

Solutions Manual for Intermediate Accounting Volume 2 CDN 13th Kieso

CHAPTER 13

NON-FINANCIAL AND CURRENT LIABILITIES

Learning Objectives

1. Understand the importance of non-financial and current liabilities from a business perspective.
2. Define liabilities, distinguish financial liabilities from other liabilities, and identify how they are measured.
3. Define current liabilities and identify and account for common types of current liabilities.
4. Identify and account for the major types of employee-related liabilities.
5. Explain the recognition, measurement, and disclosure requirements for decommissioning and restoration obligations.
6. Explain the issues and account for product guarantees, other customer program obligations, and unearned revenue.
7. Explain and account for contingencies and uncertain commitments, and identify the accounting and reporting requirements for guarantees and commitments.
8. Indicate how non-financial and current liabilities are presented and analyzed.
9. Identify differences in accounting between IFRS and ASPE, and what changes are expected in the near future.

Summary of Questions by Learning Objectives and Bloom's Taxonomy

Item	LO	BT	Item	LO	BT	Item	LO	BT	Item	LO	BT	Item	LO	BT
Brief Exercises														
1.	1	C	8.	3	AP	15.	4	AP	22.	5,9	AP	29.	6,9	AP
2.	3	AP	9.	3	AP	16.	4	AP	23.	6	AP	30.	7,9	AP
3.	3	AP	10.	3	AP	17.	4	AP	24.	6	AP	31.	7	AP
4.	3	AP	11.	3	AP	18.	4	AP	25.	6	AP	32.	8	AN
5.	3	AP	12.	3	AP	19.	4	AP	26.	6	AP	33.	8	AN
6.	2,3	AP	13.	3,9	C	20.	2,5	AP	27.	6	AP	34.	8	AN
7.	3	AP	14.	3,9	C	21.	5,9	AP	28.	6	AP	34.	8	AN
Exercises														
1.	2,9	C	8.	3,8,9	AP	15.	5,9	AP	22.	6,9	AP	29.	7,9	C
2.	3	AP	9.	3,8,9	AP	16.	5,9	AP	23.	6,9	AP	30.	8	AN
3.	3	AP	10.	4	AP	17.	6	AP	24.	6,9	AP	31.	8	AN
4.	3,9	AP	11.	4	AP	18.	3,4,6	AP	25.	6	AP	32.	8	AN
5.	3	AP	12.	4	AP	19.	6,9	AP	26.	6,9	AP			
6.	3,9	AP	13.	4	AP	20.	6,8,9	AP	27.	6	AP			
7.	3,4,6,7,9	C	14.	4,9	AN	21.	6,9	AP	28.	6	AP			
Problems														
1.	2,3,5,9	AP	5.	4	AP	9.	6,7,9	AP	13.	6,9	AP	17.	7,8,9	AP
2.	2,3	AP	6.	4	AP	10.	6,7,10	AP	14.	6,8,9	AP			
3.	2,3,4,6,9	AP	7.	4,9	AN	11.	6,8	AP	15.	6,9	AP			
4.	2,3,5,6	AP	8.	5,7	AP	12.	6,7,9	AP	16.	7,8	AP			
Cases														
1.	6,9	AN	2.			3.								
Integrated Cases														
1.	7	AN	2.	7	AP	3.	7	AP						
Research and Analysis														
1.	5,6,7	AP	3.	6,7,8	AP	5.	6,7	AP	6.	4,8	AP	7.	2,6,7	AN
2.	3,7,8	AP	4.	3,5,6,8	AP									

Legend: The following abbreviations will appear throughout the solutions manual file.

LO	Learning objective	
BT	Bloom's Taxonomy	
	K	Knowledge
	C	Comprehension
	AP	Application
	AN	Analysis
	S	Synthesis
	E	Evaluation
Difficulty:	Level of difficulty	
	S	Simple
	M	Moderate
	C	Complex
Time:	Estimated time to complete in minutes	
AACSB	Association to Advance Collegiate Schools of Business	
	Communication	Communication
	Ethics	Ethics
	Analytic	Analytic
	Tech.	Technology
	Diversity	Diversity
	Reflec. Thinking	Reflective Thinking
CPA CM	CPA Canada Competency Map	
	Ethics	Professional and Ethical Behaviour
	PS and DM	Problem-Solving and Decision-Making
	Comm.	Communication
	Self-Mgt.	Self-Management
	Team & Lead	Teamwork and Leadership
	Reporting	Financial Reporting
	Stat. & Gov.	Strategy and Governance
	Mgt. Accounting	Management Accounting
	Audit	Audit and Assurance
	Finance	Finance
	Tax	Taxation
	DAIS	Data Analytics and Information Systems

ASSIGNMENT CLASSIFICATION TABLE

Topics	Brief Exercises	Exercises	Problems
1& 2. Concept of liabilities; definition, measurement, and classification.	1, 6, 20	1	1, 2, 3, 4, 7
3. Current liabilities including accounts and notes payable, dividends payable, sales and income tax payable, refund liabilities, and short-term obligations expected to be refinanced.	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	2, 3, 4, 5, 6, 7, 8, 9, 18	1, 2, 3, 4
4. Employee-related liabilities.	15, 16, 17, 18, 19	7, 9, 10, 11, 12, 13, 14, 18	3, 5, 6, 7
5. Asset retirement obligations.	20, 21, 22	15, 16	1, 4, 8
6. Unearned revenue.	23, 24	7, 17, 18	8, 9, 16
6. Product guarantees, warranties, and other customer programs.	25, 26, 27, 28, 29	7, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28	3, 4, 10, 11, 12, 13, 14, 15
7. Contingencies, guarantees, and uncertain commitments.	30, 31	7, 29	8, 9, 12, 16, 17
8. Presentation and analysis.	32, 33, 34, 35	8, 9, 20, 30, 31, 32	3, 8, 9, 11, 16, 17
9. IFRS and ASPE compared.	13, 14, 21, 22, 29, 30, 31	1, 4, 6, 7, 8, 9, 14, 15, 16, 19, 20, 21, 22, 24, 29	1, 3, 7, 9, 12, 13, 14, 15, 17

ASSIGNMENT CHARACTERISTICS TABLE

Item	Description	Level of Difficulty	Time (minutes)
E13.1	Balance sheet classification of various liabilities	Simple	10-15
E13.2	Accounts and notes payable	Simple	10-15
E13.3	Notes payable and reversing entry	Moderate	15-20
E13.4	Liability for returnable containers	Moderate	15-20
E13.5	Entries for sales taxes	Moderate	25-35
E13.6	Income tax	Moderate	15-20
E13.7	Financial statement impact of liability transactions	Moderate	30-35
E13.8	Refinancing of short-term debt	Moderate	20-25
E13.9	Refinancing of short-term debt	Simple	10-15
E13.10	Payroll tax entries	Moderate	15-20
E13.11	Compensated absences—vacation and sick pay	Moderate	40-45
E13.12	Compensated absences—vacation and sick pay	Moderate	25-30
E13.13	Compensated absences—parental benefits	Moderate	20-25
E13.14	Bonus calculation and income statement preparation	Complex	15-20
E13.15	Asset retirement obligation	Moderate	40-45
E13.16	Asset retirement obligation	Moderate	40-50
E13.17	Unearned revenue	Simple	10-15
E13.18	HST and payroll	Moderate	15-20
E13.19	Warranties—assurance-type and cash basis	Simple	10-15
E13.20	Warranties—assurance-type	Moderate	15-20
E13.21	Warranties—assurance-type and service-type	Moderate	20-25
E13.22	Warranties—assurance-type and service-type	Moderate	25-30
E13.23	Customer loyalty programs	Moderate	15-20
E13.24	Premium entries	Moderate	15-20
E13.25	Premiums	Moderate	20-30
E13.26	Premiums	Simple	10-15
E13.27	Coupons and rebates	Moderate	15-20
E13.28	Customer returns	Simple	10-15
E13.29	Contingencies and commitments	Moderate	20-30
E13.30	Ratio calculations and discussion	Simple	15-20
E13.31	Ratio calculations and analysis	Simple	20-25
E13.32	Ratio calculations and effect of transactions	Moderate	15-25

ASSIGNMENT CHARACTERISTICS TABLE (CONTINUED)

Item	Description	Level of Difficulty	Time (minutes)
P13.1	Current liability entries and adjustments	Simple	40-50
P13.2	Instalment notes	Moderate	40-45
P13.3	Current liabilities: various	Complex	45-55
P13.4	Asset retirement obligation and warranties	Moderate	25-35
P13.5	Payroll tax entries	Moderate	25-35
P13.6	Payroll tax entries	Moderate	35-45
P13.7	Bonus calculation	Moderate	35-40
P13.8	Loss contingencies: entries and essay.	Moderate	45-50
P13.9	Advances, self-insurance, loss contingencies, guarantees, and commitments	Moderate	35-40
P13.10	Assurance-type warranties and cash basis	Simple	25-30
P13.11	Assurance-type and service-type warranties	Moderate	20-30
P13.12	Warranty calculations	Moderate	30-35
P13.13	Premium entries	Moderate	30-45
P13.14	Premium entries and financial statement presentation	Moderate	30-45
P13.15	Warranties and premiums	Simple	35-40
P13.16	Guarantees and contingencies	Complex	35-45
P13.17	Loss contingencies: entries and essays	Moderate	45-50

SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 13.1

- (a) **Working capital is the excess of total current assets over total current liabilities. It represents the liquid buffer that is available to meet the financial demands of the company's operating cycle. Current liabilities place a demand on the company's current assets. Management of the due dates of current liabilities and management of current assets to generate cash on a timely basis are important for effective management of business operations. Effective management of working capital to achieve high liquidity may also contribute to positive cash from operating activities, as seen on the statement of cash flows.**
- (b) **Wellson can improve its management of working capital by focusing on the management of current liabilities as well as current assets. For example, if Wellson has a cash flow shortage, it can take advantage of the full credit period extended by its suppliers. As another example, Wellson may also time the due dates of short-term notes payable to coincide with expected periods of positive cash flow.**

LO 1 BT: C Difficulty: M Time: 10 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.2

07/01	Purchases	60,000	
	 Accounts Payable		60,000
	To record purchase on account		
	Freight in	1,200	
	 Cash		1,200
	To record freight on purchase		
07/03	Accounts Payable	6,000	
	 Purchase Returns and Allowances		6,000
07/10	Accounts Payable	54,000	
	 Cash (\$54,000 X 98%)		52,920
	 Purchase Discounts		1,080

LO 3 BT: AP Difficulty: S Time: 5 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.3

07/01	Inventory	60,000	
	 Accounts Payable		60,000
	To record purchase on account		
	Inventory	1,200	
	 Cash		1,200
	To record freight on purchase		
07/03	Accounts Payable	6,000	
	 Inventory		6,000
07/10	Accounts Payable	54,000	
	 Cash (\$54,000 X 98%)		52,920
	 Inventory		1,080

LO 3 BT: AP Difficulty: S Time: 5 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.4

11/01/23	Cash	40,000	
	Notes Payable		40,000
12/31/23	Interest Expense¹	600	
	Interest Payable		600
	¹(\$40,000 X 9% X 2/12)		
02/01/24	Notes Payable	40,000	
	Interest Payable	600	
	Interest Expense²	300	
	Cash		40,900
	²(\$40,000 X 9% X 1/12)		

LO 3 BT: AP Difficulty: S Time: 5 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.5

01/01/24	Interest Payable	600	
	Interest Expense		600
02/01/24	Notes Payable	40,000	
	Interest Expense¹	900	
	Cash		40,900
	¹(\$40,000 X 9% X 3/12)		

LO 3 BT: AP Difficulty: S Time: 5 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.6**(a)****Using a financial calculator:**

PV	\$ 60,000	Yields .744 % per month or 8.9% per year
I	? %	
N	3	
PMT	0	
FV	\$ (61,350)	
Type	0	

Excel formula =RATE(nper,pmt,pv,fv,type)

The image shows the 'Function Arguments' dialog box for the RATE function in Excel. The dialog box has a title bar with a question mark and a close button. Inside, the function name 'RATE' is displayed. Below it, five arguments are listed with input fields and their corresponding values: Nper (3), Pmt (0), Pv (60000), Fv (-61350), and Type (0). Each input field has a small icon to its right. Below the arguments, the calculated result is shown as '= 0.007444443'. A descriptive text block explains that the function returns the interest rate per period of a loan or investment, with an example of 6%/4 for quarterly payments at 6% APR. It also defines 'Pv' as the present value. At the bottom, the 'Formula result' is shown as '= 0.01'. There are links for 'Help on this function' and buttons for 'OK' and 'Cancel'.

Function Arguments

RATE

Nper 3 = 3

Pmt 0 = 0

Pv 60000 = 60000

Fv -61350 = -61350

Type 0 = 0

= 0.007444443

Returns the interest rate per period of a loan or an investment. For example, use 6%/4 for quarterly payments at 6% APR.

Pv is the present value: the total amount that a series of future payments is worth now.

Formula result = 0.01

[Help on this function](#) **OK** **Cancel**

Result: .0074444

BRIEF EXERCISE 13.6 (Continued)**(b)**

11/01/23	Cash	60,000	
	Notes Payable		60,000
12/31/23	Interest Expense¹	897	
	Notes Payable		897
	¹ $(\$60,000 \times .007444) = \$447$		
	$(\$60,447 \times .007444) = \$450$		
	$(\$447 + \$450) = \$897$		
	(alternately could record $\$1,350 \times 2/3 = \$900$)		
02/01/23	Interest Expense²	453	
	Notes Payable		453
	² $(\$1,350 - \$897)$		
	To accrue interest expense		
	Notes Payable	61,350	
	Cash		61,350
	To record note repayment		

LO 2,3 BT: AP Difficulty: M Time: 15 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.7

(a)	Cash	13,000	
	Sales		8,000
	Refund Liability		5,000
(b)	Refund Liability (\$5,000 x 60%)	3,000	
	Container Sales Revenue		3,000

LO 3 BT: AP Difficulty: S Time: 5 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.8

Accounts Receivable	42,375.00	
Sales Revenue		37,500.00
HST Payable (\$37,500 X 13%)		4,875.00
To record sales on account		
Furniture	2,860.00	
HST Receivable (\$2,860 X 13%)	371.80	
Cash		3,231.80
To record cash purchase of furniture		

LO 3 BT: AP Difficulty: S Time: 5 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.9

Accounts Receivable	37,500.00	
Sales Revenue (\$37,500 ÷ 1.13)		33,185.84
HST Payable (\$37,500 ÷ 1.13 X .13)...		4,314.16
To record sales on account		
Furniture (\$2,860 ÷ 1.13)	2,530.97	
HST Receivable (\$2,860 ÷ 1.13 X .13)	329.03	
Cash		2,860.00
To record cash purchase of furniture		

LO 3 BT: AP Difficulty: S Time: 5 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.10

(a) Purchases.....	29,400	
GST Receivable (\$29,400 X 5%)	1,470	
Accounts Payable		30,870
(b) Accounts Receivable.....	47,250	
Sales Revenue.....		45,000
GST Payable		2,250
(c) GST Payable.....	2,250	
Cash		780
GST Receivable.....		1,470

LO 3 BT: AP Difficulty: S Time: 5 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.11

(a) Income Tax Expense	12,800	
Cash (\$3,200 X 4)		12,800
To record income tax payments		
 Income Tax Expense (\$20,000–\$12,800)	7,200	
Income Tax Payable.....		7,200
To accrue income tax expense		
 (b) At year end, the company would report Income Tax Payable of \$7,200 in current liabilities.		

LO 3 BT: AP Difficulty: S Time: 5 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.12

(a) Income Tax Receivable	2,600	
Income Tax Expense¹		2,600
¹ (\$12,800 – \$10,200)		
 (b) At year end, the company would report Income Tax Receivable of \$2,600 in current assets.		

LO 3 BT: AP Difficulty: S Time: 5 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.13

- (a) Under IFRS, the \$700,000 debt is reclassified as current because the long-term debt agreement is violated and the liability becomes payable on demand. It should be noted that under IFRS, the debt is reclassified as current, even if the lender agrees between the date of the SFP and the date the financial statements are released that it will not demand repayment because of the violation.
- (b) Under ASPE, the \$700,000 debt is reclassified as current unless the creditor waives, in writing, the covenant (agreement) requirements, or the violation has been corrected within the grace period that is usually given in these agreements and it is likely that the company will not violate the covenant requirements within a year from the balance sheet date.

LO 3,9 BT: C Difficulty: M Time: 10 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.14

- (a) Under IFRS, since the debt is due within 12 months from the reporting date, it is classified as a current liability. This classification holds even if long-term refinancing has been completed before the financial statements are released. The only exception for continuing long-term classification is if, at the balance sheet date, the entity expects to refinance it or roll it over under an existing agreement for at least 12 months and the decision is solely at its discretion.
- (b) Under IFRS, the whole \$500,000 of maturing debt would still be classified as a current obligation at December 31, 2023. The international standard has a stringent requirement that the agreement must be firm at the date of the SFP in order to qualify for classification as long-term. (This assumes Burr had not entered into a long-term agreement prior to the SFP date of Dec. 31, 2023.)
- (c) For part (a), under ASPE, the debt would be classified as a long-term liability. If there is irrefutable evidence by the time the financial statements are completed and released that the debt has been or will be converted into a long-term obligation, ASPE allows currently maturing debt to be classified as long-term on the balance sheet. In this case, the debt was refinanced before the financial statements were completed and released.

For part (b), under ASPE, the debt would be classified as a current liability since there is not irrefutable evidence by the time the financial statements were completed that the debt has been or will be converted into a long-term obligation. (This assumes Burr had not entered into a long-term agreement prior to the release of the financial statements of Dec. 31, 2023.) In addition, since repayment occurred before funds were obtained through long-term financing, the repayment used existing current assets.

LO 3,9 BT: C Difficulty: M Time: 15 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.15

Salaries and Wages Expense.....	23,000	
Employee Income Tax Deductions Payable		3,426
CPP Contributions Payable.....		990
EI Premiums Payable.....		420
Cash.....		18,164

LO 4 BT: AP Difficulty: S Time: 5 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.16

(a)		
Payroll Tax Expense	1,578	
EI Premiums Payable (\$420 X 1.4)		588
CPP Contributions Payable.....		990

(b)		
Employee Income Tax Deductions Payable.....	3,426	
CPP Contributions Payable (\$990 X 2)	1,980	
EI Premiums Payable (\$420 + \$588).....	1,008	
Cash.....		6,414

LO 4 BT: AP Difficulty: S Time: 5 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.17

Salaries and Wages Expense¹	30,000	
Vacation Wages Payable		30,000
¹(30 X 1 X \$1,000)		

LO 4 BT: AP Difficulty: S Time: 5 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.18**December 1, 2023:**

Employee Benefit Expense¹	11,952	
 Parental Leave Benefits Payable		11,952
To record expense for parental leave		

¹ Salary for 17 weeks (\$74,000 ÷ 52 X 17)	\$24,192	
Less: employment insurance		
 payments (\$720/week X 17 weeks)	(12,240)	
Employee Benefit Expense	<u>\$11,952</u>	

For each of the 4 weeks in December 2023, Laurin Corporation will pay Ruzbeh Awad a top-up amount and record the payments as follows:

Parental Leave Benefits Payable	703.08	
 Cash.....		703.08
(\$74,000 ÷ 52 weeks) = \$1,423.08;		
\$1,423.08 – \$720.00 = \$703.08		
To record parental leave payment		

LO 4 BT: AP Difficulty: M Time: 10 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.19

12/31/23	Bonus Expense.....	350,000	
	 Bonus Payable.....		350,000
2/15/24	Bonus Payable.....	350,000	
	 Cash		350,000

LO 4 BT: AP Difficulty: S Time: 5 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.20

Drilling Platform.....	500,249	
Asset Retirement Obligation¹		500,249

(a) Using Table A.2: (\$1,000,000 X .50025)

(b) Using a financial calculator:

PV	?	Yields \$ 500,248.97
I	8%	
N	9	
PMT	0	
FV	\$ (1,000,000)	
Type	0	

(c) Using Excel: =PV(rate,nper,pmt,fv,type)

Function Arguments

PV

Rate: .08 = 0.08

Nper: 9 = 9

Pmt: 0 = 0

Fv: -1000000 = -1000000

Type: 0 = 0

= 500248.9671

Returns the present value of an investment: the total amount that a series of future payments is worth now.

Type is a logical value: payment at the beginning of the period = 1; payment at the end of the period = 0 or omitted.

