Compute the present value of a note.

Present value = PV of maturity amount + PV of periodic interest payments.

Maturity amount = \$12,000

Periodic interest payments = $\$12,000 \times 4\% = \480

Effective interest rate = 10%

Periods = 2

$0, P/F, 10\%, n = 2) + (\$480, P/A, 10\%, n = 2)$

+ \$833

)

The note is at a *discount* = $(\$12,000 - \$10,750) = \$1,250$.

WATCH!

Premium or Discount on notes is the difference between the maturity amount and the present value of note.

Measurement of Interest Expense

Premium or Discount Recognition

If the nominal interest rate is different from the interest rate at the time the note is issued, the loan is issued above or below par, or at a premium or discount

When nominal and effective interest rates differ, this results in the debt being issued at discount or premium (compared to face value of debt). The premium or discount is amortized to income as an adjustment to the interest expense over the life of the debt using the *Effective interest method*. A constant effective rate of interest is maintained.

Several examples of present value calculations are provided in the textbook.

Remeasurement of an obligation

When an obligation will occur in the future it must be estimated. The estimation may change over time under the following conditions:

- A change in the amount or timing of the expected future obligation cash flows; or
- A change in the discount rate to reflect current market rates.

In these cases an adjustment to both the obligation and the related asset is required.

An example of the decommissioning liability with remeasurement is provided in the textbook.

8. CLASSIFYING LIABILITIES

Most companies segregate their liabilities between current and long-term. A **current liability** is one that is due or payable *within the next operating cycle or in the next fiscal year, whichever period is longer*. A **long-term liability** has a due date past this time window.

In North America, current liabilities normally are listed by descending order based on the strength of the creditor's claims. In other countries, this may be reversed.

Classification of Notes Payable

Notes payable may be long-term or current liabilities. Classification depends on the terms of the loan. They are current if they are loans due on demand or the loans are due within the next year. Long term debt that is in violation of debt covenants and can be called by the lender at any time is classified a current liability.

If there is a contractual arrangement at year-end to support restructuring a debt from current to long-term, then reclassification is permitted. Note disclosure may be appropriate.

Classification of Provisions

Provisions are classified as current or long term based on the timing of expected future cash flows. However, classification must be first based on the legal terms of the provision.

9. DISCLOSURE AND STATEMENT OF CASH FLOWS

Disclosures for Financial Liabilities

Extensive disclosure is required, including:

- carrying amounts of the debt,
- the fair value,
- components of each financial statement category
- legal terms of the liability such as maturity date and interest rate,
- any defaults or breaches,
- interest expense,
- any exposures to risk (credit risk, liquidity risk and market risk) and
- accounting policy information.

Disclosures for Provisions and Contingencies

Provisions must be shown in a separate category from other payables due to their nature of uncertainty and application of judgment in recording and measurement.

Companies must disclose a reconciliation, or a *continuity schedule* (opening balance to closing balance), that explains the movement in each class of provisions. Unrecorded amounts, or contingencies, must be described completely.

Statement of Cash Flows

- Changes in liabilities and provisions that are related to earnings are adjusted in operating activities.
- Cash changes in borrowings, both new loans and repayments, are reported in financing activities on the gross basis (cash proceeds and repayments presented separately).
- Non-cash changes in borrowings, such as notes payable issued for assets, are non-cash transactions and are excluded from the SCF. Non-cash transactions are described in disclosure notes.
- Interest that is represented by unwinding a discount is a non-cash expense and is added back in operating activities under both indirect and direct methods.
- Cash paid for interest can be reported either in operating activities or financing activities as long as the presentation is consistent, and excludes any portion of interest caused by unwinding a discount.

10. LOOKING AHEAD

As part of a review of the conceptual framework, the International Accounting Standards Board (IASB) is reconsidering the definition of financial elements, including the definition of a liability. The definition under consideration is that a liability is “a present obligation for which the entity is the obligor.”

Accounting Standards for Private Enterprises

Accounting standards for private enterprise (ASPE) is similar to International Financial Reporting Standards (IFRS) for financial liabilities.

However, ASPE contain no comprehensive standards for non-financial liabilities. Liabilities are recognized when they meet the recognition criteria (definition, measureable and if future sacrifices are probable). This results in largely a consistent practice with IFRS.

The term “provision” is not used under ASPE which changes the recording and disclosure related to contingencies as well.

ASPE defines *contingent liabilities* as those that result in the outflow of resources only if another event happens. *A contingent liability is either recorded or disclosed.* Under IFRS, the liability is termed a contingency only if it is *disclosed and not recorded*. It is a *provision* if it is recorded. This is a different use of the word *contingency*. The grid used under ASPE is provided in the textbook.

Constructive obligations are defined as they are under IFRS and ASPE contains an additional definition of an equitable obligation which is an obligation recorded based on ethical or moral consideration.

Under ASPE, use of the effective-interest method is not required. The **straight-line method** can be used to amortize the discount and measure interest expense.

Classification and disclosure

A company may wish to reclassify liabilities from current to long term to improve the reported working capital position. Under ASPE, classification of such a loan as long term would be permitted if renegotiation resulted in agreement by the *date the financial statements are released*.

PowerPoint Slides

The PowerPoint slides can be used in part or in their entirety in computer adapted classrooms.