Formula result = 500248.9671

[Help on this function](#)

OK Cancel

Result: \$500,248.97

LO 2,5 BT: AP Difficulty: S Time: 10 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.21**(a) IFRS**

Depreciation Expense ¹	55,583	
Accumulated Depreciation – Drilling Platform.....		55,583
¹ (\$500,249 ÷ 9 years)		
To record depreciation expense		

Interest Expense ²	40,020	
Asset Retirement Obligation		40,020
² (\$500,249 X 8%)		
To record interest expense		

(b) ASPE

Depreciation Expense ³	55,583	
Accumulated Depreciation– Drilling Platform.....		55,583
³ (\$500,249 ÷ 9 years)		
To record depreciation expense		

Accretion Expense ⁴	40,020	
Asset Retirement Obligation		40,020
⁴ (\$500,249 X 8%)		
To record accretion expense		

LO 5,9 BT: AP Difficulty: S Time: 10 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.22**(a) IFRS**

Inventory.....	61,942	
 Asset Retirement Obligation.....		61,942

(b) ASPE

Drilling Platform.....	61,942	
 Asset Retirement Obligation.....		61,942

LO 5,9 BT: AP Difficulty: S Time: 5 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.23

Aug. 1 Cash (12,000 X \$18)	216,000	
 Unearned Revenue		216,000
Dec. 31 Unearned Revenue	90,000	
 Sales Revenue¹.....		90,000
 ¹(\$216,000 X 5/12 = \$90,000)		

LO 6 BT: AP Difficulty: S Time: 5 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.24

(a) Cash	104,500	
 Service Revenue		45,000
 Unearned Revenue.....		59,500

	<u>Cash</u>	<u>Earned</u>	<u>Unearned</u>
200 @ \$100	\$20,000	\$20,000	
100 @ \$95	9,500		\$9,500
300 @ \$250	<u>75,000</u>	<u>25,000</u>	<u>50,000</u>
	<u>\$104,500</u>	<u>\$45,000</u>	<u>\$59,500</u>

- (b) The current portion of the unearned revenue will be \$9,500 plus \$25,000 relating to the three-year plan. The non-current portion will be \$25,000 for the last year of the three-year plan.**

LO 6 BT: AP Difficulty: M Time: 10 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.25

2023	Cash.....	2,500,000	
	Sales Revenue.....		2,500,000
	To record cash sale		
2023	Warranty Expense.....	68,000	
	Materials, Cash, Payables		68,000
	To record warranty expense		
12/31/23	Warranty Expense.....	420,000	
	Warranty Liability.....		420,000

LO 6 BT: AP Difficulty: S Time: 10 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.26

2023	Cash.....	2,500,000	
	Sales Revenue.....		1,900,000
	Unearned Revenue.....		600,000
	To record cash sale		
2023	Warranty Expense.....	68,000	
	Materials, Cash, Payables		68,000
	To record warranty expense		
12/31/23	Unearned Revenue.....	150,000	
	Warranty Revenue¹		150,000
	¹\$600,000 X 25%		
	To record year-end adjustment		

LO 6 BT: AP Difficulty: S Time: 10 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.27

(a)	Cash	1,980,000	
	Unearned Revenue¹		1,980,000
	¹(20,000 X \$99)		
(b)	Warranty Expense	180,000	
	Materials, Cash, Payables.....		180,000
(c)	Unearned Revenue	330,000	
	Warranty Revenue²		330,000
	² [\$1,980,000 X		
	(\$180,000/\$1,080,000³)]		
	³\$180,000 + \$900,000 = \$1,080,000		

LO 6 BT: AP Difficulty: M Time: 10 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.28**a. July 10, 2023**

Accounts Receivable	1,700,000	
Refund Liability (15% X \$1,700,000)		255,000
Sales Revenue		1,445,000
To record sales on account		

Cost of Goods Sold	816,000	
Estimated Inventory Returns ¹	144,000	
Inventory		960,000
¹ (\$960,000 X 15%)		
To record cost of goods sold		

b. October 11, 2023

Refund Liability	255,000	
Cash		248,000
Sales Revenue		7,000
To record returns from customers		

Returned Inventory ¹	140,047	
Cost of Goods Sold ²	3,953	
Estimated Inventory Returns		144,000
To record return of inventory		
¹ (\$960,000 ÷ \$1,700,000) X \$248,000		
² \$144,000 - \$140,047		

LO 6 BT: AP Difficulty: M Time: 15 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.29**(a) IFRS**

Inventory of Premiums ¹	250,000	
Cash		250,000

¹100,000 X \$2.50

To record cash purchase of premiums

Cash	4,000,000	
Sales Revenue		3,600,000
Unearned Revenue ²		400,000

²1,000,000 X \$4.00 X 10%

To record cash sales

Cash ³	80,000	
Premium Expense	120,000	
Inventory of Premiums ⁴		200,000

³ 240,000/3 X \$1.00⁴ 240,000/3 X \$2.50

To record redemption of codes

Unearned Revenue	320,000	
Sales Revenue ⁵		320,000

⁵240,000/(1,000,000 X 30%) X \$400,000

To adjust unearned revenue

(b) ASPE

Inventory of Premiums ⁶	250,000	
Cash		250,000

⁶100,000 X \$2.50

To record cash purchase of premiums

Cash	4,000,000	
Sales Revenue		4,000,000

To record cash sales

BRIEF EXERCISE 13.29 (Continued)**(b) (Continued)**

Cash⁷	80,000	
Premium Expense.....	120,000	
 Inventory of Premiums⁸		200,000

⁷240,000/3 X \$1.00⁸240,000/3 X \$2.50**To record redemption of codes**

Premium Expense⁹	30,000	
 Estimated Liability for Premiums.....		30,000

⁹[(1,000,000 X 30%) – 240,000] / 3 X (\$2.50 - \$1.00)**To record premium expense**

LO 6,9 BT: AP Difficulty: M Time: 15 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.30

(a) **Litigation Expense** 700,000
 Litigation Liability 700,000

(b) **Litigation Expense** 700,000
 Litigation Liability 700,000

(c) **No entry is necessary. The loss is not accrued because it is not probable that a liability has been incurred at 12/31/23.**

(d) **(a) - ASPE where Litigation Liability is likely:**

Litigation Expense 700,000
 Litigation Liability..... 700,000

(b) - ASPE where Litigation Liability is not likely:

No entry is necessary. The loss is not accrued because it is not likely that a liability has been incurred at 12/31/23.

LO 7,9 BT: AP Difficulty: S Time: 10 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.31

- (a) Under IFRS, Siddle should record a loss since it is probable that a liability has been incurred, and the amount is reliably measurable. The amount should be measured at the probability-weighted expected value of the loss. Assuming that a payout of \$100,000 and a payout of \$250,000 are equally probable, a loss in the amount of \$175,000 is recorded.

Litigation Expense	175,000	
Litigation Liability		175,000

- (b) Under ASPE, Siddle should record a loss since it is likely that a liability has been incurred, and the amount can be reasonably estimated. The amount should be measured at the best estimate in the range of possible outcomes. If no particular estimate is better than another, the bottom of the range is recognized, and the amount of the remaining exposure to possible loss is disclosed in the notes. Assuming that a payout of \$100,000 and a payout of \$250,000 are equally likely, a loss in the amount of \$100,000 is recorded, and the remaining exposure of \$150,000 is disclosed in the notes.

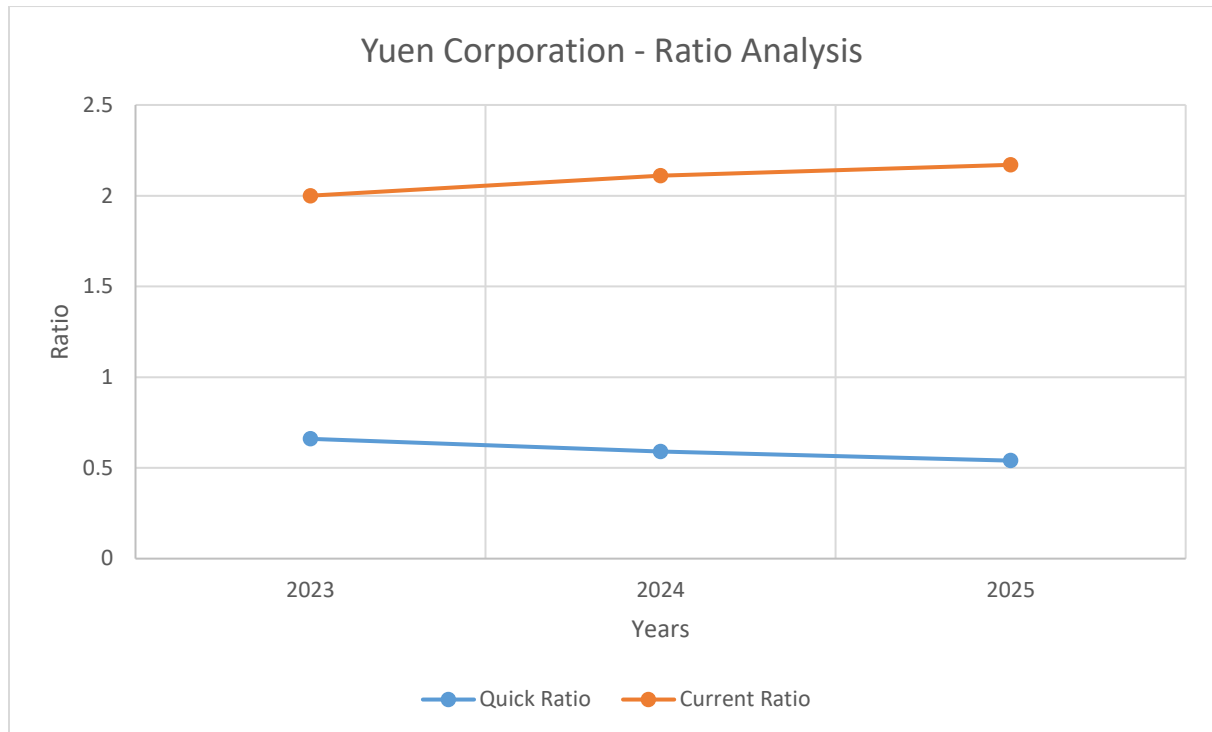
Litigation Expense	100,000	
Litigation Liability		100,000

LO 7 BT: AP Difficulty: M Time: 10 min. AACSB: None CPA: cpa-t001 CM: Reporting

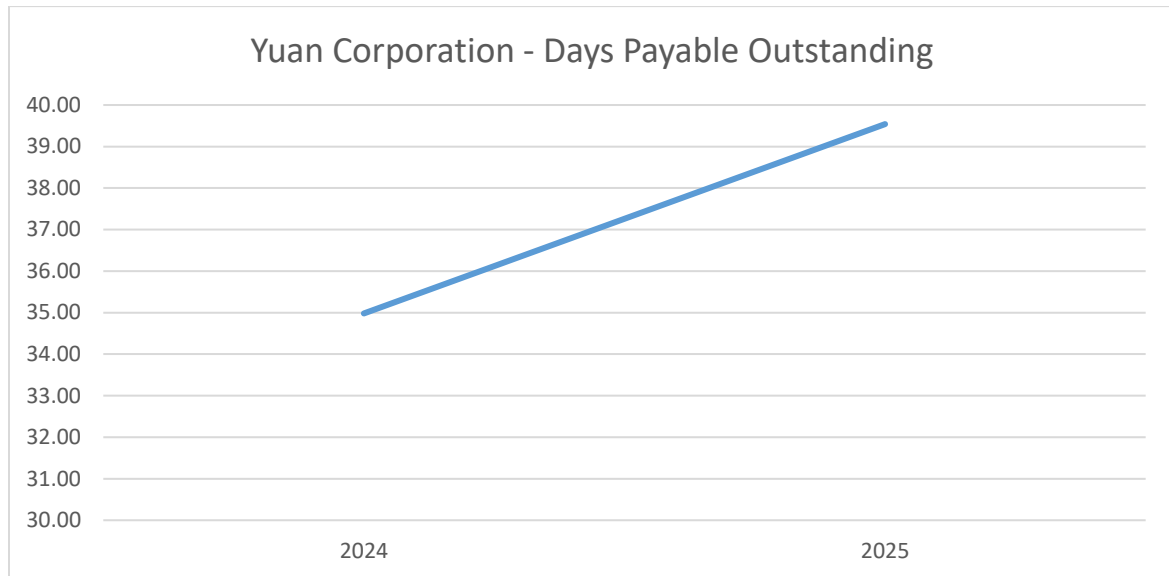
BRIEF EXERCISE 13.32**a.**

<u>Ratio</u>	<u>2025</u>	<u>2024</u>	<u>2023</u>
Current Ratio	2.17	2.11	2.00
Quick Ratio	0.54	0.59	0.66
Days Payables Outstanding	39.54	34.98	N/A

Current Ratio = Current Assets / Current Liabilities**2025: \$8,250 / \$3,800 = 2.17****2024: \$7,800 / \$3,700 = 2.11****2023: \$7,300 / \$3,650 = 2.00****Quick Ratio = Quick Assets / Current Liabilities****2025: (\$650 + \$500 + \$900) / \$3,800 = 0.54****2024: (\$700 + \$500 + \$1,000) / \$3,700 = 0.59****2023: (\$600 + \$500 + \$1,300) / \$3,650 = 0.66****Days Payables Outstanding**
= Average Trade Accounts Payable
Average Daily Cost of Goods Sold
2025: $\frac{(\$1,550 + \$1,700) / 2}{(\$15,000 / 365)} = 39.54$
2024: $\frac{(\$1,700 + \$1,750) / 2}{(\$18,000 / 365)} = 34.98$

BRIEF EXERCISE 13.32 (Continued)**b.**

The company shows a positive trend in the current ratio. However, the quick ratio shows deterioration in the quality of the current assets. The two ratios combined show that the increasing liquidity in the current ratio is created from less liquid assets such as inventory and prepaid expenses.

BRIEF EXERCISE 13.32 (Continued)**b. (Continued)**

The days payables outstanding ratio shows the company is taking a longer amount of time to pay off its current liabilities. The ratio has increased from approximately 35 days in 2024 to almost 40 days in 2025. If the company's creditors normally have credit terms of 30 days, this shows a disturbing trend, especially when combined with the deterioration in the quick ratio.

LO 8 BT: AN Difficulty: M Time: 25 min. AACSB: Analytic CPA: cpa-t001, cpa-t005, cpa-t007
CM: Reporting, Finance and DAIS

BRIEF EXERCISE 13.33

The following data can be used to forecast the liability:

- Pre-pandemic historical number of points awarded and redeemed
- Pre-pandemic average value of a point (\$ value of flight / total points redeemed)
- Actual amount of points set to expire → use the average value of a point to reduce liability

The following adjustments should be made to the liability:

Addition to the liability

Current awarding of loyalty points since the pandemic → use to forecast amount of points to be awarded in the next 6 months and then multiply with average value of a point to add to the liability.

Reduction to the liability

The reduction in liability will be related to 1) the use of the awards and, 2) the expiration of the awards due to 12 months passing from the date the points were earned by the customers.

LO 8 BT: AN Difficulty: M Time: 15 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.34

The following information can be used to forecast the liability:

- **Average number of vacation days taken (total number of days / employee headcount)**
- **Average cost of a vacation day to the company**
- **Average number of vacation days taken during pandemic (total days / average headcount)**
- **Determination (using market data) when travel will return back to normal (if at all, in the current year)**
- **Average headcount for the remaining of the year**

The following adjustments should be made to the liability:

Additions to the liability

Calculate weighted average of average vacation days earned pre/post pandemic based on determination (using market data) when travel will return back to normal (if at all, in the current year) and multiply it by the average headcount.

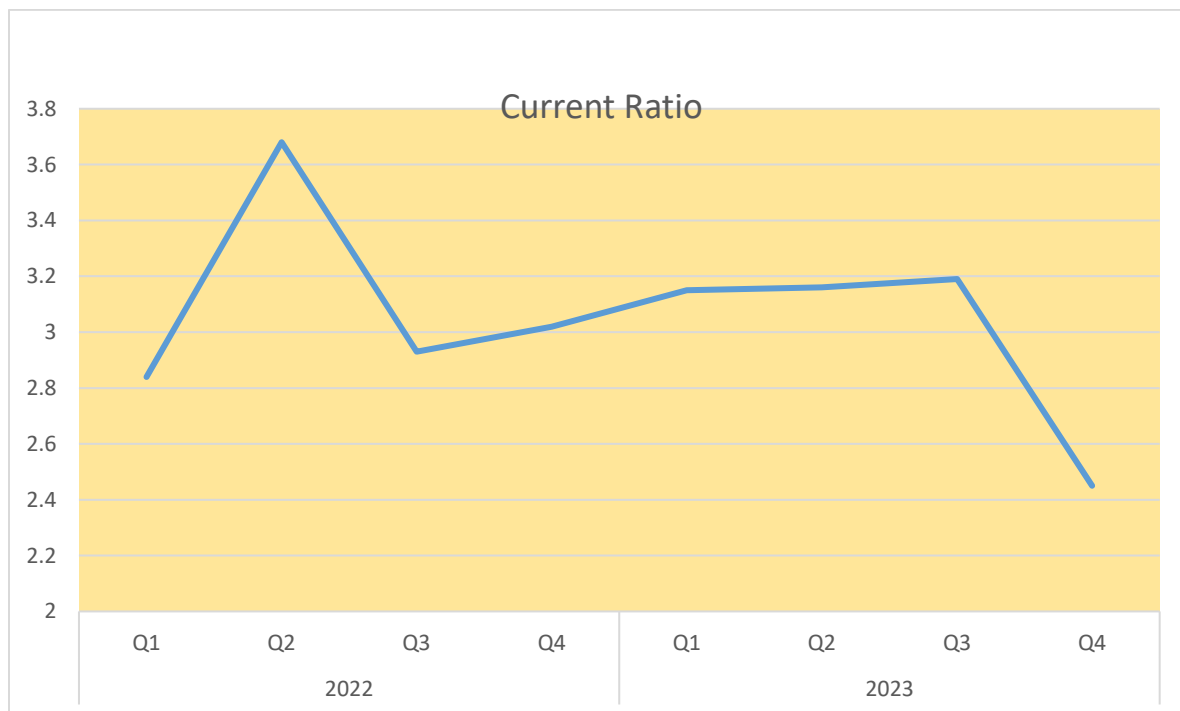
Reduction to the liability

Calculate weighted average of average vacation days taken pre/post pandemic based on determination (using market data) when travel will return back to normal (if at all, in the current year) and multiply it by the average headcount.

LO 8 BT: AN Difficulty: M Time: 15 min. AACSB: None CPA: cpa-t001 CM: Reporting

BRIEF EXERCISE 13.35**(a) Refer to Step-by-Step Excel video**

Row Labels	Sum of Current Ratio
2022	
Q1	2.84
Q2	3.68
Q3	2.93
Q4	3.02
2023	
Q1	3.15
Q2	3.16
Q3	3.19
Q4	2.45
Grand Total	3.01

(b) Refer to Step-by-Step Excel video

LO 8 BT: AN Difficulty: M Time: 20 min. AACSB: Analytic CPA: cpa-t001, cpa-t005, cpa-t007
CM: Reporting, Finance and DAIS

SOLUTIONS TO EXERCISES

EXERCISE 13.1

- a. **Classifications on balance sheet prepared under ASPE:**
- 1. Current liability; financial liability.**
 - 2. Current asset.**
 - 3. Current liability or long-term liability depending on term of warranty; not a financial liability.**
 - 4. Current liability; financial liability. A company would have an obligation to pay cash to the bank for any overdraft and this would result from the contractual agreement with the bank.**
 - 5. Current liability; not a financial liability if this refers to legislative obligations for income tax withholdings, CPP, and EI. This is a financial liability if it refers to other withholdings of a contractual nature with employees (union dues, for example).**
 - 6. Current liability; financial liability.**
 - 7. Current or noncurrent liability depending upon the time involved; not a financial liability (if deposit will be returned then it would be a financial liability).**
 - 8. Current liability; not a financial liability; this is a legislative obligation.**
 - 9. Current liability; not a financial liability. A portion could be noncurrent depending on the expiry date of the certificate.**
 - 10. Current liability; not a financial liability.**
 - 11. Current liability; financial liability.**
 - 12. Current asset.**
 - 13. Current liability; financial liability.**
 - 14. Current liability; financial liability.**

EXERCISE 13.1 (CONTINUED)**a. (Continued)**

- 15. Note disclosure; not a financial liability. Dividends in arrears have not been declared – so it cannot be a financial liability. It becomes a financial liability only when declared by the company. The contractual arrangement between a company and its preferred shareholders is that they are entitled to a dividend every year before the common shareholders get any distributions, but they must be declared before they become a liability.**
- 16. Separate presentation in either current or long-term liability section; financial liability.**
- 17. Current liability; not a financial liability; this is a legislative obligation.**
- 18. Current or noncurrent liability depending upon the time involved; not a financial liability; this is a legislative or constructive obligation.**
- 19. Current liability; financial liability.**

b. There would be no changes if the SFP was prepared under IFRS.

LO 2,9 BT: C Difficulty: S Time: 15 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.2

a.	Sept. 1	Purchases	50,000	
		 Accounts Payable		50,000
		Purchase on account		
	Oct. 1	Accounts Payable	50,000	
		 Notes Payable		50,000
		Settlement of accounts payable by issuing a note		
	Oct. 1	Cash	75,000	
		 Notes Payable		75,000
		Borrowed cash and issued a note		
b.	Dec. 31	Interest Expense¹	1,000	
		 Interest Payable		1,000
		 ¹(\$50,000 X 8% X 3/12) To accrue interest expense on 8% note		
	Dec. 31	Interest Expense²	1,500	
		 Notes Payable		1,500
		 ²[($\\$81,000 - \\$75,000$) X 3/12] To accrue interest expense on non-interest-bearing note		
c.	(1)	Note payable	\$50,000	
		Interest payable	<u>1,000</u>	
			<u>\$51,000</u>	
	(2)	Note payable at issuance	\$75,000	
		Interest accrued	<u>1,500</u>	
		Note payable balance	<u>\$76,500</u>	

LO 3 BT: AP Difficulty: S Time: 15 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.3

a.	Oct. 1/24	Interest Expense ¹	3,000	
		Interest Payable	1,000	
		Notes Payable	50,000	
		Cash.....		54,000
		¹ (\$50,000 X 8% X 9/12)		
		To record repayment of 8% note		
	Oct. 1/24	Interest Expense ²	4,500	
		Notes Payable		4,500
		² [(81,000 – 75,000) X 9/12]		
		To accrue interest expense on non-interest-bearing note		
	Notes Payable	81,000		
	Cash.....		81,000	
	To record repayment of non-interest-bearing note			
b.		<u>Orion Note:</u>		
	Jan. 1	Interest Payable	1,000	
		Interest Expense		1,000
	Oct. 1	Interest Expense.....	4,000	
		Notes Payable.....	50,000	
		Cash.....		54,000

Bank Note: The use of reversing entries is more efficient for the interest-bearing note. In this case, the bookkeeping staff will debit interest expense for the full 12 months when the note is paid and, in combination with the reversing entry, the expense in 2024 will be correct. With the non-interest-bearing note, there is no need to reverse the interest. When the note is paid at maturity, the difference between the note's carrying amount and the amount paid is all charged – correctly – to interest expense.

EXERCISE 13.3 (Continued)**b. (continued)**

	<u>If reversing entry used:</u>		
Jan. 1	Notes Payable.....	1,500	
	Interest Expense.....		1,500
Oct. 1	Interest Expense.....	6,000	
	Note Payable		6,000
	To accrue interest expense on non-interest-bearing note		
	Notes Payable.....	81,000	
	Cash		81,000
	To record repayment of non-interest-bearing note		
	<u>If reversing entry not used:</u>		
Oct. 1	Interest Expense	4,500	
	Note Payable		4,500
	To accrue interest expense on non-interest-bearing note		
	Notes Payable.....	81,000	
	Cash		81,000
	To record repayment of non-interest-bearing note		

LO 3 BT: AP Difficulty: M Time: 20 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.4

a.	Cash	894,000	
	Deposits		894,000
	To record deposit from customers		
	Deposits	705,400	
	Cash.....		705,400
	To record refund of deposit		
	Deposits	55,000	
	Container Sales Revenue.....		55,000
	(\$170,000 – \$115,000)		
	To record revenue		

b.		<u>Deposits</u>	
		\$650,000	12/31/22 liability
		894,000	2023 deliveries
	2023 returns	\$705,400	
	2024 expired	<u>55,000</u>	<u>(760,400)</u>
	Deposits	<u>\$783,600</u>	12/31/23 liability

- c. The classification of this liability as current or long-term depends upon the length of the company's operating cycle. If the company's operating cycle is one year or less, then the portion of the liability that is expected to be settled within one year is classified as current. The remaining deposits would be classified as long-term. If the company's operating cycle is between one year and two years, the portion of the liability that is expected to be settled within one operating cycle is classified as current. If the company's operating cycle is two years or more, the entire liability (\$783,600) is classified as current.
- d. There would be no changes if the SFP was prepared under ASPE.

LO 3,9 BT: AP Difficulty: M Time: 20 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.5**a. Province of Ontario**

March 1	Rent Expense	5,500	
	HST Receivable (\$5,500 X 13%)	715	
	Cash		6,215
3	Accounts Receivable—Marcus	22,600	
	Sales Revenue		20,000
	HST Payable (\$20,000 X 13%)...		2,600
	To record sales on account		
	Cost of Goods Sold	11,000	
	Inventory		11,000
	To record cost of goods sold		
5	Sales Returns and Allowances	500	
	HST Payable (\$500 X 13%)	65	
	Accounts Receivable—Marcus		565
7	Inventory	4,000	
	HST Receivable (\$4,000 X 13%)	520	
	Accounts Payable—Tinney		4,520
12	Furniture and Fixtures	600	
	HST Receivable (\$600 X 13%)	78	
	Cash		678
Apr. 15	HST Payable (\$2,600 – \$65)	2,535	
	Cash		1,222
	HST Receivable		1,313
	(\$715 + \$520 + \$78)		

EXERCISE 13.5 (CONTINUED)**b. Province of Alberta**

March 1	Rent Expense	5,500	
	GST Receivable (\$5,500 X 5%)	275	
	Cash.....		5,775
3	Accounts Receivable—Marcus	21,000	
	Sales Revenue		20,000
	GST Payable (\$20,000 X 5%)		1,000
	To record sales on account		
	Cost of Goods Sold.....	11,000	
	Inventory		11,000
	To record cost of goods sold		
5	Sales Returns and Allowances	500	
	GST Payable (\$500 X 5%)	25	
	Accounts Receivable—Marcus..		525
7	Inventory.....	4,000	
	GST Receivable (\$4,000 X 5%)	200	
	Accounts Payable—Tinney		4,200
12	Furniture and Fixtures	600	
	GST Receivable (\$600 X 5%)	30	
	Cash.....		630
Apr. 15	GST Payable (\$1,000 – \$25)	975	
	Cash.....		470
	GST Receivable		
	(\$275 + \$200 + \$30)		505

LO 3 BT: AP Difficulty: M Time: 25 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.6

a.	Mar. 31	Income Tax Expense	8,100	
		Cash.....		8,100
	June	Cash	11,250	
		Income Tax Receivable		11,250
	June 30	Income Tax Expense	8,100	
		Cash.....		8,100
	Sep. 30	Income Tax Expense	8,100	
		Cash.....		8,100
	Dec. 31	Income Tax Expense	8,100	
		Cash.....		8,100
		To record income tax instalment payment		
	Dec. 31	Income Tax Expense	5,400	
		Income Tax Payable		5,400
		To accrue income tax expense		
		Estimated income tax	\$37,800	
		Income tax instalments paid		
		(\$8,100 X 4)	(32,400)	
		Income tax payable	<u>\$ 5,400</u>	

b. The income tax payable will be shown as a current liability.

EXERCISE 13.6

c.	June	Cash	2,750	
		Retained Earnings	8,500	
		Income Tax Receivable		11,250

The error relates to a prior period and should be treated as an adjustment to opening retained earnings on the statement of retained earnings or statement of changes in equity. No tax effect would be applicable for this correction of error.

LO 3,9 BT: AP Difficulty: M Time: 20 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.7**a.**

#	Assets	Liabilities	Shareholders' Equity	Net Income
1	I	I	NE	NE
2	NE	NE	NE	NE
3	NE	I	D	D
4	I	I	NE	NE
5	NE	I	D	D
6	I	I	I	I
7	D	I	D	D
8	NE	I	D	D
9	NE	I	D	D
10	NE	NE	NE	NE
11	NE	I	D	D
12	NE	I	D	D
13	NE	I	D	D
14	D	D	NE	NE
15	I	I	I	I
16	D	NE	D	D
17	NE	D	I	I
18	NE	I	D	D
19	I	I	NE	NE
20	I	D	I	I

EXERCISE 13.7 (CONTINUED)

- b. Under IFRS, addition considerations should be applied to the following items:**

Item No.

12 The criteria for recording a contingent loss under ASPE must be “likely,” meaning a high probability, whereas for IFRS the threshold for recognition is lower at “probable.”

13 and 15 ASPE requires companies to apply recognition criteria separately when the selling price includes an identifiable amount for subsequent servicing. Under IFRS 15, warranties are considered either assurance-type or service-type.

LO 3,4,6,7,9 BT: C Difficulty: M Time: 35 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.8**a.**

**Hornsby Corporation
Partial Balance Sheet
December 31, 2023**

Current liabilities:

Notes payable (Note 1)	\$250,000
------------------------	-----------

Long-term liabilities:

Notes payable refinanced in February 2024 (Note 1)	950,000
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Note 1: Short-term debt refinanced

As at December 31, 2023, the company had notes payable totalling \$1,200,000 due on February 2, 2024. These notes were refinanced on their due date to the extent of \$950,000 received from the issuance of common shares on January 21, 2024. The balance of \$250,000 was liquidated using current assets.

OR**Current liabilities:**

Notes payable (Note 1)	\$250,000
------------------------	-----------

Long-term liabilities:

Short-term debt expected to be refinanced (Note 1)	950,000
---	---------

(Same Note as above.)

EXERCISE 13.8 (CONTINUED)

- b. Under IFRS, since the debt is due within 12 months from the reporting date, the whole amount (\$1.2 million) is classified as a current liability. This classification holds even if a long-term refinancing has been completed before the financial statements are released. The only exception for continuing long-term classification is if, at the balance sheet date, the entity expects to refinance it or roll it over under an existing agreement for at least 12 months and the decision is solely at its discretion. The international standard has a stringent requirement that the agreement must be firm at the balance sheet date.
- c. The current ratio is calculated as current assets/current liabilities. If Hornsby follows ASPE, current liabilities would include \$250,000 related to the short-term notes payable. If Hornsby follows IFRS, current liabilities would include \$1.2 million related to the short-term notes payable. Therefore, the current ratio would appear higher if Hornsby follows ASPE. A creditor would want to assess the company's liquidity and solvency, and should be aware that classification of the short-term notes payable on the balance sheet has a significant impact on key ratios, including the current ratio. The creditor should refer to all information in the financial statements, including notes to the financial statements, to determine the financial position of the company, especially when comparing the company's performance to that of another company with financial statements prepared under a different standard.

LO 3,8,9 BT: AN Difficulty: M Time: 25 min. AACSB: Analytic CPA: cpa-t001 cpa-t005
CM: Reporting and Finance

EXERCISE 13.9

Zimmer Corporation
Partial Balance Sheet
December 31, 2023

Current liabilities:

Notes payable (Note 1)	\$4,480,000
------------------------	-------------

Long-term liabilities:

Notes payable expected to be refinanced in 2024 (Note 1)	3,420,000
---	-----------

Note 1.

Under a financing agreement with Provincial Bank, the company may borrow up to 60% of the gross amount of its accounts receivable at an interest cost of 1% above the prime rate (currently prime rate is 8%). The company has informed Provincial Bank that it wishes to refinance as much of its debt as possible and will issue notes maturing in 2025 to replace \$3,420,000 of short-term, 15%, notes due periodically in 2024. Because the amount that can be borrowed may range from \$3,420,000¹ to \$4,200,000², only \$3,420,000 of the \$7,900,000 of currently maturing debt has been reclassified as long-term debt.

Expected range of receivables:

¹low in May: \$5,700,000 X 60% = \$3,420,000

²high in October: \$7,000,000 X 60% = \$4,200,000

- b. Under IFRS, since the debt is due within 12 months from the reporting date, the whole amount (\$7.9 million) is classified as a current liability. This classification holds even if a long-term refinancing has been completed before the financial statements are released. The only exception accepted for continuing long-term classification is if, at the balance sheet date, the entity expects to refinance it or roll it over under an existing agreement for at least 12 months and the decision is solely at its discretion. The international standard has a stringent requirement that the agreement must be firm at the balance sheet date.

LO 3,8,9 BT: AP Difficulty: S Time: 15 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.10

a.	Salaries and Wages Expense.....	485,000	
	Employee Income Tax Deductions		
	Payable		85,000
	EI Premiums Payable¹		5,767
	CPP Contributions Payable²		19,893
	Union Dues Payable		8,000
	Cash.....		366,340
	¹ \$365,000 X 1.58% = \$5,767		
	² \$365,000 X 5.45% = \$19,893		
	To record the salaries and wages paid and the employee payroll deductions		
	Payroll Tax Expense	27,967	
	EI Premiums Payable³		8,074
	CPP Contributions Payable⁴		19,893
	³ \$365,000 X 2.212% = \$8,074		
	⁴ \$365,000 X 5.45% = \$19,893		
	To record employer contributions		
b.	Employee Income Tax Deductions		
	Payable	85,000	
	EI Premiums Payable (\$5,767 + \$8,074)...	13,841	
	CPP Contributions Payable⁵	39,786	
	Cash.....		138,627
	⁵ (\$19,893 + \$19,893)		
	To record remittance		
	Union Dues Payable	8,000	
	Cash.....		8,000
	To remit union dues collected		
c.	Salaries and wages for September 2023	\$485,000	
	Payroll tax expense	27,967	
	Total payroll cost for September 2023	<u>\$512,967</u>	
	Cost per dollar of salaries and wages = (\$512,967 ÷ \$485,000) = \$1.058		

EXERCISE 13.10 (CONTINUED)

- d. The company may have additional employee-related costs such as Workplace Safety and Insurance Board (WSIB) coverage, health taxes, life, health and disability insurance, pension benefits, compensated absences (paid vacation, maternity/paternity leave, sick pay), and indirect costs such as a human resources department.**

LO 4 BT: AP Difficulty: M Time: 20 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.11**a. To accrue the expense and liability for vacation entitlement:**

2022	Salaries and Wages Expense	14,400	
	Vacation Wages Payable¹		14,400
2023	Salaries and Wages Expense	15,120	
	Vacation Wages Payable²		15,120
	Salaries and Wages Expense	648	
	Vacation Wages Payable³	12,960	
	Cash⁴		13,608

¹ 9 employees X \$20.00/hr. X 8 hrs./day X 10 days = \$14,400

² 9 employees X \$21.00/hr. X 8 hrs./day X 10 days = \$15,120

³ 9 employees X \$20.00/hr. X 8 hrs./day X 9 days = \$12,960

⁴ 9 employees X \$21.00/hr. X 8 hrs./day X 9 days = \$13,608

NOTE: Vacation days are paid at the employee's current wage.

b. To accrue the expense and liability for sick days:

2022	Salaries and Wages Expense	8,640	
	Sick Pay Wages Payable⁵		8,640

To record payment for compensated time when used by employees:

	Sick Pay Wages Payable⁶	5,760	
	Cash		5,760
2023	Salaries and Wages Expense	9,072	
	Sick Pay Wages Payable⁷		9,072

EXERCISE 13.11 (CONTINUED)**b. (continued)**

2023	Salaries and Wages Expense	144	
	Sick Pay Wages Payable⁸	7,416	
	Cash⁹		7,560

Note: in 2020, employees would first use up remaining 2019 sick leave (2 days), and then use 2020 sick leave. The 2019 sick leave had originally been accrued at \$20 per hour, but it is being paid at 2020 pay rates (\$21/hr), therefore increase expense in 2020 by: 9 employees X 8hrs./day X 2 days X (\$21 - \$20) = \$144

⁵	9 employees X \$20.00/hr. X 8 hrs./day X 6 days =	<u>\$8,640</u>
⁶	9 employees X \$20.00/hr. X 8 hrs./day X 4 days =	<u>\$5,760</u>
⁷	9 employees X \$21.00/hr. X 8 hrs./day X 6 days =	<u>\$9,072</u>
⁸	9 employees X \$20.00/hr. X 8 hrs./day X (6-4) days =	\$2,880
	9 employees X \$21.00/hr. X 8 hrs./day X (5-2) days =	+ <u>\$4,536</u>
		<u>\$7,416</u>
⁹	9 employees X \$21.00/hr. X 8 hrs./day X 5 days =	<u>\$7,560</u>

NOTE: Sick days are paid at the employee's current wage.

c. Accrued liability at year-end:

	2022		2023	
	Vacation Wages Payable	Sick Pay Wages Payable	Vacation Wages Payable	Sick Pay Wages Payable
Jan. 1 balance	\$ 0	\$ 0	\$14,400	\$2,880
+ accrued	14,400	8,640	15,120	9,072
- paid	<u>(0)</u>	<u>(5,760)</u>	<u>(12,960)</u>	<u>(7,416)</u>
Dec. 31 balance	<u>\$14,400¹⁰</u>	<u>\$2,880¹¹</u>	<u>\$16,560¹²</u>	<u>\$4,536¹³</u>

¹⁰	9 emp. X \$20.00/hr. X 8 hrs./day X 10 days =	<u>\$14,400</u>
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EXERCISE 13.11 (CONTINUED)**c. (continued)**

$$^{11} \quad 9 \text{ emp.} \times \$20.00/\text{hr.} \times 8 \text{ hrs./day} \times (6-4) \text{ days} = \quad \underline{\underline{\$2,880^*}}$$

$$\begin{array}{rcl} ^{12} \quad 9 \text{ emp.} \times \$20.00/\text{hr.} \times 8 \text{ hrs./day} \times (10-9) \text{ days} & = & \$ 1,440 \\ \quad 9 \text{ emp.} \times \$21.00/\text{hr.} \times 8 \text{ hrs./day} \times 10 \text{ days} & & \underline{\underline{+15,120^*}} \\ & & \underline{\underline{\$16,560}} \end{array}$$

*** Based on company policy; a more precise estimate would use the rate of pay expected at the time the sick leave will be used of \$21.00/hr. (or higher if a pay raise is expected in 2022).**

$$\begin{array}{rcl} ^{13} \quad 9 \text{ emp.} \times \$21.00/\text{hr.} \times 8 \text{ hrs./day} \times \\ \quad (6 + 6 - 4 - 5) \text{ days} & & \underline{\underline{\$4,536}} \end{array}$$

EXERCISE 13.11 (CONTINUED)

- d. Since the sick days entitlement does not accumulate, the company would not accrue unused sick days. Unused sick days would expire. Paid sick days taken by employees during the year would be debited to Salaries and Wages Expense as taken, at the wage rate in effect in that year.

To record payment for compensated time when used by employees:

2022	Salaries and Wages Expense¹⁴	5,760	
	Cash		5,760

2023	Salaries and Wages Expense¹⁵	7,560	
	Cash		7,560

¹⁴ 9 employees X \$20.00/hr. X 8 hrs./day X 4 days = **\$5,760**

¹⁵ 9 employees X \$21.00/hr. X 8 hrs./day X 5 days = **\$7,560**

The accrued liability at year-end would be the same as part c. for vacation wages payable, but no accrual would be required for sick days.

Vacation Wages Payable (2022) = \$14,400

Vacation Wages Payable (2023) = \$16,632

LO 4 BT: AP Difficulty: M Time: 45 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.12**a.****2022 To accrue the expense and liability for vacations:**

Salaries and Wages Expense ¹	14,940	
Vacation Wages Payable		14,940

To record vacation time paid:**No entry.****2023 To accrue the expense and liability for vacations:**

Salaries and Wages Expense ²	15,552	
Vacation Wages Payable		15,552

To record vacation time paid:

Salaries and Wages Expense	162	
Vacation Wages Payable ³	13,446	
Cash ⁴		13,608

¹ 9 employees X \$20.75/hr. X 8 hrs./day X 10 days = \$14,940² 9 employees X \$21.60/hr. X 8 hrs./day X 10 days = \$15,552³ 9 employees X \$20.75/hr. X 8 hrs./day X 9 days = \$13,446⁴ 9 employees X \$21.00/hr. X 8 hrs./day X 9 days = \$13,608**b.****2022 To record sick time paid:**

Salaries and Wages Expense ⁵	5,760	
Cash		5,760

2023 To record sick time paid:

Salaries and Wages Expense ⁶	7,560	
Cash		7,560

⁵ 9 employees X \$20.00/hr. X 8 hrs./day X 4 days = \$5,760⁶ 9 employees X \$21.00/hr. X 8 hrs./day X 5 days = \$7,560

EXERCISE 13.12 (CONTINUED)**c. Accrued liability at year-end (vacation pay only):**

	<u>2022</u>	<u>2023</u>
Jan. 1 balance	\$ 0	\$14,940
+ accrued	14,940	15,552
– paid	<u>(0)</u>	<u>(13,446)</u>
Dec. 31 balance	<u>\$14,940</u>⁷	<u>\$17,046</u>⁸

⁷ 9 employees X \$20.75/hr. X 8 hrs./day X 10 days = \$14,940

⁸ 9 employees X \$20.75/hr. X 8 hrs./day X 1 day = \$ 1,494
 9 employees X \$21.60/hr. X 8 hrs./day X 10 days = 15,552
\$17,046

LO 4 BT: AP Difficulty: M Time: 30 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.13**a. October 29, 2023:**

Employee Benefit Expense ¹	36,810	
Parental Leave Benefits Payable		36,810

The expense and liability are recognized when the event that obligates the entity occurs. For maternity and parental leave, the application for leave is the event that obligates the corporation. The notification in June is not considered an actual application for leave.

¹ Salary for 12 months	\$54,000	
Less: employment insurance		
payments (\$720/week X 52 weeks)	(37,440)	
Salary for 6 months at 75%		
(\$54,000 X 6/12 X 75%)	<u>20,250</u>	
Employee Benefit Expense		<u>\$36,810</u>

For each of the 9 weeks from October 29, 2023 to December 31, 2023, Goldwing Corporation will pay Zeinab Jolan a top-up amount and record the payments as follows:

Parental Leave Benefits Payable ²	318	
Cash		318
² (\$54,000 – \$37,440) ÷ 52 weeks = \$318		

b. Parental Leave Benefits Payable ³	20,708	
Cash		20,708

³ Top up for one year (\$54,000 – \$37,440)	\$16,560	
Less portion used in 2023 (9 weeks X \$318)	(2,862)	
Remaining 9 weeks at 75% of full pay		
(\$20,250 X 9/26)	<u>7,010</u>	
Benefits paid during 2024		<u>\$20,708</u>

EXERCISE 13.13 (CONTINUED)

- c. Parental Leave Benefits Payable at December 31, 2023 =
\$36,810 – (9 weeks X \$318) = \$33,948**

**Parental Leave Benefits Payable at December 31, 2024 =
\$33,948 – \$20,708 = \$13,240**

The parental leave benefits payable balance at December 31, 2023 will have both a current and long-term portion. The amount payable within the coming year, \$20,708, will be shown as a current liability, whereas the remaining \$13,240, which will be payable in 2025, will be shown as a long-term liability.

On the December 31, 2024 balance sheet, the remaining amount of \$13,240 will be shown as a current liability.

LO 4 BT: AP Difficulty: M Time: 25 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.14**a.**

Justin Corp.
Income Statement
For the Year Ended December 31, 2023

Sales revenue		\$10,000,000
Cost of goods sold		<u>7,000,000</u>
Gross profit		3,000,000
Administrative and selling expenses	\$1,000,000	
Profit-sharing bonus to employees	<u>245,614</u>	<u>1,245,614</u>
Income before income tax		1,754,386
Income tax (30%)		<u>526,316</u>
Net income		<u><u>\$ 1,228,070</u></u>

Calculation of bonus and tax:

$$\begin{aligned}
 T &= .30 (\$3,000,000 - \$1,000,000 - B) \\
 B &= .20 (\$2,000,000 - B - T) \\
 B &= .20 [\$2,000,000 - B - .30 (\$2,000,000 - B)] \\
 B &= .20 (\$2,000,000 - B - \$600,000 + .30B) \\
 B &= .20 (\$1,400,000 - .70B) \\
 B &= \$280,000 - .14B \\
 1.14B &= \$280,000 \\
 \text{Bonus} &= \$245,614.04 \\
 T &= .30 (\$2,000,000 - \$245,614.04) \\
 T &= .30 (\$1,754,385.96) \\
 \text{Tax} &= \$526,315.79
 \end{aligned}$$

b.	Bonus Expense	245,614	
	Bonus Payable.....		245,614

c. The calculation of the bonus would not have changed had Justin followed IFRS.

LO 4,9 BT: AN Difficulty: C Time: 20 min. AACSB: Analytic CPA: cpa-t001 CM: Reporting

EXERCISE 13.15

a.	January 1, 2023		
Drilling Platform		5,460,000	
Cash			5,460,000
Drilling Platform¹		419,063	
Asset Retirement Obligation			419,063
¹ \$598,661.50 ² X 70% = \$419,063			

1. Using Table A.2 tables i=8% and n=6):
 (\$950,000 X .63017) = \$598,661.50²

2. Using a financial calculator:

PV	?	Yields \$ 598,661.15
I	8%	
N	6	
PMT	0	
FV	\$ (950,000)	
Type	0	

3. Using Excel: =PV(rate,nper,pmt,fv,type)

Function Arguments

PV

Rate: .08 = 0.08

Nper: 6 = 6

Pmt: 0 = 0

Fv: -950000 = -950000

Type: 0 = 0

= 598661.1455

Returns the present value of an investment: the total amount that a series of future payments is worth now.

Type is a logical value: payment at the beginning of the period = 1; payment at the end of the period = 0 or omitted.

Formula result = 598661.1455

[Help on this function](#) OK Cancel

Result: \$598,661.15

EXERCISE 13-15 (CONTINUED)

b.	December 31, 2023		
Depreciation Expense ³		979,844	
Accumulated Depreciation –			
Drilling Platform			979,844
³ $(\$5,460,000 + \$419,063) \div 6$			
To record depreciation expense			
Interest Expense ⁴		33,525	
Asset Retirement Obligation			33,525
⁴ $\$419,063 \times 8\%$			
To record interest expense			
Inventory		32,328	
Asset Retirement Obligation			32,328
To record production of oil inventory			
c.	December 31, 2024		
Depreciation Expense ⁵		979,844	
Accumulated Depreciation –			
Drilling Platform			979,844
⁵ $(\$5,460,000 + \$419,063) \div 6$			
To record depreciation expense			
Interest Expense ⁶		38,793	
Asset Retirement Obligation			38,793
⁶ $(\$419,063 + \$33,525 + \$32,328) \times 8\%$			
To record interest expense			
Inventory		34,914	
Asset Retirement Obligation			34,914
To record production of oil inventory			

EXERCISE 13.15 (CONTINUED)

d.	December 31, 2028		
Asset Retirement Obligation	950,000		
Gain on Settlement of ARO		28,000	
Cash		922,000	
e.	January 1, 2023		
Drilling Platform	5,460,000		
Cash		5,460,000	
Drilling Platform	419,063		
Asset Retirement Obligation		419,063	
Same amount as in (a)			
	December 31, 2023		
Depreciation Expense⁷	979,844		
Accumulated Depreciation –			
Drilling Platform		979,844	
⁷$(\\$5,460,000 + \\$419,063) \div 6$			
To record depreciation expense			
Accretion Expense⁸	33,525		
Asset Retirement Obligation		33,525	
⁸$\\$419,063 \times 8\%$			
To record accretion expense			
Drilling Platform	32,328		
Asset Retirement Obligation		32,328	
To adjust asset retirement obligation			

EXERCISE 13.15 (CONTINUED)**e. (continued)**

December 31, 2024		
Depreciation Expense⁹	986,310	
Accumulated Depreciation –		
Drilling Platform		986,310
⁹ $(\$5,460,000 + \$419,063) \div 6 + \$32,328 \div 5$		
To record depreciation expense		
Accretion Expense¹⁰	38,793	
Asset Retirement Obligation		38,793
¹⁰ $(\$419,063 + \$33,525 + \$32,328) \times 8\%$		
To record accretion expense		
Drilling Platform	34,914	
Asset Retirement Obligation		34,914
To adjust asset retirement obligation		
December 31, 2028		
Asset Retirement Obligation	950,000	
Gain on Settlement of ARO		28,000
Cash		922,000

LO 5,9 BT: AP Difficulty: M Time: 45 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.16**a.****Present value of the asset retirement obligation****1. Using Table A.2 i=6% and n=10):= \$75,000 X .55839 = \$41,879****2. Using a financial calculator:**

PV	?	Yields \$ 41,879.61
I	6%	
N	10	
PMT	0	
FV	\$ (75,000)	
Type	0	

3. Using Excel: =PV(rate,nper,pmt,fv,type)

The image shows the 'Function Arguments' dialog box for the PV function in Excel. The arguments are as follows:

Argument	Value	Result
Rate	.06	= 0.06
Nper	10	= 10
Pmt	0	= 0
Fv	-75000	= -75000
Type	0	= 0

The calculated result is: = 41879.60827

Returns the present value of an investment: the total amount that a series of future payments is worth now.

Type is a logical value: payment at the beginning of the period = 1; payment at the end of the period = 0 or omitted.

Formula result = 41879.60827

[Help on this function](#)

OK Cancel

Result: \$41,879.61

EXERCISE 13.16 (CONTINUED)**a. (continued)****July 2, 2023**

Oil Tanker Depot	600,000	
Cash		600,000
To record purchase of depot		

Oil Tanker Depot	41,879	
Asset Retirement Obligation		41,879
To record asset retirement obligation		

b. December 31, 2023

Depreciation Expense ¹	32,094	
Accumulated Depreciation –		
Oil Tanker Depot		32,094
¹ $(\$600,000 + \$41,879) \div 10 \times 6/12$		
To record depreciation expense		

Accretion Expense ²	1,256	
Asset Retirement Obligation		1,256
² $(\$41,879 \times 6\% \times 6/12)$		
To record accretion expense		

c. Balance Sheet:**Property, Plant, and Equipment:**

Oil Tanker Depot	\$641,879	
Less: Accumulated Depreciation	<u>32,094</u>	\$609,785

Long-term Liabilities:

Asset Retirement Obligation	43,135	
$(\$41,879 + \$1,256)$		

Income Statement:

Operating Expenses		
Depreciation Expense	32,094	
Accretion Expense	1,256	

EXERCISE 13.16 (CONTINUED)**d.**

Year	Beg. Carrying Amount	Accretion Expense (6%)	Ending Carrying Amount
June 30, 2024	41,879.00	2,512.74	44,391.74
2025	44,391.74	2,663.50	47,055.24
2026	47,055.24	2,823.31	49,878.55
2027	49,878.55	2,992.71	52,871.26
2028	52,871.26	3,172.28	56,043.54
2029	56,043.54	3,362.61	59,406.15
2030	59,406.15	3,564.37	62,970.52
2031	62,970.52	3,778.23	66,748.75
2032	66,748.75	4,004.93	70,753.68
2033	70,753.68	4,245.22	74,998.90

e.**June 30, 2033**

Asset Retirement Obligation	75,000	
Loss on Settlement of ARO	5,000	
Cash		80,000

- f.** The accretion expense is a non-cash expense. It would be omitted from cash from operations in the statement of cash flows prepared using the direct method. It would be added back to net income in the statement of cash flows prepared using the indirect method.

EXERCISE 13.16 (CONTINUED)

- g. If the company reports under IFRS, the main differences in accounting for the asset retirement costs and obligation are as follows:**
- 1. In addition to the legal obligations recognized in part a, if there are any constructive obligations related to retiring the oil tanker depot, the related costs would be included in the asset retirement obligation (ARO). Under ASPE, only the costs associated with legal obligations are included in the ARO.**
 - 2. The costs included in the capital asset would only be those retirement obligations related to the acquisition of the asset, not those retirement obligations related to the subsequent production of goods or services. Under IFRS, retirement costs related to the subsequent production of goods or services are included as inventory or product costs as the depot is used and the retirement costs increase due to production. Under ASPE, the costs included in the capital asset are the retirement obligations resulting from both the acquisition of the asset and its subsequent use in producing inventory.**
 - 3. The interest adjustment to the liability account recorded in part b. would be recognized as a borrowing cost in the interest expense account. Under ASPE, the interest adjustment is recognized as an operating expense in the accretion expense account.**

As an example, assuming that Crude Oil follows IFRS and that the ARO of \$75,000 at the end of the depot's useful life relates 50% to acquisition of the depot and 50% to the subsequent production:

- The July 2, 2023 entry to acquire the oil tanker depot would be the same as under ASPE.**
- Instead of capitalizing the full \$41,879 in the Oil Tanker Depot account, only $\frac{1}{2} \times \$41,879$ or \$20,940 would be capitalized at July 2, 2023.**

EXERCISE 13.16 (CONTINUED)**g. (continued)**

- The depreciation expense for the six months ended December 31, 2023 would be $(\$600,000 + \$20,940) \div 10 \times 6/12 = \$31,047$
- Interest expense (which would be accretion expense under ASPE as discussed above) for the 6 months ended December 31, 2023 would be lower under ASPE. It would be $\$20,940 \times 6\% \times 6/12 = \$628$.
- An entry would have to be made to recognize the increased ARO due to the production activities for the 6 months ended December 31, 2023, with the costs charged to Inventory. This would be measured at the present value of the incremental costs caused by this production. If \$37,500 of the remediation obligation (ARO) was caused by the acquisition of the asset, then the other \$37,500 of the ARO, or \$1,875 every six months, would be caused by production. At the end of December 2023, \$1,078 is the present value of the incremental cost caused by production (PV \$1,875 using $i=6\%$ and $n=9.5$ periods which gives a PV factor of .57490). On June 30, 2024, an additional \$1,110 would be recognized as production costs and an increase in the ARO (PV \$1,875 using $i=6\%$ and $n=9$ periods which gives a PV factor of .59190). At June 30, 2024, additional interest expense would be recognized as well because \$1,078 has been included in the ARO since December 31, 2023. However, only \$1,078 is charged to Inventory and credited to the Asset Retirement Obligation at December 31, 2023.
- At June 30, 2033, the ARO will have accumulated to \$75,000, the same as under ASPE. Therefore, the same entry would be made to recognize the \$80,000 expenditure for remediation and the \$5,000 loss.

Note to instructor: This may be more detail than you would like to get into with your students, but it is provided here as one way to calculate reasonable numbers for the entries. The following table sets out a “proof” that the ARO related to production activity and interest for the first year’s production will accumulate to 1/10 of the estimated retirement costs at the end of 10 years or \$3,750.

EXERCISE 13.16 (CONTINUED)**g. (continued)**

For each period, the ARO relating to the current production is recorded at its present value at the end of the period of production, added to the same liability account for the ARO recognized for the asset acquisition, and then accreted until the obligation is eventually retired.

There is no amount in the ARO account related to inventory production until December 31, 2023, so no accretion is needed in that first period.

	Present value of additional costs resulting from production in first year	Accretion at 6% per year	Balance of ARO related to production activity for first year
Jul.1/23	0	0	0
Dec.31/23	1,078	0	1,078
Jul.1/24	1,110	32	2,220
Jul.1/25	0	133	2,353
Jul.1/26	0	141	2,494
Jul.1/27	0	150	2,644
Jul.1/28	0	159	2,803
Jul.1/29	0	168	2,971
Jul.1/30	0	178	3,149
Jul.1/31	0	189	3,338
Jul.1/32	0	200	3,538
Jul.1/33	0	212	3,750

LO 5,9 BT: AP Difficulty: M Time: 50 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.17**a. May 1, 2023****No entry – neither party has performed on May 1, 2023.****b. May 15, 2023**

Cash	3,200	
 Unearned Revenue		3,200

c. May 31, 2023

Unearned Revenue	3,200	
 Sales Revenue		3,200
To record sales revenue		
Cost of Goods Sold	2,150	
 Inventory		2,150
To record cost of goods sold		

LO 6 BT: AP Difficulty: S Time: 15 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.18

Jan. 5	Cash.....	17,854	
	Sales Revenue.....		15,800
	HST Payable (\$15,800 × 13%).		2,054
	To record cash sales plus HST		
12	Unearned Revenue	7,000	
	HST Payable (\$6,195 × 13%)...		805
	Service Revenue¹		6,195
	To record service revenue for cash previously received		
	¹(\$7,000 / 1.13) = \$6,195		
14	HST Payable.....	11,390	
	HST Receivable		4,260
	Cash.....		7,130
	Remitted HST payable		
15	CPP Contributions Payable	2,152	
	EI Premiums Payable	1,019	
	Employee Income Tax Deductions Payable.....	4,563	
	Cash.....		7,734
	Remitted payroll deduction		
20	Equipment².....	5,600	
	HST Receivable (\$5,600 × 13%) ...	728	
	Accounts Payable		6,328
	To record purchase of equipment on account		
	²(\$6,328 / 1.13) = \$5,600		
31	Salaries and Wages Expense	25,350	
	CPP Contributions Payable ..		1,183
	EI Premiums Payable		464
	Employee Income Tax Deductions Payable		4,563
	Cash.....		19,140
	To record payment of monthly payroll		

EXERCISE 13.18 (CONTINUED)

Jan. 31	Payroll Tax Expense	1,833	
	 CPP Contributions Payable .		1,183
	 EI Premiums Payable ³		650
	To record employer benefits expense.		
	 ³(\$464 × 1.4)		

LO 6 BT: AP Difficulty: M Time: 15 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.19

- a.**
- | | | |
|--|---------|---------|
| Cash (150 X \$4,000) | 600,000 | |
| Sales Revenue | | 600,000 |
| To record cash sales | | |
|
Warranty Expense | 17,000 | |
| Materials, Cash, Payables..... | | 17,000 |
| To record warranty expense | | |
|
Warranty Expense (\$45,000 ¹ – \$17,000) .. | 28,000 | |
| Warranty Liability | | 28,000 |
| ¹ (150 X \$300) | | |
| To accrue warranty expense | | |
- b.**
- | | | |
|--------------------------------|---------|---------|
| Cash | 600,000 | |
| Sales Revenue | | 600,000 |
| To record cash sales | | |
|
Warranty Expense | 17,000 | |
| Materials, Cash, Payables..... | | 17,000 |
| To record warranty expense | | |
- c.** The cash basis of accounting for warranty costs is generally not acceptable under GAAP. However, some companies may use it when the costs are very immaterial or when the warranty period is quite short. It may also be used when the amount of the liability cannot be reasonably estimated or if future costs are not likely to be incurred.
- d.** The recording of assurance-type warranties is the same under IFRS and ASPE. However, under ASPE it is based on the principle that when revenue covers a variety of deliverables (bundled sales) it should be unbundled and the revenue allocated to the various goods or services that are required to be performed.

LO 6,9 BT: AP Difficulty: S Time: 15 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.20**a. Estimated warranty expense for 2023:**

On 2023 sales: $\$1,036,000 \times .09^1 = \underline{\underline{\$ 93,240}}$

¹(2% of sales first year + 3% of sales second year + 4% of sales third year = 9% of sales)

<u>Sales</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>Total</u>
\$810,000	\$16,200	\$24,300	\$32,400			\$72,900
1,070,000		21,400	32,100	\$42,800		96,300
1,036,000			<u>20,720</u>	<u>31,080</u>	<u>\$41,440</u>	<u>93,240</u>
	<u>\$16,200</u>	<u>\$45,700</u>	<u>\$85,220</u>	<u>\$73,880</u>	<u>\$41,440</u>	<u>\$262,440</u>

Estimated warranty costs:

On 2021 sales \$ 810,000 X .09	\$ 72,900
On 2022 sales \$1,070,000 X .09	96,300
On 2023 sales \$1,036,000 X .09	<u>93,240</u>
Total estimated costs	262,440
Total warranty expenditures ²	<u>146,700</u>
Balance of liability, 12/31/23	<u>\$115,740</u>

²2021—\$16,500; 2022—\$47,200, and 2023—\$83,000.

The liability account has a balance of \$115,740 at 12/31/23 based on the difference between the estimated warranty costs (totalling \$262,440) for the three years' sales and the actual warranty expenditures (totalling \$146,700) during that same period.

- b.** The recording of assurance-type warranties is the same under IFRS and ASPE. However, under ASPE it is based on the principle that when revenue covers a variety of deliverables (bundled sales) it should be unbundled and the revenue allocated to the various goods or services that are required to be performed.

EXERCISE 13.20 (CONTINUED)

- c. The difference between actual warranty expenditures and the estimated amount would be treated as a change in accounting estimate and applied to the current and future years. The difference would be used as part of Cool Sound's experience in setting the rate for current and future years' transactions. If the difference is considered material, the additional warranty expenditures would be charged to the income statement in the current year.**
- d. When arriving at the estimate of likely costs to be incurred in satisfying warranty claims, Cool Sound could use information to generate predictive analytics regarding matters such as which parts are most likely to fail, and the number and severity of expected claims. Data analytics information about the parts used, customer feedback, repair technician comments, and similar data can be important tools in estimating warranty costs and highlighting quality issues that should be focused upon by management.**

LO 6, 8, 9 BT: AP Difficulty: M Time: 20 min. AACSB: None CPA: cpa-t001, cpa-t007 CM: Reporting and DAIS

EXERCISE 13.21

a.	Accounts Receivable.....	3,000,000	
	Sales Revenue¹.....		3,000,000
	¹(500 X \$6,000)		
	To record sales on account		
	Warranty Expense	30,000	
	Cash.....		30,000
	To record payment of warranty expense		
	Warranty Expense²	90,000	
	Warranty Liability		90,000
	²(\$120,000 – \$30,000)		
	To accrue warranty expense		
b.	Accounts Receivable.....	3,000,000	
	Sales Revenue		2,840,000
	Unearned Revenue		160,000
	To record sales on account		
	Warranty Expense	30,000	
	Cash.....		30,000
	To record payment of warranty expense		
	Unearned Revenue	40,000	
	Warranty Revenue³.....		40,000
	³[\$160,000 X (\$30,000/\$120,000)]		
	To remeasure unearned revenue		

EXERCISE 13.21 (CONTINUED)**c.**

Sales Revenue	\$3,000,000	\$2,840,000
Warranty Revenue	0	40,000
Warranty Expense	<u>(120,000)</u>	<u>(30,000)</u>
Net Income	<u>\$2,880,000</u>	<u>\$2,850,000</u>

Treating the warranty as an integral part of the sale under the assurance-type (expense-based) approach for warranties will trigger a larger expense. This is because the full cost of servicing the product over the course of the warranty period must be estimated and disclosed in the period of sale. The warranty expense under a service-type (revenue-based) approach for warranties consists of only expenses incurred in the current period.

The presentation of sales revenue will also differ under the two approaches. Under the assurance-type warranty, the sales proceeds from selling the product generate only one revenue source. Under the service-type warranty approach, the sale of the product generates two different revenue streams (the sale of the product and the sale of the warranty contract as service revenue) as well as two gross profit sources (sales revenue less cost of goods sold and warranty revenue net of warranty expense).

The service-type warranty approach generates a lower income in the current year because a portion of the profit is deferred to future periods, when it is earned as the service is provided.

- d. The recording of assurance-type and service-type warranties is the same under IFRS and ASPE. However, under ASPE, it is based on the principle that when revenue covers a variety of deliverables (bundled sales) it should be unbundled and the revenue allocated to the various goods or services that are required to be performed.

EXERCISE 13.21 (CONTINUED)

- e. If the warranty costs are considered to be immaterial, the cash basis method could be used and warranty costs recognized in the year they are incurred. However, if the warranty costs are considered material to the company's financial statements, the company may have to defer recognizing the revenue from the sale of the product until all costs can be measured and matched against the related revenues.**

LO 6,9 BT: AP Difficulty: M Time: 25 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.22**a. Assurance-type (expense approach):**

Accounts Receivable.....	3,000,000	
Sales Revenue ¹		3,000,000
¹ (1,000 X \$3,000)		
To record sales on account		

Warranty Expense	105,000	
Cash.....		105,000
To record payment of warranty expense		

Warranty Expense ²	95,000	
Warranty Liability		95,000
² [(1,000 X \$200) – \$105,000]		
To accrue warranty expense		

December 31, 2023 financial statement amounts reported:

Balance Sheet		
Warranty liability		\$95,000

Income Statement		
Sales revenue		\$3,000,000
Warranty expense		200,000

EXERCISE 13.22 (CONTINUED)**a. (continued)****Service-type (revenue approach):**

Accounts Receivable.....	3,000,000	
Sales Revenue		2,650,000
Unearned Revenue		350,000
To record sales on account		
Warranty Expense	105,000	
Cash.....		105,000
To record warranty expense		
Unearned Revenue	183,750	
Warranty Revenue¹.....		183,750
¹[\$350,000 X (\$105,000/\$200,000)]		
To remeasure unearned revenue		

December 31, 2023 financial statement amounts reported:**Balance Sheet**

Unearned revenue	\$166,250
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Income Statement

Sales revenue	\$2,650,000
Warranty revenue	183,750
Warranty expense	105,000

- b. The recording of assurance-type and service-type warranties is the same under IFRS and ASPE. However, under ASPE it is based on the principle that when revenue covers a variety of deliverables (bundled sales) it should be unbundled and the revenue allocated to the various goods or services that are required to be performed.**

EXERCISE 13.22 (CONTINUED)

- c. When the assurance-type approach is used to account for warranty costs, sales revenue will be higher because it is all considered to be earned upon the sale of the product. As well, the expense on the income statement will represent the total estimated costs of servicing the warranties (i.e., the actual costs of servicing the warranty in the period, plus a year-end adjustment for expected future costs.) Therefore, the total gross profit on the warranty work is recognized in the period the equipment is sold.

When the service-type approach is used, sales revenue will be lower because the total selling price is allocated between the sale of the product and the sale of the warranty service. There will be an unearned revenue liability account for the portion of the warranty that has not been taken into revenue at year end. Warranty expense will be equal to the actual costs of servicing the warranty during the year. In summary, the profit on the warranty work is recognized later under the revenue approach—in the period in which the warranty work is performed.

In this situation, it makes more sense to choose the service-type approach. In this way, income is reported as it is earned, and is a better measure of performance. In addition, as the company is considering going public in a few years, and the bifurcation of revenues to multiple deliverables is required by IFRS, the service-type approach would be consistent with what will be required after the company goes public. It would make sense to adopt this accounting policy now so that a retrospective change is not required later.

LO 6,9 BT: AP Difficulty: M Time: 30 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.23

- a. The performance obligation is satisfied when the points are used or the time to use them expires. Because the points provide a material right to a customer that it would not receive without entering into a loyalty program, the points are a separate performance obligation. Bélanger allocates the transaction price to the product and the points on a relative stand-alone selling price basis as follows.

The stand-alone selling price:

Purchased products:	\$100,000
Estimated points to be redeemed ¹	<u>9,500</u>
Total fair value	<u>\$109,500</u>

¹9,500 points X \$1 per point

The allocation is as follows:

Products $(\$100,000 / \$109,500) \times \$100,000 = \$91,324$

Bonus points $(\$9,500 / \$109,500) \times \$100,000 = \$8,676$

- b. To record sales of products subject to bonus points:

Cash	100,000	
Unearned Revenue		8,676
Sales Revenue		91,324
To record cash sale		

Cost of Goods Sold (1–45%) X 100,000	55,000	
Inventory		55,000
To record cost of goods sold		

- c. Had Bélanger been following ASPE, there would be no difference in the accounting of the customer loyalty program transactions.

LO 6,9 BT: AP Difficulty: M Time: 20 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.24**a.**

Inventory of Premiums (8,800 X \$0.90).....	7,920	
Cash.....		7,920
To record cash purchase of premiums		
 Cash (120,000 X \$3.30)	396,000	
Sales Revenue		396,000
To record cash sales		
 Premium Expense ¹	3,960	
Inventory of Premiums		3,960
¹ [(44,000 ÷ 10) X \$0.90]		
To record redemption of coupons		
 Premium Expense ²	2,520	
Estimated Liability for Premiums		2,520
² [(120,000 X 60%) – 44,000] ÷ 10 X \$0.90		
To record premium expense		

b. Balance Sheet:**Current Assets:**

Inventory of premiums (\$7,920 – \$3,960)	\$3,960
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Current Liabilities:

Estimated liability for premiums	2,520
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Income Statement:

Sales revenue	\$396,000
Less: Premium expense (\$3,960 + \$2,520)	(6,480)

c. Moleski followed the expense approach under ASPE. Had Moleski followed IFRS, the revenue approach would have been used.

LO 6,9 BT: AP Difficulty: M Time: 20 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.25

1	Liability for stamp redemptions, 12/31/22	\$13,000,000
	Cost of redemptions redeemed in 2023	<u>(6,000,000)</u>
		7,000,000
	Cost of redemptions to be redeemed in 2024	
	(\$5,200,000 x 80%)	<u>4,160,000</u>
	Liability for stamp redemptions, 12/31/23	<u><u>\$11,160,000</u></u>
2 a.	Face value of total coupons issued	\$800,000
	Redemption rate	<u>60%</u>
	Amount to be redeemed	480,000
	Handling charges (\$480,000 X 10%)	<u>48,000</u>
	Total cost	<u><u>\$528,000</u></u>
	Total cost	\$528,000
	Total payments to retailers	<u>330,000</u>
	Liability for unredeemed coupons	<u><u>\$198,000</u></u>
b.	Premium expense	<u><u>\$528,000</u></u>

EXERCISE 13.25 (CONTINUED)**3 a.**

Boxes sold	700,000
Sale price per unit related to premium	<u>X \$1.00</u>
Unearned revenue recorded in 2023	<u>\$700,000</u>

Total coupons expected to be redeemed (700,000 x 60%)	420,000
Less: coupons redeemed during 2023	<u>105,000</u>
Coupons still to be redeemed, 12/31/23 ÷	315,000
Total coupons expected to be redeemed	<u>420,000</u>
% of unearned revenue to be earned after 2023 ¹	<u>75%</u>
¹ (\$315,000 / \$420,000)	

Unearned revenue recorded in 2023	\$700,000
% of unearned revenue to be earned after 2023	<u>X 75%</u>
Unearned revenue (adjusted), 12/31/23	<u>\$525,000</u>

b. Total coupons redeemed in 2023	105,000
Cost per redemption (\$6.25 – \$4.75)	<u>X \$1.50</u>
Premium expense	<u>\$157,500</u>

c.

Cash	3,150,000	
Sales Revenue (700,000 X \$3.50)		2,450,000
Unearned Revenue (700,000 x \$1.00) ...		700,000
To record cash sale		

Cash (105,000 X \$4.75)	498,750	
Premium Expense ²	157,500	
Inventory of Premiums (105,000 X \$5.00)		525,000
Accounts Payable (105,000 X \$1.25)		131,250
² (105,000 X [\$5.00 + \$1.25 - \$4.75])		
To record redemptions of coupons		

Unearned Revenue (\$700,000 - \$525,000)	175,000	
Sales Revenue		175,000
To adjust unearned revenue		

EXERCISE 13.25 (CONTINUED)**3 (continued)**

- d. An unredeemed coupon represents an obligation that arose from a past sale transaction, which may result in a transfer of assets (cash, for the freight, and inventory) upon coupon redemption. The company has little or no discretion to avoid the obligation. Therefore, the unredeemed coupons meet the definition of a liability. Their fair value should be represented as unearned revenue on the balance sheet because a coupon was offered with each box of pie mix purchased, and a portion of the sales revenue related to each box of pie mix sold was related to the promotional coupon that was included with each box. The unredeemed coupons represent unearned revenue to be settled by delivery of goods in the future, upon coupon redemption.

LO 6 BT: AP Difficulty: M Time: 30 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.26**a. Balance Sheet:****Current Liabilities:**

Estimated liability for premiums ¹	\$600
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Income Statement:

Premium expense	\$1,500
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¹ Total estimated redemptions of stickers, at cost (25,000 X 10% ÷ 10 X \$10) X 60%	\$1,500
Stickers redeemed in current year (25,000 x 6% ÷ 10 x \$10) X 60%	<u>900</u>
Estimated future redemptions, at cost	<u>\$ 600</u>

b.

Premium Expense.....	900	
Inventory of Premiums		900
(cost of free product given in exchange when stickers were redeemed)		
 Premium Expense.....	 600	
Estimated Liability for Premiums		600
(liability for unredeemed stickers)		

c. Had Timo been following IFRS, the revenue approach would have been used for the premiums instead of the expense approach used under ASPE.

LO 6,9 BT: AP Difficulty: S Time: 15 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.27**a.****1. Coupon****Estimated promotion expense to be reported on income statement:**

Remaining estimated redemptions of coupons	
(50 coupons to be used in future	
X 10% discount X \$75 average sale)	\$375
Coupons already used	<u>250</u>
Total promotion expense	<u>\$625</u>

Balance sheet disclosure:

Unredeemed coupons liability	\$375
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2. Sick time**As it is possible that these amounts will be paid in the future, and there is little likelihood that the employees will resign, the full amount should be accrued.****Balance Sheet:**

Sick pay wages payable:	
(2 employees X \$200/day X 4 days X 50%)	\$800

Income Statement:**Increase to salaries and wages expense on the income statement:**

- For the sick days bonus outstanding related to the liability:	
(2 employees X \$200/day X 4 days X 50%)	\$800

EXERCISE 13.27 (CONTINUED)

- b. The customer loyalty program offers future discounts of \$10 for accumulating sales of \$250. Under ASPE, these types of programs may be evaluated as a revenue arrangement with multiple deliverables. The fair value of the award credits would be recognized as unearned revenue, a liability, with each sale. When customers redeem their award credits, the amount would be recognized as revenue.

However, not all of the awards will be redeemed, as customers may lose their card, move away, or forget to redeem their award once it is earned. Once the company has some experience, an estimation of how many award credits will be redeemed as compared to the total credits awarded to customers can be determined, and an adjustment can be made to the liability account at year end.

If the program is accounted for as a revenue arrangement with multiple deliverables, a liability must be recorded as each customer earns sales “credits” towards the \$250 total. The fair value of each credit given for each dollar of sales is \$0.04 (\$10/\$250). Therefore, each sale to a customer who is a member of the customer loyalty program must be split, with 4% of the sale being recorded as unearned revenue, and the balance as a sale in the period of the transaction. When customers accumulate \$250 in credits, and come in to receive their \$10 discounts, this amount will be recorded as a decrease in unearned revenue and an increase in sales.

LO 6 BT: AP Difficulty: M Time: 20 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.28**a. July 1, 2023**

Accounts Receivable	3,000,000	
Refund Liability (\$3,000,000 X 12%)		360,000
Sales Revenue		2,640,000
To record sales on account		

Estimated Inventory Returns ¹	204,000	
Cost of Goods Sold	1,496,000	
Inventory		1,700,000
¹ (\$1,700,000 X 12%)		
To record cost of goods sold		

b. October 3, 2023

Refund Liability	360,000	
Accounts Receivable		340,000
Sales Revenue		20,000

To record sales return

(to account for July sales returned and to adjust the original estimate of returns to reflect actual results for this year's "special").

Cost of Goods Sold ¹	11,333	
Inventory ²	192,667	
Estimated Inventory Returns		204,000
² (\$1,700,000 ÷ \$3,000,000) X \$340,000 = \$192,667		
¹ \$204,000 – \$192,667 = \$11,333		

To record inventory returns from customers

Cash	2,660,000	
Accounts Receivable		2,660,000
Collection on account		

LO 6 BT: AP Difficulty: S Time: 15 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.29

1. **The *CPA Canada Handbook for Private Enterprises* section 3290 requires that, when some amount within the range appears at the time to be a better estimate than any other amount within the range, that amount be accrued. When no amount within the range is a better estimate than any other amount, the dollar amount at the low end of the range is accrued and the dollar amount of the high end of the range is disclosed. Since the information indicates that it is likely that a liability has been incurred at December 31, 2023, and a range of possible amounts can be reasonably determined, the criteria for recording a liability are met. In this case, therefore, Sugarpost Inc. would report a liability of \$900,000 at December 31, 2023.**
2. **Su Li Corp. would not be required to make any entry. The wage increase is for the coming two years and does not relate to the current or prior years.**
- 3.a. **The loss should be accrued since both criteria (it is likely that a loss is incurred and the amount of the loss can be reasonably determined) for recording the contingency are met. Given that the loss is covered by insurance, except for the \$500,000 deductible, only the \$500,000 should be accrued.**
- b. **Under IFRS requirements, the recognition criterion used to determine the chance of occurrence of a confirming future event is “probable,” which is interpreted to mean “more likely than not.” This is a somewhat lower hurdle than the “likely” required under ASPE. If the amount cannot be measured reliably, no liability is recognized under IFRS either; however, the standard indicates that it is only in very rare circumstances that this would be the case. If recognized, IAS 37 requires the best estimate and an “expected value” method to be used to measure the liability. As in part a. above, this would be the \$500,000 deductible.**

EXERCISE 13.29 (CONTINUED)

- 4. This is a gain contingency because the amount to be received will be in excess of the carrying amount of the plant. Under ASPE, gain contingencies are not recorded and are disclosed in the notes only when the probabilities are high that a gain contingency will become a reality.**

LO 7,9 BT: C Difficulty: M Time: 30 min. AACSB: None CPA: cpa-t001 CM: Reporting

EXERCISE 13.30

$$\text{a. Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{\$210,000}{\$70,000} = 3.00$$

Current ratio measures the short-term ability of the company to meet its currently maturing obligations with current assets. In this case, current assets include cash, net accounts receivable, and inventory.

$$\begin{aligned} \text{b. Acid-test ratio} &= \frac{\text{Cash} + \text{Marketable Securities} + \text{Net Receivables}}{\text{Current Liabilities}} \\ &= \frac{\$115,000}{\$70,000} = 1.64 \end{aligned}$$

Acid-test ratio also measures the short-term ability of the company to meet its current maturing obligations. However, it eliminates assets that might be slow moving, such as inventory and prepaid expenses. In this case there are no marketable securities, so only cash and accounts receivable are included as current assets.

$$\begin{aligned} \text{c. Debt to total assets} &= \frac{\text{Total Liabilities}}{\text{Total Assets}} = \frac{\$210,000}{\$430,000} \\ &= 48.84\% \end{aligned}$$

This ratio provides the creditors with some idea of the corporation's ability to withstand losses without impairing the interest of creditors.

$$\begin{aligned} \text{d. Rate of return on assets} &= \frac{\text{Net Income}}{\text{Average Total Assets}} \\ &= \frac{\$27,000}{\$430,000} = 6.28\% \end{aligned}$$

This ratio measures the return the company is earning on its average total assets and provides one indication related to the profitability of the enterprise.

EXERCISE 13.30 (CONTINUED)

$$\begin{aligned}
 \text{e.} \quad \text{Days payables outstanding} &= \frac{\text{Average Trade Accounts Payable}}{\text{Average Daily Cost of Total Operating Expenses}} \\
 &= \frac{\$70,000}{\$471,000^1/365} = 54.2 \text{ days}
 \end{aligned}$$

1

(\$420,000 + \$51,000)

This ratio measures the time it takes a company to pay its trade accounts payable and provides one indication related to the liquidity of the enterprise if the number of days exceeds the normal credit period for the industry, or if the ratio reveals an increasing trend.

LO 8 BT: AN Difficulty: S Time: 20 min. AACSB: Analytic CPA: cpa-t001 cpa-t005
CM: Reporting and Finance

EXERCISE 13.31**a.**

1. **Current ratio** =
$$\frac{\$773,000}{\$220,000 + \$20,000} = 3.22$$

2. **Acid-test ratio** =
$$\frac{\$52,000 + \$198,000 + \$80,000}{\$220,000 + \$20,000} = 1.38$$

3. **Accounts receivable turnover** =
$$\$1,640,000 \div \frac{\$80,000 + \$198,000}{2} = 11.8 \text{ times}$$

(or approximately every 31 days) $(365 \div 11.8)$

4. **Inventory turnover** =
$$\$800,000 \div \frac{\$360,000 + \$440,000}{2} = 2 \text{ times}$$

(or approximately every 183 days) $(365 \div 2)$

5. **Days payables outstanding** =
$$\frac{\$145,000 + \$220,000}{2} \div \frac{\$800,000}{365} = 83 \text{ days}$$

6. **Rate of return on assets** =
$$\$360,000 \div \frac{\$1,400,000 + \$1,630,000}{2} = 23.76\%$$

7. **Profit margin on sales** =
$$\$360,000 \div \$1,640,000 = 21.95\%$$

EXERCISE 13.31 (CONTINUED)

- b. Financial ratios should be evaluated in terms of industry peculiarities and prevailing business conditions. Although industry and general business conditions are unknown in this case, the company appears to have a relatively strong current position. The main concern from a short-term perspective is the apparently low inventory turnover and the high days payables outstanding. The two ratios may be linked when extended credit terms are provided by suppliers or if the inventory is slow-moving. The rate of return on assets and profit margin on sales are extremely good and indicate that the company is employing its assets advantageously.
- c. Unearned revenue is a liability that arises from current sales but for which some services or products are owed to customers in the future. At the time of sale, customers pay not only for the delivered product, but they also pay for future products or services. In this case, the company recognizes revenue from the current product and part of the sale proceeds is recorded as a liability (unearned revenue) for the value of future products or services that are “owed” to customers. An increase in the unearned revenue liability, rather than raising a red flag, often provides a positive signal about sales and profitability. When the sales are growing, the unearned revenue account should grow. Thus, an increase in a liability may be good news about company performance. In contrast, when unearned revenue declines, the company owes less future amounts but this also means that sales of new products may have slowed.

LO 8 BT: AN Difficulty: S Time: 25 min. AACSB: Analytic CPA: cpa-t001 cpa-t005
CM: Reporting and Finance

EXERCISE 13.32

- a.
1. $\$318,000 \div \$87,000 = 3.66$
 2. $\$820,000 \div \frac{\$200,000 + \$170,000}{2} = 4.43 \text{ times} = 82 \text{ days}$
 3. $\$1,400,000 \div \$95,000 = 14.74 \text{ times}$
 4. $365 \div 14.74 \text{ times} = 25 \text{ days}$
 5. $\$32,000 \div \$820,000 \times 365 = 14 \text{ days}$
 6. $\$285,000 \div 52,000 = \$5.48$
 7. $\$285,000 \div \$1,400,000 = 20.4\%$
 8. $\$285,000 \div \$588,000 = 48.5\%$
- b.
1. No effect on current ratio.
 2. Weaken current ratio by increasing current assets and current liabilities by the same amount.
 3. Improve current ratio by reducing current assets and current liabilities by the same amount.
 4. No effect on current ratio.
 5. Weaken current ratio by increasing current liabilities with no change to current assets.
 6. No effect on current ratio.
 7. No effect on current ratio.

LO 8 BT: AN Difficulty: M Time: 25 min. AACSB: Analytic CPA: cpa-t001 cpa-t005
CM: Reporting and Finance

TIME AND PURPOSE OF PROBLEMS

Problem 13.1

Purpose—to present the student with an opportunity to prepare journal entries for a variety of situations related to liabilities. The situations presented include purchases on account and payments on account, borrowing funds by giving a zero-interest-bearing note, sales tax, deposits, and corporate income tax. The student is also required to prepare year-end adjusting entries and to calculate sales tax two ways. A comparison of any difference between the accounting treatment under IFRS and ASPE is included.

Problem 13.2

Purpose—to present the student with an instalment note with two terms of repayment (fixed principal, fixed amount of repayment) with a current and long-term portion. The student must prepare the amortization schedule for each note and the related journal entries. The balance sheet presentation is also required to emphasize the current amounts related to the note for two consecutive year ends. The comparison of interest costs for the two sets of notes and lender preferences are also discussed.

Problem 13.3

Purpose—to provide the student with experience in calculating the amounts of various liabilities and determining the portion relating to current liabilities. The student must calculate the interest payable on bonds and notes payable, warranty liability, employee withholding amounts payable, GST payable, and deal with debit balances in the trade payables and other miscellaneous payables. The student is also required to discuss why certain items were excluded from current liabilities and which items are considered financial liabilities. Journal entries are not required. The student must also discuss debt covenants and income statement presentation of revenue from gift cards. This problem is an excellent overview of the chapter content.

Problem 13.4

Purpose—to present the student a comprehensive problem in determining various liabilities and to present their findings in writing. Issues addressed relate to asset retirement obligation, warranties, and HST.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 13.5

Purpose—to present the student with an opportunity to prepare journal entries for four weekly payrolls. The student must calculate income tax to be withheld, CPP premiums, and Employment Insurance. The student must record two pay periods where employees are on vacation. In addition, the student needs to comment on the adequacy of the disclosure of grouped liabilities on the balance sheet and grouped salary-related expenses on the income statement, taking the perspective of a banker.

Problem 13.6

Purpose—to provide the student with the opportunity to prepare journal entries for a monthly payroll. The student must calculate income tax to be withheld, CPP contributions, and Employment Insurance. The student must also calculate the total payroll tax expense for the company for the month. Analysis of the amount of payroll tax expense compared to salaries and wages expense is required. Student must comment on whether payroll taxes expense is a constant for all months of the calendar year. Finally, a proposal to convert salaried employees to contractors is discussed, along with the point of view of a potential investor for the proposal.

Problem 13.7

Purpose—to provide the student with experience in calculating bonuses under a variety of compensation plans. The student must calculate a bonus before deduction of bonus and income tax, after deduction of bonus but before deduction of income tax, and before deduction of bonus but after deduction of income tax. The student must also arrive at the classification of any balances owing, and deal with the accrual of bonus expenses when quarterly financial statements are issued by the business. A proposal for the timing of payments of the bonus is made by the recipient and the student must comment on the ethical and legal aspects of the proposal, taking the perspective of the CRA.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 13.8

Purpose—to provide the student with a comprehensive problem dealing with contingent losses. The student is required to prepare journal entries for each of four independent situations. For each situation the student must also discuss the appropriate disclosure in the financial statements. The situations presented include a lawsuit, an environmental assessment, an expropriation, and a self-insurance situation. This problem challenges the student not only to apply the guidelines set forth in *CPA Canada Handbook-Accounting*, Part II, Section 3290, but also to develop reasoning as to how the guidelines relate to each situation. The student is also required to discuss ethical issues inherent in contingent liabilities. Finally, the student must take the perspective of a potential investor and discuss the consequences of investing in a politically volatile location. A good problem to analyze the effects of Section 3290 on a variety of situations.

Problem 13.9

Purpose—to provide a problem in determining various liabilities, including advance payments, self insurance, litigation, commitments, guarantees, and loss contingencies. The student must also discuss any required disclosures. Finally, the student must look at the inherent risk of self-insurance from the perspective of a potential investor.

Problem 13.10

Purpose—to provide the student with an opportunity to prepare journal entries and balance sheet presentations for warranty costs under the cash basis and the assurance-type approach. Entries in the sales year and one subsequent year are required. The student must deal with recording differences between the amount accrued and the amount paid. The problem highlights the differences between the two methods in the accounts and on the balance sheet.

Problem 13.11

Purpose—to provide the student with a problem covering the assurance-type and service-type approaches for warranties. The student is required to prepare journal entries in the year of sale and in subsequent years as warranty costs are incurred. Also required are balance sheet presentations for the year of sale and two subsequent years. Finally, the student takes the perspective of a potential investor dealing with the risk of product recalls.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 13.12

Purpose—to present the student with a comprehensive problem in determining the amounts of various liabilities. The student must calculate (for independent situations) the warranty liability, and an estimated liability for premium claims outstanding. Journal entries are not required. A comparison of the IFRS and ASPE accounting treatment is also required. A discussion of the financial implications of a change in policy concerning unlimited returns is included. This problem should challenge the better students.

Problem 13.13

Purpose—to provide the student with a basic problem in accounting for premium offers. The student is required to prepare journal entries relating to sales, the purchase of premium inventory, and the redemption of coupons. The student must also prepare the year-end adjusting entry reflecting the estimated liability for premium claims outstanding. The student is required to prepare the entries under two different approaches; the premium redemptions are recorded as premium expense or as a decrease of the estimated liability for premiums. Statement presentation is also required.

Problem 13.14

Purpose—to present the student with a problem related to accounting for premium offers. The problem is more complicated in that coupons redeemed are accompanied by cash payments, and in addition to the cost of the premium item, postage costs are also incurred. The student is required to prepare journal entries for various transactions including sales, purchase of the premium inventory, and redemption of coupons for two years. The second year's entries are more complicated due to the existence of the liability for claims outstanding. Finally, the student is required to indicate the amounts related to the premium offer that would be included in the financial statements for each of two years and determine if the liability is financial. A comparison of the IFRS and ASPE accounting treatment is also required. This very realistic problem challenges the student's ability to account for all transactions related to premium offers.

TIME AND PURPOSE OF PROBLEMS (CONTINUED)

Problem 13.15

Purpose—the student must calculate warranty expense, warranty liability, premium expense, inventory of premiums, and estimated liability for premiums. The student is also required to discuss how the accounting would be affected if the warranty were treated under the service-type warranty approach.

Problem 13.16

Purpose—to provide the student with experience in guarantees of indebtedness and contingencies. The student is required to provide journal entries related to guarantees and loss contingencies and to identify related disclosures. The situation is complicated by receivables from the guaranteed customer and revenue recognition issues related to the guarantee fee. A challenging problem.

Problem 13.17

Purpose—to present the student with the problem of determining the proper amount of, and disclosure for, two contingent losses due to lawsuits. The student is required to prepare journal entries and notes. The student is also required to discuss any liability incurred by the company due to the risk of loss from lack of insurance coverage. The student is required to take the position of the manager and describe both how the assessment of the likelihood of the outcome of each case is arrived at and the measurement of the amount of the probable judgement.

SOLUTIONS TO PROBLEMS

PROBLEM 13.1

a.	February 6		
Purchases.....		46,000	
GST Receivable (\$46,000 X .05)		2,300	
Accounts Payable			48,300
	February 20		
Accounts Payable		48,300	
Cash			48,300
	April 1		
Vehicles (\$50,000 X 1.07).....		53,500	
GST Receivable (\$50,000 X .05)		2,500	
Cash			11,000
Notes Payable			45,000
	May 1		
Cash		83,000	
Notes Payable			83,000
	June 30		
Income Tax Expense		19,000	
Cash			19,000
	August 14		
Dividends (or Retained Earnings)		13,000	
Dividends Payable			13,000
	September 10		
Dividends Payable		13,000	
Cash			13,000
	December 5		
Cash		750	
Refund Liability			750

PROBLEM 13.1 (CONTINUED)

a. (continued)

December 10		
Furniture and Fixtures (\$8,000 X 1.07)	8,560	
GST Receivable (\$8,000 X .05)	400	
Accounts Payable		8,960

December 31		
Cash	88,480	
Sales Revenue		79,000
Sales Tax Payable (\$79,000 X .07).....		5,530
GST Payable (\$79,000 X .05)		3,950
To record cash sales		

December 31		
Rent Expense ¹	4,870	
Rent Payable		4,870
¹ (\$2,500 + [3% X \$79,000])		
Note no GST recorded on an accrual		
To accrue rent expense		

December 31		
Land Improvements	46,000	
Asset Retirement Obligation		46,000
To record asset retirement obligation		

December 31		
Income Tax Expense	19,000	
Cash		19,000
To record payment of income tax expense		

December 31		
Income Tax Expense ²	3,000	
Income Tax Payable		3,000
² (\$205,000 X 20%) – (\$19,000 X 2)		
To accrue income tax expense		

PROBLEM 13.1 (CONTINUED)

a. (Continued)

December 31		
Interest Expense ($\$45,000 \times 8\% \times 9/12$)	2,700	
Interest Payable		2,700
To accrue interest expense		

December 31		
Interest Expense ($\$9,000 \times 8/12$)	6,000	
Notes Payable		6,000
To accrue expense on non-interest-bearing note		

b.	Current Liabilities:	
	Accounts Payable	\$8,960
	Notes Payable	45,000
	Interest Payable	2,700
	Notes Payable	89,000
	Sales Tax Payable	5,530
	GST Payable ³	0
	Rent Payable	4,870
	Income Tax Payable	3,000
	Refund Liability	750
	Total Current Liabilities	<u>\$159,810</u>

³Net GST:

GST Payable Dec. 31 sales entry	<u>\$3,950</u>
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GST Receivable Feb. 6 inventory purchase .	\$2,300
April 1 Truck purchase	2,500
Dec. 10 Furniture purchase	400
Total GST Receivable	<u>\$5,200</u>

Net GST claim for refund	<u>\$1,250</u>
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There is a legal right to offset the GST Payable against the GST Receivable. The net amount is reported as a current asset of \$1,250 on the SFP.

PROBLEM 13.1 (CONTINUED)

- c. As a lender of money, the banker is interested in the priority his/her claim has on the company's assets relative to other claims. Close examination of the liability section and the related notes discloses amounts, maturity dates, collateral, subordinations, and restrictions of existing contractual obligations, all of which are important to potential and existing creditors. The assets and earning power are likewise important to a banker considering a loan.
- d. Current liabilities are obligations whose liquidation is reasonably expected to require the use of existing resources properly classified as current assets, or the creation of other current liabilities.
- e. A liability is an obligation that arises from past transactions or events, which may result in a transfer of assets or provision of services.

Under IFRS, for a liability to exist, the following criteria must all be satisfied:

1. the entity has an obligation (that is, a duty or responsibility to others that it has no practical ability to avoid).
2. the liability has the potential to require the transfer of an economic resource or exchange economic resources with another party on unfavourable terms.
3. the obligation is a present obligation that exists as a result of past events.

Under ASPE, the three essential characteristics of liabilities are:

1. They embody a duty or responsibility to others.
2. The entity has little or no discretion to avoid the duty.
3. The transaction or event that obliges the entity has already occurred.

The potential transfer of an economic resource does not have to be certain, or even likely, under IFRS. Under IFRS, a present obligation can exist even if it cannot be enforced until some date in the future.

LO 2,3,5,9 BT: AP Difficulty: S Time: 50 min. AACSB: None CPA: cpa-t001 CM: Reporting

PROBLEM 13.2

a.

Date	Payment	Interest (5%)	Principal repayment	Carrying Amount of Note
Jan. 1, 2023				\$85,000
Jan. 1, 2024	\$23,971	\$4,250	\$19,721	65,279
Jan. 1, 2025	23,971	3,264	20,707	44,572
Jan. 1, 2026	23,971	2,229	21,742	22,830
Jan. 1, 2027	23,971	1,141	22,830	0
Total	<u>\$95,884</u>	<u>\$10,884</u>	<u>\$85,000</u>	

Using a financial calculator:

PV	?	Yields \$ 84,999.98
I	5%	
N	4	
PMT	\$ (23,971)	
FV	0	
Type	0	

Using a financial calculator:

PV	\$ 85,000	
I	? %	Yields 5.0 %
N	4	
PMT	\$ (23,971)	
FV	0	
Type	0	

PROBLEM 13.2 (CONTINUED)

a. (continued)

Using Excel: =PV(rate,nper,pmt,fv,type)

The screenshot shows the 'Function Arguments' dialog box for the PV function. The arguments are: Rate = .05, Nper = 4, Pmt = -23971, Fv = 0, and Type = 0. The formula result is 84999.97954. The description states: 'Returns the present value of an investment: the total amount that a series of future payments is worth now. Type is a logical value: payment at the beginning of the period = 1; payment at the end of the period = 0 or omitted.'

Argument	Value	Result
Rate	.05	= 0.05
Nper	4	= 4
Pmt	-23971	= -23971
Fv	0	= 0
Type	0	= 0

Formula result = 84999.97954

[Help on this function](#) OK Cancel

Result: \$84,999.98

OR

Excel formula =RATE(nper,pmt,pv,fv,type)

The screenshot shows the 'Function Arguments' dialog box for the RATE function. The arguments are: Nper = 4, Pmt = -23971, Pv = 85000, Fv = 0, and Type = 0. The formula result is 0.049999896. The description states: 'Returns the interest rate per period of a loan or an investment. For example, use 6%/4 for quarterly payments at 6% APR. Type is a logical value: payment at the beginning of the period = 1; payment at the end of the period = 0 or omitted.'

Argument	Value	Result
Nper	4	= 4
Pmt	-23971	= -23971
Pv	85000	= 85000
Fv	0	= 0
Type	0	= 0

Formula result = 0.049999896

[Help on this function](#) OK Cancel

Result: 5%

PROBLEM 13.2 (CONTINUED)

b.

Jan. 1	Equipment	85,000	
2023	Notes Payable		85,000
Dec. 31	Interest Expense	4,250	
2023	Interest Payable		4,250
Jan. 1	Interest Payable	4,250	
2024	Notes Payable	19,721	
	Cash		23,971

c.

Bian Inc.			
Statement of Financial Position (partial)			
December 31, 2023			
Current Liabilities:			
Interest Payable	\$4,250		
Current portion of long-term note payable	<u>19,721</u>	\$23,971	
Long-term Liabilities			
Note Payable	85,000		
Less: current portion	<u>(19,721)</u>	\$65,279	

d.

Bian Inc.			
Statement of Financial Position (partial)			
December 31, 2024			
Current Liabilities:			
Interest Payable	\$3,264		
Current portion of long-term note payable	<u>20,707</u>	\$23,971	
Long-term Liabilities			
Note Payable	65,279		
Less: current portion	<u>(20,707)</u>	\$44,572	

PROBLEM 13.2 (CONTINUED)

e.

Bian Inc.		
Statement of Financial Position (partial)		
December 31, 2023		
Current Liabilities:		
Interest Payable ¹	\$2,125	
Current portion of long-term note payable	<u>19,721</u>	\$21,846
Long-term Liabilities		
Note Payable	85,000	
Less: current portion	<u>(19,721)</u>	\$65,279

$$^1\$4,250 \times 6/12 = \$2,125$$

- f. The fixed principal payments for each year would have been in the amount of \$21,250 ($\$85,000 \div 4$).

Date	Payment	Interest (5%)	Principal repayment	Carrying Amount of Note
Jan. 1, 2023				\$85,000
Jan. 1, 2024	\$25,500	\$4,250	\$21,250	63,750
Jan. 1, 2025	24,438	3,188	21,250	42,500
Jan. 1, 2026	23,375	2,125	21,250	21,250
Jan. 1, 2027	22,312	1,062	21,250	-
Total	<u>\$95,625</u>	<u>\$10,625</u>	<u>\$85,000</u>	

- g. The higher interest costs are incurred with the fixed payment terms in part a.
- h. As a lender, I would prefer to negotiate a fixed payment for the terms of repayment as I would collect more interest.

LO 2,3 BT: AP Difficulty: M Time: 45 min. AACSB: None CPA: cpa-t001 CM: Reporting

PROBLEM 13.3

a.

Current Liabilities:

Accounts payable (\$414,000 ¹ – \$23,000)	\$ 391,000
Liability to affiliated company	23,000
Notes payable (\$150,000 + \$200,000)	350,000
GST payable (Schedule 6)	11,900
Dividends payable	50,000
Bonus payable (75% X \$25,000)	18,750
Unearned revenue (Schedule 1)	65,750
Accrued liabilities (Schedule 2)	<u>545,749</u>
Total current liabilities	<u><u>\$1,456,149</u></u>

¹Note: The debit balances in accounts payable would be classified as current assets.

Schedule 1:

Unearned revenue, Mar. 1, 2022	\$ 95,000
New gift card purchases	22,500
Gift card redemptions	(37,500)
15% of Mar. 1, 2022 balance recognized as revenue (15% X \$95,000)	<u>(14,250)</u>
Unearned revenue, Feb. 29, 2023	<u><u>\$65,750</u></u>

Schedule 2:

Interest payable (Schedule 3)	\$ 122,709
Warranty liability (Schedule 4)	1,240
Salaries and wages payable	220,000
Employee withholdings payable (Schedule 5)	105,300
Union dues payable	21,500
Audit fee accrual	<u>75,000</u>
Total accrued liabilities	<u><u>\$545,749</u></u>

PROBLEM 13.3 (CONTINUED)

a. (continued)

Schedule 3:

Interest on the bond ($\$4,000,000 \times 7\% \times 3/12$)	\$ 70,000
Interest on Note due 04/01/23 ($\$150,000 \times 8\% \times 11/12$)	11,000
Interest on Note due 01/31/24 ($\$200,000 \times 9\% \times 1/12$)	1,500
Interest on Note due 03/15/24 ($\$500,000 \times 7\% \times 11.5/12$)	33,542
Interest on Note due 10/30/25 ($\$250,000 \times 8\% \times 4/12$)	<u>6,667</u>
Total interest payable	<u><u>\$122,709</u></u>

Schedule 4:

Warranty liability 02/28/22	\$5,700
Less warranty claims on 2021-2022 sales	<u>(4,900)</u>
Remaining warranty liability	800
Warranty liability on 2022-2023 sales for following 12 months ($\$154,000 \times 1\%$)	1,540
Less: warranty claims on 2022-2023 sales	<u>(1,100)</u>
Current warranty liability 02/29/23	<u><u>\$1,240</u></u>

Schedule 5:

EI premiums payable ($2.4 \times \$9,500$)	\$ 22,800
CPP contributions payable ($2 \times \$16,900$)	33,800
Employee income tax deductions payable	<u>48,700</u>
Employee withholdings payable	<u><u>\$105,300</u></u>

Schedule 6:

Net GST payable, 01/31/23 ($\$60,000 - \$34,000$)	\$ 26,000
Less: payment on 15 th of Feb./23	(26,000)
GST charged on February sales	39,900
GST Receivable	<u>(28,000)</u>
Net GST payable, 02/29/23	<u><u>\$11,900</u></u>

PROBLEM 13.3 (CONTINUED)

- b. All current liabilities listed with the exception of the unearned revenue, the warranty liability, the employee withholdings payable (employee income tax deductions payable, EI premiums payable, and CPP contributions payable), and GST payable are financial liabilities.

A financial liability is any liability that is a contractual obligation to deliver cash or other financial assets to another party, or to exchange financial assets or financial liabilities with another party under conditions that are potentially unfavourable to the entity. A contractual obligation refers to an agreement between two or more parties that has clear economic consequences that the parties have little, if any, discretion to avoid, usually because the agreement is enforceable at law. Contracts, and thus financial instruments, may take a variety of forms and need not be in writing.

Items such as unearned revenue and most warranty obligations are not financial liabilities because the probable outflow of economic benefits associated with them is the delivery of goods and services rather than cash or another financial asset.

GST payable and employee withholdings payable are not considered financial liabilities because they are not contractual in nature. They are created as a result of statutory requirements imposed by governments.

PROBLEM 13.3 (CONTINUED)

- c. Items excluded from current liabilities:
1. Bonds payable were excluded based on the assumption that the bonds will not be redeemed in the coming period or operating cycle, whichever is longer.
 2. Notes payable due 03/15/24 and 10/30/25 were excluded because their due date is beyond the coming period.
 3. Warranty liability for costs of 1.5% of 2022-2023 sales ($1.5\% \times \$154,000 = \$2,310$) would be shown as a long-term liability. The costs of honouring the warranty would occur beyond the coming period.
 4. Bonus payable in March 2024 ($\$25,000 \times 25\% = \$6,250$).
- d. Under ASPE, if Hrudka is not in compliance with the bank's debt covenants, the note would be reclassified as a current liability. A breach of the covenants of long-term debt gives the creditor the right to demand short-term repayment of the debt (the liability becomes payable on demand). The note can be classified as long-term only if the creditor waives in writing the covenant (agreement) requirements, or the violation has been cured within the grace period and it is likely Hrudka will not violate the covenant requirements within a year from the balance sheet date.
- e. Revenue from redeemed cards should be shown with other product sales and offset against cost of sales to accurately measure gross profit. Revenue from unredeemed gift cards do not have a related product cost and will distort the gross margin if they are included in product sales revenues. They should be shown as a separate source of revenue. Given the increasing popularity of gift cards, the revenue should be shown as an ongoing source of revenue in the income from operations section of the income statement and not as "other revenues."

PROBLEM 13.3 (CONTINUED)

- f. ASPE does not separately address the issue of non-financial liabilities, and so they are measured in a variety of ways, depending on the liability. Under IFRS, non-financial liabilities are measured initially, and at each subsequent reporting date, at the best estimate of the amount the entity would rationally pay at the date of the SFP to settle the present obligation. This is usually the present value of the resources needed to fulfill the obligation, measured at the expected value or probability-weighted average of the range of possible outcomes.

When assessing the adequacy of the Warranty Liability account balance at year-end under IFRS, management would scrutinize the historical data available to support the balance needed to satisfy future warranty claims. Using a probability-weighted average of the range of possible outcomes may result in a different required year-end balance in the account.

LO 2,3,4,6,9 BT: AP Difficulty: C Time: 55 min. AACSB: None CPA: cpa-t001 CM: Reporting

PROBLEM 13.4

a.

Cost of storage tanks	\$110,000
Asset retirement cost ($\$28,000 \times .55839$)	
[PV of \$28,000 FV ($n=10, i=6\%$)]	<u>15,635</u>
Balance in asset account, Feb. 28, 2023	<u>\$125,635</u>
 Depreciation for 2023 ($\$125,635 \div 10 \times 10/12$):	 \$10,470
 Presentation on Dec. 31, 2023 balance sheet:	
Asset cost	\$125,635
Less: Accumulated depreciation	<u>(10,470)</u>
	<u>\$115,165</u>

b.

Asset retirement obligation (ARO), Feb. 28, 2023 (from above)	\$15,635
2023 interest expense ($\$15,635 \times 6\% \times 10/12$)	<u>782</u>
Balance of ARO, December 31, 2023	16,417
2024 interest expense ($\$16,417 \times 6\%$)	<u>985</u>
Balance of ARO, December 31, 2024	17,402
2025 interest expense ($\$17,402 \times 6\%$)	<u>1,044</u>
Balance of ARO, December 31, 2025	<u>\$18,446</u>

c.

Unearned revenue recorded in 2023 ($\$970 \times 20$)	\$19,400
Portion unearned at December 31, 2023	<u>X 75%</u>
Unearned revenue, December 31, 2023	<u>\$14,550</u>

PROBLEM 13.4 (CONTINUED)

d. Warranty expense on the 2023 income statement will be \$2,700.

e.

HST collected on sales (and therefore payable to the government)	
(20 machines X \$12,000 X 15%)	\$36,000
HST paid on purchase of underground tanks (and therefore, receivable from government)	
(\$110,000 X 15%)	<u>16,500</u>
	<u>\$19,500</u>

Healy will send a cheque to the Receiver General for Canada of \$19,500 to pay its net HST liability.

f. Healy's warranty obligation represents a stand-ready obligation to provide parts and labour under the warranty agreement at any time throughout the two-year contract period. This argument may support straight-line recognition of warranty revenue over the two-year contract term. On the other hand, if historical evidence indicates that warranty services are usually provided later in the two-year warranty period, a higher proportion of warranty revenue is actually earned in the later years of the contract period, and a higher proportion of warranty revenue should be recognized later in the contract. This would result in lower warranty revenue and net income in year 1, and a higher unearned revenue liability balance at the end of year 1.

PROBLEM 13.4 (CONTINUED)

f. (continued)

In this case, the company's 25% estimate of warranty revenue being earned in 2023 looks realistic. The \$2,700 of costs incurred in 2023 is exactly 25% of the estimate of total costs over the two-year contract term. In addition, if the assumption is that the warranties have been outstanding, on average, for half a year in 2023, they will be outstanding also for a full year in 2024 and the remaining half year in 2025. This supports an assumption of being earned evenly over the two-year warranty period.

A potential investor should be aware that accounting for warranties affects liabilities on the SFP, as well as revenue and net income on the income statement, for multiple periods. If unsupported or biased assumptions are used in accounting for warranties, the resulting financial statements may not reflect the appropriate financial position or performance of the company.

LO 2,3,5,6 BT: AP Difficulty: M Time: 35 min. AACSB: None CPA: cpa-t001 CM: Reporting

PROBLEM 13.5**a. Entries for Payrolls 1 and 4 (individually)**

Salaries and Wages Expense ¹	3,640.00
Employee Income Tax Deductions	
Payable (10% X \$3,640)	364.00
EI Premiums Payable ²	57.51
CPP Contributions Payable ³	198.38
Union Dues Payable (1% X \$3,640).....	36.40
Cash	2,983.71

To record payroll

$$^1\$450 + \$610 + \$550 + \$1,250 + \$780 = \$3,640$$

$$^2 \text{ EI Premiums} = \$3,640 \times 1.58\% = \$57.51$$

$$^3 \text{ CPP Contributions} = \$3,640 \times 5.45\% = \$198.38$$

Payroll Tax Expense	278.89
EI Premiums Payable (1.4 X \$57.51)	80.51
CPP Contributions Payable	198.38

To record employer share for payroll tax expense

Entries for Payrolls 2 and 3 (individually)

Vacation Wages Payable ⁴	2,310.00
Salaries and Wages Expense (\$550 + \$780)	1,330.00
Employee Income Tax Deductions	
Payable (10% X \$3,640)	364.00
EI Premiums Payable	57.51
CPP Contributions Payable	198.38
Union Dues Payable (1% X \$3,640).....	36.40
Cash	2,983.71

$$^4(\$450 + \$610 + \$1,250)$$

To record payroll

Payroll Tax Expense	278.89
EI Premiums Payable (1.4 X \$57.51)	80.51
CPP Contributions Payable	198.38

To record employer share for payroll tax expense

PROBLEM 13.5 (CONTINUED)**b. Monthly Remittance to Receiver General**

Employee Income Tax Deductions Payable ⁵	1,456.00	
EI Premiums Payable ⁶	552.08	
CPP Contributions Payable (\$198.38 X 8)	1,587.04	
Cash		3,595.12
⁵ (\$364.00 X 4)		
⁶ [(\$57.51 X 4) + (\$80.51 X 4)]		

c. Vacation Entitlement for August

Salaries and Wages Expense	397.60	
Vacation Wages Payable		397.60
\$3,640 X 2 weeks X 4% = \$291.20		
\$1,330 X 2 weeks X 4% = <u>106.40</u>		
<u>\$397.60</u>		

- d. As Sultanaly's banker I do not object to the presentation adopted for salaries, wages, and related expenses, nor for the accrued liabilities. A certain level of grouping to reduce details is perfectly acceptable and likely useful. It is fairly standard to accrue vacation entitlement at the rate of 4% and the statutory deductions are well known and could easily be estimated to arrive at a gross pay amount. Should details in either groupings of accounts become necessary, I would not hesitate to request the detail from the bank's client.

LO 4 BT: AP Difficulty: M Time: 35 min. AACSB: None CPA: cpa-t001 CM: Reporting

PROBLEM 13.6

a.

Name	Earnings to Oct. 31	1 st week of Nov. Earnings	Income Tax Deducted	CPP	EI	Union Dues
L. Meloche	\$36,120	\$ 840	\$ 126	\$ 45.78	\$13.27	\$8.40
P. Groot	33,540	780	117	42.51	12.32	7.80
D. Beaux	54,180	1,260	189	68.67	19.91	12.60
C. Regier	6,000	1,000	150	54.50	15.80	10.00
Total	<u>\$129,840</u>	<u>\$3,880</u>	<u>\$582</u>	<u>\$211.46</u>	<u>\$61.30</u>	<u>\$38.80</u>

Salaries and Wages Expense	3,880.00	
Employee Income Tax		
Deductions Payable		582.00
EI Premiums Payable		61.30
CPP Contributions Payable		211.46
Union Dues Payable		38.80
Cash		2,986.44

b. Payroll Tax Expense	297.28	
EI Premiums Payable (1.4 X \$61.30)...		85.82
CPP Contributions Payable		211.46

c. Employee Income Tax Deductions		
Payable.....	582.00	
EI Premiums Payable (\$61.30 + \$85.82) .	147.12	
CPP Contributions Payable ¹	422.92	
Cash		1,152.04
¹ (\$211.46 + \$211.46)		

Union Dues Payable	38.80	
Cash		38.80

PROBLEM 13.6 (CONTINUED)

d. Salaries and Wages Expense	\$3,880.00
Payroll tax expense	<u>297.28</u>
Total cost for first week of November 2023	<u>\$4,177.28</u>
Percentage of payroll tax expense to gross pay	7.7%

Later in the calendar year, some employees will have reached the maximum amount of contributions to the CPP and EI programs, as will soon be the case for D. Beaux above. Consequently, the payroll tax expense will be higher at the beginning of the calendar year, or at the beginning of the employment of a new employee and lower at the end of the calendar year, assuming employees earn more than \$56,300 per year for EI and \$61,600 for CPP calculation purposes.

- e. As a potential investor, I would likely not be fooled by the reclassification of labour costs. I would be concerned with the shift from salaried employees to contract services provided by the same employees. My first concern would be with the Canada Revenue Agency (CRA), which keeps a close eye on employers who are mischaracterizing their relationships with employees in order to save costs on payroll expenses, including CPP and EI, or for vacation pay or parental leave entitlements and possibly also additional benefit costs for such plans as medical and dental coverage. Bayview would be responsible for any penalties and unpaid payroll tax CRA would deem should have been remitted. My second concern would be with employee loyalty. Since Bayview would not be perceived as a long-term employer and could lay off employees on short notice with few consequences, employees would be more likely to look elsewhere for employment, causing high turnover of staff at Bayview. I would also question the lack of accrual for severance packages. This is legally required and its absence could lead to lawsuits from former employees.

LO 4 BT: AP Difficulty: M Time: 45 min. AACSB: Ethics CPA: cpa-t001 cpa-e001 CM: Reporting and Ethics

PROBLEM 13.7

a.

(B = bonus; T = tax)

1.

$$\begin{aligned} B &= 0.12 (\$250,000) \\ B &= \$30,000 \\ T &= .30 (\$250,000 - \$30,000) \\ T &= \$66,000 \end{aligned}$$
2.

$$\begin{aligned} B &= 0.12 (\$308,000 - B) \\ B &= \$36,960 - .12B \\ 1.12B &= \$36,960 \\ B &= \$33,000 \\ T &= 0.30 (\$308,000 - \$33,000) \\ T &= \$82,500 \end{aligned}$$
3.

$$\begin{aligned} B &= 0.12 (\$350,000 - T) \\ T &= 0.30 (\$350,000 - B) \\ B &= 0.12 [\$350,000 - 0.30 (\$350,000 - B)] \\ B &= 0.12 (\$350,000 - \$105,000 + .3B) \\ B &= \$29,400 + .036B \\ 0.964B &= \$29,400 \\ B &= \$30,497.93 \\ T &= .30 (\$350,000 - \$30,497.93) \\ T &= \$95,850.62 \end{aligned}$$

- b. Any outstanding bonus payable to Ms. Shen would be classified as a current liability on the SFP for all three years since the quarterly payments are made within one year of the fiscal year end in which the bonus was earned.
- c. Using the formulas and based on the best possible information at hand concerning the financial performance of the business, a pro-rated estimate would be made of the annual bonus for the first three quarters of the fiscal year and a final accrual would be made on the final results for the fourth quarter of the fiscal year.

PROBLEM 13.7 (CONTINUED)

- d. There would be no difference in the accounting treatment of Huang's bonus to Ms. Shen had IFRS been followed.
- e. 1. From the perspective of the CRA, advances on bonuses can be treated as loans to the officer, in this case the President Ms. Shen. The proposal is acceptable.

From an accounting perspective, Huang will accrue the bonus payable as described in (c) above. Any balance of the bonus liability will be reduced by advances paid to Ms. Shen. The net amount of any balances would be disclosed separately in the current assets or liability section of the SFP.

2. Ms. Shen's proposal is ethical. The proposal is not to evade tax but to postpone tax and it is a reasonable approach to tax planning.

LO 4,9 BT: AN Difficulty: M Time: 40 min. AACSB: Ethics CPA: cpa-t001 cpa-e001 CM: Reporting and Ethics

PROBLEM 13.8

a.

- | | | | |
|----|--|-----------|-----------|
| 1. | Litigation Expense | 225,000 | |
| | Litigation Liability | | 225,000 |
| | | | |
| 2. | Loss Due to Environmental Clean-up ... | 500,000 | |
| | Liability for Environmental
Clean-up | | 500,000 |
| | | | |
| 3. | Loss on Expropriation ¹ | 2,245,000 | |
| | Inventory, Accumulated
Impairment Losses, (for each individual
asset that has a value assessed to be
impaired)..... | | 2,245,000 |
| | ¹ [\$5,725,000 – (40% X \$8,700,000)] | | |
| | | | |
| 4. | No entry required. | | |

b.

1. A loss and a liability have been recorded in the first case because (i) information is available prior to the issuance of the financial statements indicating it is likely that a liability has been incurred at the date of the financial statements and (ii) the amount is reasonably estimable. That is, the occurrence of the uninsured accidents during the year plus the outstanding injury suits and the legal counsel's estimate of probable loss require recognition of a loss contingency.
- No journal entry is recorded in the case of the \$60,000 injury suit since it is considered unlikely that a liability has been incurred at the date of the financial statements. If the amount were considered material, it would be desirable to disclose the existence of the lawsuit in the notes to the financial statements.

PROBLEM 13.8 (CONTINUED)

b. (continued)

2. A loss and a liability have been recorded because information is available prior to the issuance of the financial statements that indicates it is likely that a liability has been incurred at the date of the financial statements. Under ASPE, where a range of possible amounts is determined and no one amount within the range is more likely than another, the bottom of the range is usually accrued with the amount of the remaining exposure disclosed in the notes.
3. An entry to record a loss and to establish reduced asset values due to threat of expropriation is necessary because the expropriation is imminent as evidenced by the foreign government's communicated intent to expropriate, and the prior settlements for properties already expropriated. Enough evidence exists to reasonably estimate the amount of the probable loss resulting from the impairment of assets at the balance sheet date. The amount of the loss is measured by the excess of the carrying amount of the assets over the expected compensation. At the time the expropriation occurs, the related assets are written down or written off and any differences between the amount received and the reduced asset values will be adjusted to the Loss from Expropriation. In this case, it is asset values that have been impaired, not an additional liability that has been incurred. If there is significant uncertainty about which specific assets are affected, general allowance accounts (contra asset accounts) could be credited for each general category of assets.

PROBLEM 13.8 (CONTINUED)**b. (continued)**

4. Even though Sahoto's chemical product division is uninsurable due to high risk and has sustained repeated losses in the past, as at the balance sheet date, no assets have been impaired or liabilities incurred nor is an amount reasonably estimable. Therefore, this situation does not satisfy the criteria for recognition of a loss contingency. Also, unless a casualty has occurred or there is some other evidence to indicate impairment of an asset prior to the issuance of the financial statements, there is no disclosure required relative to a loss contingency. The absence of insurance does not of itself result in the impairment of assets or the incurrence of liabilities. Expected future injuries to others or damage to the property of others, even if the amount is reasonably estimable, does not require recording a loss or a liability. The cause for loss or litigation or claim must have occurred on or prior to the balance sheet date and the amount of the loss must be reasonably estimable in order for a loss contingency to be recorded. Disclosure is required when one or both of the criteria for a loss contingency are not satisfied and there is a reasonable possibility that a liability may have been incurred or an asset impaired, or, it is probable that a claim will be asserted and there is a reasonable possibility of an unfavourable outcome.
- c. In contingencies related to legal proceedings, the accrual for contingencies and the related disclosure can be construed as an admission of guilt and could weaken the company's position. Company's management has to balance the need for full disclosure with the need for careful management of the legal proceedings and protecting shareholders' interests by avoiding costly lawsuit damages. The ethical issues also involve the interpretation of terms such as "likely" and "reasonably estimable" in determining when and how much is shown on financial statements.

PROBLEM 13.8 (CONTINUED)

- d. As a potential investor, I might find the consequences of management's past investment decisions to have been less than ideal. This would be particularly true with the benefit of hindsight. Claiming negligence on the part of the board of directors, however, is another matter. Management would have studied the potential financial consequences of locating in a politically volatile location and the past history of expropriations experienced by other firms. The decision to go ahead with the investment would have been reported and disclosed in the financial statements. The decision to absorb this risk on the basis of a cost-benefit analysis warns the financial statement user of the potential for losses in the future. As a potential investor, I would not view the choice as negligent on the part of the board of directors.

LO 5,7 BT: AP Difficulty: M Time: 50 min. AACSB: None CPA: cpa-t001 CM: Reporting

PROBLEM 13.9**a. ASPE**

- | | | | |
|----|--|---------|---------|
| 1. | Unearned Revenue | 400,000 | |
| | Sales Revenue | | 400,000 |
| | To record subscriptions earned during 2023 | | |

Carrying amount balance of liability account at 12/31/23	\$2,300,000
Adjusted balance (\$600,000 + \$500,000 + \$800,000)	<u>1,900,000</u>
Credit to Sales Revenue account	<u>\$ 400,000</u>

2. No entry should be made to accrue for an expense, because the absence of insurance coverage does not mean that an asset has been impaired or a liability has been incurred as at the balance sheet date. The company may, however, appropriate retained earnings for self-insurance as long as actual costs or losses are not charged to the appropriation of retained earnings and no part of the appropriation is transferred to income. Appropriation of retained earnings and/or disclosure in the notes to the financial statements are not required, but are recommended.

- | | | | |
|----|---|---------|---------|
| 3. | Litigation Expense | 300,000 | |
| | Litigation Liability | | 300,000 |
| | To record estimated minimum damages
on breach-of-contract litigation | | |

Note disclosure would also be required indicating the nature of the loss contingency and the exposure to loss in excess of the amount recorded.

PROBLEM 13.9 (CONTINUED)**a. (continued)**

4. No entry should be made for this loss contingency, because it is not likely that an asset has been impaired or a liability has been incurred and the loss cannot be reasonably estimated as at the balance sheet date. The company must however disclose the guarantee in the notes to its financial statements, even if the likelihood of loss is remote. The note disclosure should include the nature of the guarantee, the maximum potential amount of future payments, the nature and extent of any recourse provisions, and the carrying amount of any liability.
5. No entry should be made since it does not represent a liability at the balance sheet date. The company should have a note disclosure for this contractual obligation since it represents a major capital expenditure commitment.
6. No entry should be made for this loss contingency, because it is not likely that an asset has been impaired or a liability has been incurred and the loss cannot be reasonably estimated as at the balance sheet date. The loss contingency should be disclosed in the notes to the financial statements.

PROBLEM 13.9 (CONTINUED)**b. IFRS**

IAS 37 would be similar to the ASPE standard except that under IAS 37, provisions are required for situations where it is “probable” or “more likely than not” that a present obligation exists. This is a somewhat lower hurdle than the “likely” required under ASPE. If the amount cannot be measured reliably, no liability is recognized under IFRS either; however, the standard indicates that it is only in very rare circumstances that this would be the case. If recognized, IAS 37 requires that the best estimate and an “expected value” method be used to measure the liability. This approach assigns weights to the possible outcomes according to their associated probabilities when measuring the amount of the provision, if a range of possible amounts is available.

- c. As a potential investor, I might find the future adverse consequences of the decision made by Ramirez to become self-insured as negligent behaviour on the part of the board of directors. However, presumably management would have studied the potential financial consequences of self insurance and would have reported and disclosed the decision in the notes to the financial statements. Disclosing the decision to absorb this risk on the basis of a cost-benefit analysis warns the financial statement user of the potential for losses in the future. As a potential investor, I would not view the choice as negligent on the part of the board of directors if it was properly studied by management and fully disclosed.

LO 6,7,9 BT: AP Difficulty: M Time: 40 min. AACSB: None CPA: cpa-t001 CM: Reporting

PROBLEM 13.10

a.	Cash (400 X \$2,500)	1,000,000	
	Sales Revenue		1,000,000
b.	Cash (400 X \$2,500)	1,000,000	
	Sales Revenue		1,000,000
	To record cash sales		
	Warranty Expense ¹	136,000	
	Warranty Liability		136,000
	¹ (400 X [\$155 + \$185])		
	To accrue warranty expense		
c.	No liability would be disclosed under the cash basis method, with respect to future costs due to warranties on past sales.		
d.	Current Liabilities:		
	Warranty Liability		<u>\$68,000</u>
	Long-term Liabilities:		
	Warranty Liability		<u>\$68,000</u>
e.	Warranty Expense	61,300	
	Inventory		21,400
	Salaries and Wages Payable		39,900
f.	Warranty Liability	61,300	
	Inventory		21,400
	Salaries and Wages Payable		39,900

PROBLEM 13.10 (CONTINUED)

- g. The assurance-type approach results in matching of warranty costs with the revenues that generate them. The cash basis would be acceptable only where the warranty costs are immaterial or when the warranty period is relatively short. This is not the case for Brooks. Increasingly today, the asset and liability view and faithful representation drive the accounting model, resulting in the bifurcation or separation of the proceeds received into two or more revenue amounts for the various deliverables promised. This is referred to as the service-type warranty approach.
- h. Higher than predicted warranty expenditures will cause the Warranty Liability account to have an understated balance that will not be sufficient for future warranty obligations. Management must review actual warranty claims experience against the estimated warranty liability balances in order to adjust the rate used to record warranty expense in current and future years. The discrepancy is treated as a change in an accounting estimate and is applied to current and future periods. In 2025, Brook's management would have to record a larger warranty expense in order to more accurately measure the Warranty Liability.

LO 6,7,10 BT: AP Difficulty: S Time: 30 min. AACSB: None CPA: cpa-t001 CM: Reporting

PROBLEM 13.11

a.	Cash	279,300	
	Sales Revenue (300 X \$850).....		255,000
	Unearned Revenue (270 X \$90) ..		24,300
	To record cash sales		
	Warranty Expense (300 X \$25).....	7,500	
	Warranty Liability		7,500
	To accrue warranty expense		
b.	Current Liabilities:		
	Warranty Liability		<u>\$ 7,500</u>
	Long-term Liabilities:		
	Unearned Revenue		<u>\$24,300</u>
c.	Warranty Liability	7,350	
	Inventory.....		4,410
	Salaries and Wages Payable.....		2,940
	To record settlement of warranty claims		
	Warranty Liability (\$7,500 - \$7,350) ...	150	
	Warranty Expense		150
	To adjust warranty liability balance		
d.	Current Liabilities:		
	Unearned Revenue ¹		<u>\$ 8,100</u>
	Long-term Liabilities:		
	Unearned Revenue		<u>\$16,200</u>

¹ The extended warranty revenues are expected to be earned evenly over the warranty period ($\$24,300 / 3 = \$8,100$).

PROBLEM 13.11 (CONTINUED)

- | | | | |
|----|--|-------|-----------------|
| e. | Unearned Revenue..... | 8,100 | |
| | Warranty Revenue..... | | 8,100 |
| | To remeasure unearned revenue | | |
| | Warranty Expense | 5,000 | |
| | Inventory..... | | 2,000 |
| | Salaries and Wages Payable..... | | 3,000 |
| | To record settlement of warranty claims | | |
| f. | Current Liabilities: | | |
| | Unearned Revenue | | <u>\$ 8,100</u> |
| | Long-term Liabilities: | | |
| | Unearned Revenue | | <u>\$ 8,100</u> |
| g. | The costs incurred for product recalls are not included in the liability for warranties accounted for using the assurance-type method. Warranty claims are initiated by users for defects in products, whereas in the case of product recalls, the manufacturer initiates the offer to replace or repair all products. | | |

Product recalls occur when faults are found in products that can result in harm or injury to all users. When products are recalled, the business is required to correct or repair the faulty equipment or refund the consumer for the purchase of the recalled product. At the point of sale of the product, the event that causes the recall is considered remote. Businesses are not required to accrue for this contingency, unless, because of the nature of the product and the history of recalls in the past, the company can reasonably measure a likely amount that will need to be paid to satisfy recalls. This could be the case, for example, in the auto industry for a normal level of minor recalls, where user harm or negligence on the part of the manufacturer is not involved.

PROBLEM 13.11 (CONTINUED)

g. (continued)

Product recalls involve costs that are far greater than the costs involved in honouring individual warranties. Although recalls may be infrequent, they generally have a substantial impact on the financial performance of the business. If the business accepts an imperfect product design that is unlikely to affect the performance of the product and not cause any harm, it may ignore the requirement to accrue for those future events.

LO 6,8 BT: AP Difficulty: M Time: 30 min. AACSB: None CPA: cpa-t001 CM: Reporting

PROBLEM 13.12

a.

Calculation of the sales price of batteries expected to be returned:

July – September sales X 8% return rate	
(\$1,800,000 + \$1,650,000 + \$2,050,000) X 8%	\$440,000
October – December sales X 10% return rate	
(\$1,425,000 + \$1,000,000 + \$900,000) X 10%	<u>332,500</u>
See also total in part b.	<u>\$772,500</u>

Estimated cost to replace batteries that have been returned as defective (measured as the sales price of batteries to be returned X cost of goods sold percentage):

The account balance in the Warranty Expense account for the period July 1 to December 31, 2023 is calculated as follows:

Estimated cost of replacing batteries related to the	
July – December sales:	
Cost to replace batteries (\$772,500 X 60%)	\$463,500
Freight cost (\$772,500 X 10%)	77,250
Less: Salvage value (\$772,500 X 14%)	<u>(108,150)</u>
See also total in part b.	432,600
Less: adjustment for the warranty liability not	
needed from expense estimate for the	
first half of the year (unadjusted balance in	
Warranty Liability account Dec. 31)	<u>(5,000)</u>
Warranty expense, July 1 – Dec. 31, 2023	<u>\$427,600</u>

PROBLEM 13.12 (CONTINUED)

- b. The amount of the accrual required in the Warranty Liability account as at December 31, 2023 is calculated as follows:

Month	Sales amount for month	% of battery returns expected	Sales price of batteries expect to be returned	Cost to replace defective batteries (= 60% + 10% – 14% = 56% of returns)	% of defective batteries remaining to be returned as at December 31, 2023	Accrual required (= cost to replace X % remaining to be returned)
July	\$1,800,000	8%	\$ 144,000	\$ 80,640	10%	\$ 8,064
August	1,650,000	8%	132,000	73,920	20%	14,784
September	2,050,000	8%	164,000	91,840	30%	27,552
October	1,425,000	10%	142,500	79,800	50%	39,900
November	1,000,000	10%	100,000	56,000	80%	44,800
December	900,000	10%	<u>90,000</u>	<u>50,400</u>	100%	<u>50,400</u>
			<u>\$772,500</u>	<u>\$432,600</u>		<u>\$185,500</u>

PROBLEM 13.12 (CONTINUED)

- c. There would be no difference in the accounting treatment under ASPE.
- d. Because the change in the warranty policy was not in effect for the fiscal year ended December 31, 2023, there would be no basis for accruing any expenses related to the accounting treatment of future warranty claims made by existing customers. Since the policy will begin April 1, 2024, soon after the release of the announcement, sales to April 1, 2024 will be given the warranty policy treatment in effect at the date of the sale.

Within the December 31, 2023 financial statement notes, a description of the estimates used in accounting for warranty claims would be disclosed. These financial statement notes would not include the basis of future estimates under the new warranty policy effective April 1, 2024. Statements and claims made by the CEO concerning the likely effect on future sales that are expected under the new policy are not required within the financial statements and are not subject to IFRS or ASPE disclosure requirements. They may also be overly optimistic. The potential shareholder should be mindful of management's tendency to be optimistic about potential future effects on sales and the related warranty expenses.

LO 6,7,9 BT: AP Difficulty: M Time: 35 min. AACSB: None CPA: cpa-t001 CM: Reporting

PROBLEM 13.13

a.

Inventory of Premiums	60,000	
Cash		60,000
To record purchase of 40,000 puppets at \$1.50 each		
Cash	1,800,000	
Sales Revenue		1,800,000
To record sales of 480,000 boxes at \$3.75 each		
Premium Expense ¹	34,500	
Inventory of Premiums		34,500
To record redemption of 115,000 coupons		
¹ (115,000 ÷ 5) X \$1.50 = \$34,500		
Premium Expense ²	23,100	
Estimated Liability for Premiums		23,100
To accrue premium expense		
Calculation: Total coupons issued in 2023		<u>480,000</u>
² Total estimated redemptions (40%)		192,000
Coupons redeemed in 2023		<u>115,000</u>
Estimated future redemptions		<u>77,000</u>
Cost of estimated claims outstanding		
(77,000 ÷ 5) X \$1.50 = \$23,100		

PROBLEM 13.13 (CONTINUED)

b.

Inventory of Premiums	60,000	
Cash		60,000
To record purchase of 40,000 puppets at \$1.50 each		

Cash	1,800,000	
Sales Revenue		1,800,000
To record sales of 480,000 boxes at \$3.75 each		

Premium Expense ³	57,600	
Estimated Liability for Premiums		57,600
To accrue premium expense		

³Calculation:

Total coupons issued in 2023	480,000
Redemption rate	X 40%
Total estimated redemptions	192,000
Number of coupons per premium	÷ 5
Number of premium claims	38,400
Cost of premium	X \$1.50
Total premium expense for the year 2023	<u>\$57,600</u>

Estimated Liability for Premiums	34,500	
Inventory of Premiums ⁴		34,500
To record redemption of 115,000 coupons		
⁴ (115,000 ÷ 5) X \$1.50 = \$34,500		

PROBLEM 13.13 (CONTINUED)

- c. The financial statement presentation would be the same for both approaches used in parts (a) and (b).

Balance Sheet:**Current Assets:**

Inventory of Premiums (\$60,000 – \$34,500)	\$25,500
---	----------

Current Liabilities:

Estimated Liability for Premiums (\$57,600 – \$34,500)	\$23,100
--	----------

Income Statement:

Sales Revenue	\$1,800,000
Less: Premium Expense	57,600

d.

Inventory of Premiums	60,000	
Cash		60,000

To record purchase of 40,000 puppets at \$1.50 each

Cash	1,800,000	
Sales Revenue (480,000 X \$3.55)		1,704,000
Unearned Revenue (480,000 X \$0.20)		96,000

To record sales and unearned revenue

Estimated number of puppets to be

awarded: $(480,000 \times 40\%) \div 5 = 38,400$

Premium revenue per award: $\$96,000 \div 38,400 \text{ puppets} = \$2.50$

Cost per award: \$1.50 purchase cost

Premium Expense ⁵	34,500	
Inventory of Premiums		34,500

⁵ $(115,000 \div 5) = 23,000 \text{ puppets}$

23,000 puppets X \$1.50 each

PROBLEM 13.13 (CONTINUED)

d. (continued)

Unearned Revenue	57,500	
Sales Revenue ⁶		57,500

⁶23,000 puppets awarded X \$2.50 = \$57,500

e.

Balance Sheet:

Current Assets:

Inventory of Premiums (\$60,000 – \$34,500)	\$25,500
---	----------

Current Liabilities:

Unearned Revenue (\$96,000 – \$57,500)	\$38,500
--	----------

Income Statement:

Sales revenue - cereal		\$1,704,000
Sales revenue - premiums	\$57,500	
Less: premiums expense	<u>34,500</u>	
Net premiums income		23,000

Alternatively, the two Sales amounts could be reported together and the cost of the premiums could be included in Cost of Goods Sold, along with the cost of the cereal.

PROBLEM 13.13 (CONTINUED)

- f. Under the expense approach in part (c), total revenue recorded in 2023 is higher than under the revenue approach in part (e). However, the expense approach triggers a larger premium expense in 2023 because the full cost of providing the premium is estimated and recorded in 2023; whereas the premium expense recorded under the revenue approach represents only expenses incurred in the current period. In 2023, net income is higher under the expense approach than under the revenue approach. Current liabilities are higher under the revenue approach than under the expense approach, due to bifurcation of the sale proceeds between the product and the premium and deferral of the revenue related to the premium, under the revenue approach.

IFRS 15 suggests that the revenue approach is more appropriate in these circumstances. Increasingly today, faithful representation and the asset and liability view of the financial statements drive the accounting model in favour of the revenue approach.

LO 6,9 BT: AP Difficulty: M Time: 45 min. AACSB: None CPA: cpa-t001 CM: Reporting

PROBLEM 13.14a. 2023

Inventory of Premiums ¹	450,000	
Cash		450,000
To record the purchase of mini piggy banks		
¹ (250,000 x \$1.80)		

Cash	868,620	
Sales Revenue ²		868,620
To record cash sales		
² (2,895,400 x \$0.30)		

Cash (\$480,000 ³ – \$120,000 ⁴)	360,000	
Premium Expense ⁵	72,000	
Inventory of Premiums (240,000 x \$1.80)		432,000
To record the redemption of wrappers		

⁵Calculation of premium expense:

240,000 banks X \$1.80 each =	\$432,000	
Postage—240,000 X \$.50 = ⁴	<u>120,000</u>	
	\$552,000	
Less: Cash received—		
240,000 X \$2.00 ³	<u>480,000</u>	
Premium expense for banks issued	<u>\$ 72,000</u>	

Premium Expense ⁶	17,400	
Estimated Liability for Premiums		17,400
To accrue premium expense for		
premium claims outstanding at 12/31/23		
⁶ (290,000 ÷ 5) X (\$1.80 + \$.50 – \$2.00) = \$17,400		

PROBLEM 13.14 (CONTINUED)

a. (continued)

2024

Inventory of Premiums ⁷	594,000	
Cash		594,000

To record the purchase of mini piggy banks
⁷(330,000 x \$1.80)

Cash	823,080	
Sales Revenue ⁸		823,080

To record cash sales
⁸(2,743,600 x \$0.30)

Cash (\$600,000 ⁹ – \$150,000 ¹⁰)	450,000	
Estimated Liability for Premiums	17,400	
Premium Expense ¹¹	72,600	
Inventory of Premiums (300,000 x \$1.80)		540,000

To record the redemption of wrappers

¹¹Calculation of premium expense:

300,000 banks X \$1.80 =	\$540,000
Postage—300,000 X \$0.50 = ¹⁰	<u>150,000</u>
	690,000

Less: Cash received—

(1,500,000 ÷ 5) X \$2.00 ⁹	<u>600,000</u>
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Premium expense for banks issued

90,000

Less: Outstanding claims at 12/31/24

charged to 2023 but redeemed in 2024	<u>17,400</u>
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Premium expense chargeable to 2024

<u>\$ 72,600</u>

Premium Expense ¹²	21,000	
Estimated Liability for Premiums		21,000

¹²(350,000 ÷ 5) X (\$1.80 + \$.50 – \$2.00) = \$21,000

To accrue premium expense

PROBLEM 13.14 (CONTINUED)

Account	Amount		Classification
	2023	2024	
Inventory of Premiums	\$18,000 ¹	\$72,000 ²	Current asset
Estimated Liability for Premiums	17,400	21,000	Current liability
Premium Expense	89,400 ³	93,600 ⁴	Selling expense

$$^1 \quad \$1.80 \times (250,000 - 240,000)$$

$$^2 \quad \$1.80 \times (10,000 + 330,000 - 300,000)$$

$$^3 \quad \$72,000 + \$17,400$$

$$^4 \quad \$72,600 + \$21,000$$

- c. The Estimated Liability for Premiums is not a financial liability since it is an obligation to customers to provide a mini piggy bank, not a contractual obligation to pay out cash or other financial assets. The fact that there are some cash amounts involved in its measurement does not make it a financial liability.
- d. The additional information that would be required to record the promotional premium program transactions using the revenue approach under IFRS would include the portion of the sales price of chocolate bars representing the performance obligation relating to the mini piggy bank premium.

LO 6,8,9 BT: AP Difficulty: M Time: 45 min. AACSB: None CPA: cpa-t001 CM: Reporting

PROBLEM 13.15

a.	
1.	Sales of musical instruments and sound equipment
	\$5,400,000
	Estimated warranty rate
	.02
	Warranty expense for 2023
	<u>\$ 108,000</u>
2.	Warranty liability —1/1/23
	\$ 136,000
	2023 warranty expense (Requirement 1)
	<u>108,000</u>
	Subtotal
	244,000
	Actual warranty costs during 2023
	<u>164,000</u>
	Warranty liability —12/31/23
	<u>\$ 80,000</u>
3.	Points issued (1 coupon/\$1 sale)
	1,800,000
	Estimated redemption rate
	<u>.60</u>
	Estimated number of points to be redeemed
	1,080,000
	Exchange rate (200 points for speakers)
	<u>÷ 200</u>
	Estimated number of speakers to be issued
	5,400
	Net cost of speakers (\$34 – \$20)
	<u>14</u>
	Premium expense for 2023
	<u>\$ 75,600</u>
4.	Inventory of premiums—1/1/23
	\$ 39,950
	Premium speakers purchased during 2023
	(6,500 X \$34)
	<u>221,000</u>
	Premium speakers available
	260,950
	Premium speakers exchanged for points
	during 2023 (1,200,000/200 X \$34)
	<u>204,000</u>
	Inventory of premiums—12/31/23
	<u>\$ 56,950</u>
5.	Estimated liability for premiums—1/1/23
	\$ 44,800
	2023 premium expense (Requirement 3)
	<u>75,600</u>
	Subtotal
	120,400
	Actual redemptions during 2023
	[1,200,000/200 X (\$34 – \$20)]
	<u>84,000</u>
	Estimated liability for premiums—12/31/23
	<u>\$ 36,400</u>

PROBLEM 13.15 (CONTINUED)

- b. Under IFRS, the warranty and premium offers are considered revenue arrangements with multiple deliverables and the service-type warranty approach is used to account for the warranties. A portion of the sales revenue from musical instruments and sound equipment, and from recorded and sheet music will have to be deferred as unearned revenue. This revenue will be recognized as revenue over the term of the warranty period and premium offer period as points are redeemed and warranties are honoured. Management will need to determine what portion of the sales price represents revenue from warranties and premiums.

When the musical instruments and sound equipment are sold, a portion of the sales price will be credited to Unearned Revenue. For the premiums, a portion of the recorded and sheet music sales will be credited to Unearned Revenue.

As warranties are claimed, a portion of the Unearned Revenue will be earned and will be transferred to the income statement. Actual warranty costs will be recorded as warranty expense.

As points for premiums are redeemed, a portion of the Unearned Revenue will be earned and will be transferred to the income statement. The premium expense (or cost of premium) will also be transferred to the income statement.

LO 6,9 BT: AP Difficulty: S Time: 40 min. AACSB: None CPA: cpa-t001 CM: Reporting

PROBLEM 13.16

a.

Cash	30,000	
Unearned Revenue.....		30,000
Accounts Receivable	15,000	
Cash		15,000
Unearned Revenue	10,000	
Service Revenue ¹		10,000
¹ (\$30,000 ÷ 3)		
Loss on Guarantee*	30,000	
Liability for Guarantee.....		30,000

* This entry is based on management's determination of the likelihood of loss in providing guarantees for Hutter. Since the collateral for the loan involves rights on unproven technology, it appears that the possibility of loss is likely. Accounts receivable was not debited since Dungannon has not yet made payment on Hutter's debt. They do not have a balance owing from Hutter for this amount.

The Service Revenue has been recognized on a straight-line basis. Company management may consider another basis more appropriate, such as an amount proportionate to the amount of debt being covered by the guarantee.

Dungannon will also need to assess the collectibility of the account receivable and include it in its bad debt expense and allowance for doubtful accounts determination as part of its adjusting entries.

PROBLEM 13.16 (CONTINUED)

b. Dungannon needs to disclose the following information related to its guarantees:

- The nature of the guarantee, how it arose, and circumstances that require the guarantor to perform under the guarantee;
- The maximum potential amount of future payments that the guarantor could be required to make, without any reduction for receivable amounts;
- The nature and extent of any recourse provisions or collateral held;
- The carrying amount of the liability, if any.

Disclosure in Dungannon's notes:

The company provides guarantees to certain customers whereby the company assumes their long-term debt in the event of non-payment to their creditors. The guarantee arrangement covers a three-year period from the date of the agreement. The maximum potential amount of future payments that the Company could be required to make is \$XXXXXX. The Company does not have any recourse provisions or collateral against the current and potential liabilities arising from these guarantees. The Company has made payments under the guarantee of \$15,000 and has accrued an additional \$30,000 for the same customer. The possibility of further loss from this customer cannot be determined at this point. All other customers under guarantee have honoured their debt arrangements and the Company believes the possibility of loss under guarantees to these other customers to be unlikely.

LO 7,8 BT: AP Difficulty: C Time: 45 min. AACSB: None CPA: cpa-t001 CM: Reporting

PROBLEM 13.17**a. 1. (1) ASPE – Section 3290**

It is likely a loss and liability have been incurred and a reasonable estimate can be made of the amount. The loss and liability should be recorded as follows:

Litigation Expense	800,000	
Litigation Liability		800,000

Note to the Financial Statements

The company is a defendant in a personal injury suit for \$4,000,000. The company is charging the year of the accident with \$800,000 in estimated losses, which represents the amount the company estimates will likely be awarded.

(2) IFRS

IAS 37 would be similar to the ASPE standard except that under IAS 37, provisions are required for situations where it is “probable” or “more likely than not” that a present obligation exists. This is a somewhat lower hurdle than the “likely” required under ASPE. If the amount cannot be measured reliably, no liability is recognized under IFRS either; however, the standard indicates that it is only in very rare circumstances that this would be the case. If recognized, IAS 37 requires that the best estimate and an “expected value” method be used to measure the liability. This approach assigns weights to the possible outcomes according to their associated probabilities when measuring the amount of the provision, if a range of possible amounts is available.

PROBLEM 13.17 (CONTINUED)

a. (continued)

2. (1) ASPE – Section 3290

Because the cause for litigation occurred before the date of the financial statements and because an unfavourable outcome is likely and reasonably estimable, Hamilton Airlines should report a loss and a liability in the December 31, 2023 financial statements. The loss and liability might be recorded as follows:

Litigation expense ¹	3,000,000	
Litigation Liability		3,000,000
¹ (\$5,000,000 X 60%)		

Note to the Financial Statements

Due to an accident that occurred during 2023, the company is a defendant in personal injury suits totalling \$5,000,000. The company is charging the year of the casualty with management's best estimate for the total expected losses, which represents the amount the company estimates will finally be awarded.

(2) IFRS

IAS 37 would be similar to the ASPE standard with the same exceptions for IAS 37 as noted in part a.(1)(2) above.

- b. Hamilton Airlines need not establish a liability for the risk of loss from lack of insurance coverage itself. *CPA Canada Handbook for Private Enterprises* Section 3290 does not require or allow the establishment of a liability for expected future injury to others or damage to the property of others even if the amount of the losses is reasonably estimable. IAS 37 mirrors the ASPE standards in this situation. The cause for a loss must occur on or before the balance sheet date for a loss contingency to be recorded. However, the fact that Hamilton is self-insured should be disclosed in a note.

PROBLEM 13.17 (CONTINUED)

- c. It is management's responsibility to prepare the financial statements. Audited financial statements are preceded by a statement of management's responsibilities in this respect, which is also reiterated in the auditor's report. Included in management's responsibility is the task of arriving at the proper accounting treatment for contingent losses. At the end of the fiscal year, management makes an assessment of the likelihood of occurrence concerning the outcome of any future event relating to the cases and applies a reasonable measurement of the dollar amount of the probable judgement or settlement out of court.

Once management's evaluation of each claim or case is arrived at, the company lawyer is contacted and asked to comment on the completeness, assessment, and measurement of all claims or possible claims. The lawyer's response to this request is provided to the auditor as evidence to support the measurement and disclosure requirements concerning all outstanding contingent liabilities.

Depending on the in-house expertise available to Hamilton Airlines, management will arrive at the estimates on its own. Should that expertise not be available, consultation with the litigation lawyer on the status of each matter will be required to perform the outcome assessment and measurement for financial reporting purposes.

LO 7,8,9 BT: AP Difficulty: M Time: 50 min. AACSB: None CPA: cpa-t001 CM: Reporting

CASE

See the Case Primer on the Student website, as well as the Summary of the Case Primer in the text. Note that the first few chapters in volume 1 lay the foundation for financial reporting decision making.

CA 13.1 ABC AIRLINES

Case Overview

The company is in a highly competitive and risky industry. The economic environment over the past few years has caused many airlines to restructure in the face of declining sales, increased competition, and falling seat prices. ABC has maintained operations by undergoing two restructurings, the most recent of which requires increases in network profitability and cutting costs. Even so, the company is in a very precarious position with a long-term debt to equity ratio of 3.2 to 1 and a current ratio of .6 to 1. Losses for the past two years have been significant at close to \$200 million each year.

Users of the financial statements will be existing creditors and shareholders who are monitoring the liquidity of the company given the ratios identified above. Employees, who are also shareholders, will be watching the statements for information about financial and job stability. This is a private company and ASPE is a constraint since users will want the most useful information. Note that as a private entity, the company may elect to follow IFRS. The company is interested in understanding any differences between IFRS and ASPE.

Management is concerned with full disclosure of the situation, due to the liquidity issues that are apparent in the financial statements and yet is also concerned with assuring the stakeholders that the company will remain operational.

CA 13.1 ABC AIRLINES (CONTINUED)

Analysis and Recommendations

The major issue is the accounting for the free flights. As already noted, these flights are similar to the Frequent Flyer Points.

One option is to treat these flights the same as the Frequent Flyer Points given that in substance they are the same. For example, the more a customer flies, the more free flights they earn.

In the notes to the financial statements for Frequent Flyer Points, ABC assumes that there is a cost to providing these free flights, which must be accrued and matched with the revenues. The revenues in question would be the revenues from the paid flights that would be recorded in the current period. The cost of the free flights should be tied to the current revenues, given that the free flights are an inducement to buy tickets and are similar to advertising costs. Also, the program creates a liability for ABC to its customers. The more customers fly, the greater the duty ABC has to them. This duty cannot be avoided as the event obligating ABC is the fact that the customers have taken flights anticipating a free flight in the future. There is a measurement issue here since not all customers will complete the requirement for a free flight, and even if they do, not all customers will take the free flight. ABC does have some history with these types of programs, and this might help with estimating costs. However, this is a new and different program. This treatment would not be used under IFRS.

Under IFRS the company could defer revenues until the future flights are taken. The full amount of revenues from the ticket sold includes the flight taken and a potential future flight. Although ASPE does not explicitly refer to these types of plans, IFRS deals with this in IFRS 15 – Revenue from Contracts with Customers. IFRS 15 requires accounting for the transaction as a performance obligation as part of a multiple element arrangement at the fair value of the possible free flight. This would decrease current revenue and be reallocated to the statement of financial position as a contract liability. The impact in the short-term is to increase the company's losses.

CA 13.1 ABC AIRLINES (CONTINUED)

When the free flights are taken by customers the revenue would be earned, which would then have a positive impact on earnings.

Prior to IFRS 15, some airlines only provided note disclosure of the program, given that there are minimal incremental costs for free flights and it is difficult to measure how many people will earn and actually take these free flights. This could result in costs related to missed revenue opportunities if a paying customer is bumped. Given increased competition, it is unlikely that the planes will always be full and ABC might mitigate this risk by limiting the free flight options to certain flights that might not normally be flying at capacity. However, the latest restructuring strategy is to increase network profitability, which means filling up each plane. Therefore, this could result in paying passengers being bumped in the future.

Conservative accounting (deferral of revenues) in this situation, along with full disclosure, would be prudent for the company for both the frequent flyer program and the “Fly 5, Fly Free” program.

INTEGRATED CASES

IC 13.1 ENVIROCOMPANY LIMITED

Case Overview

This is a public entity (shares trade on a public stock exchange); therefore, the statements must follow IFRS. The shareholders may not want the environmental issues overemphasized since this would drive the share price down. Employees likely feel the same way since they could lose their jobs if the company was forced to close. Management is likely reluctant to disclose too much for the same reasons, especially until they develop an alternative course of action that would allow the plant to continue operations and maintain profitability. Furthermore, they may be concerned that negative disclosures would reflect poor stewardship. Potential investors, on the other hand, would want full disclosure in order to assess the risks before investing, and protect themselves as well as the environment. Whatever is disclosed could be used against the company by the public “at large”.

Other users include government environmental agencies who might use the information against EL. The board of directors might resist disclosures that imply negligence or guilt since they do not wish to be held personally liable.

The controller must ensure transparency.

IC 13.1 ENVIROCOMPANY LIMITED (CONTINUED)

Analysis and Recommendations

Issue: EL's operating activities are contributing to water and air pollution to the surrounding community with chemicals that may be carcinogenic. One individual has threatened to sue, and EL's lawyers are privately acknowledging the potential for a class action suit. EL has insurance that would cover up to \$5 million in damages.

Based on a strict interpretation of GAAP, there is no liability for potential lawsuits relating to the pollutants until the company is sued. Until that time there is no basis to estimate the potential loss and to make an accrual. Likewise, until the person actually sues the company, and a court rules against the company, there is an opportunity to avoid the potential obligation (i.e., hire good lawyers, present a good defence). The event that potentially obligates the entity may be the act of polluting, the act of a neighbouring company polluting, or the act of the person getting sick and, therefore, this may have already happened. However, as noted above, the obligation has not yet been established even though the lawyers have acknowledged the potential for a class action suit. IFRS requires accrual of a potential loss if occurrence of a future event is probable (more likely than not) and measurable. In this case it does not appear that these criteria have been met.

Under ASPE, the threshold to record a liability is more conservative. The accrual of a loss is recorded if the occurrence of a future confirming event is "likely," meaning it has a high probability, and it is measurable. ASPE could be used if EL were a private company. Public knowledge of the company's financial position would not be known, but if EL uses bank financing, the bank would be kept informed and would regularly receive company financial statements. If assets are used as security for loans, and these assets are nearing the end of their useful lives, the bank would want to know the specifics of any modernization plans for the pulp and paper mill.

IC 13.1 ENVIROCOMPANY LIMITED (CONTINUED)

Note disclosure might be prudent; however, threatened lawsuits would normally not be disclosed, given the difficulty in assessing the probability that the person or others will actually sue. What about potential investors? Should management in all good conscience make this information available? Also, if management is aware that their company is responsible for pollutants that are causing birth defects and related issues, they have an ethical obligation to fix the related problems. Given the increasing onus on boards of directors to take full responsibility for the actions of the company, should they disclose the problem in order to protect themselves?

It is likely unnecessary to disclose the threatened lawsuit for the above-noted reasons (primarily the uncertainty and the fact that the loss from a potential lawsuit is not measurable). However, given that larger issue of the harmful pollutants, it could be argued that EL should disclose.

In conclusion, no disclosure is required since, at best, the threatened lawsuit is a contingent liability and it could be argued that it is unlikely that the company will suffer a material loss from it, especially since EL's insurance will cover up to \$5 million.

Issue: EL's equipment is outdated and pollutes the surrounding water and air with chemicals that have been shown to contain possible carcinogens. It is not clear if EL has an asset retirement obligation or if the assets are impaired.

Little detail is given in the case regarding whether the company has an asset retirement obligation. Under IFRS, the company would have to accrue an obligation if there was a legal obligation or a constructive obligation. While there is little information given in the case, and the old assets likely have small carrying values, the company should consider whether the assets are impaired.

IC 13.2 LANDFILL LIMITED

Case Overview

Landfill Limited (LL) is in the waste disposal business and as such, environmental concerns increase business risk. The company has many users of its financial statements. Nova Bank, which financed the acquisitions, will use the financial statements to assess cash flows. The government might use the financial statements to assess whether the company is in compliance with regulations with respect to closure and post-closure activities, etc. The financial statements will also be used by existing and potential customers to see if LL is stable and in compliance with environmental standards prior to entering into waste removal contracts. A final user is the purchaser's lawyers who will use the financial statements to perhaps assess what the company is worth in terms of negotiating a potential settlement regarding the toxins that are leaking (since LL has guaranteed toxin-free land).

The fact that the financial statements are being audited is an indication that many stakeholders are interested in reliable and relevant information about the company. As a private company, LL may use ASPE or IFRS. Management is interested in any differences between the two standards.

As the auditor, this is a new client and so the risk is greater, especially given the number of users and the potential lawsuit. Care must be taken to ensure that LL is not overstating income or net assets.

IC 13.2 LANDFILL LIMITED (CONTINUED)

Analysis and recommendations

Issue: Asset retirement obligations/impairment

Since the government regulations require capping, closure, and post-closure activities, a legal obligation exists, and a liability must be recognized as soon as measurable. The obligation would be measured at the best estimate of the expenditure required to settle the present obligation.

It is also prudent to ensure that the liability is accrued since LL must pay for cleanup where toxins are found subsequent to the sale of land. There is an additional risk here since the land sold by LL recently has been found to contain toxins.

The amount would be added to the cost of the land. The treatment would essentially be the same under ASPE and IFRS; however, the measurement might differ. Under ASPE, if there is a range of values, the company would pick the most likely estimate within the range unless this amount was not determinable. In that case the lowest amount in the range would be accrued. Under IFRS, the amount would be measured at the probability-weighted expected value.

Care should be taken to assess the existing landfill sites to ensure that the value is not impaired. The potential lawsuit represents a change in circumstances that might signal impairment.

IC 13.2 LANDFILL LIMITED (CONTINUED)**Issue:** Should LL depreciate the landfill sites.

Depreciate sites	Do not depreciate sites
- The garbage sites have a life of 20 years (finite life). - Since the sites contribute to revenues, the cost should be allocated to the period in which revenue is generated (matching). - Since varying amounts of garbage are dumped, perhaps a unit of production type method should be used. This will allow the costs to be better matched with the revenues generated. - Although the land holds its value, it is difficult to measure salvage value. - Given the potential liability for cleanup costs, the land may be worthless at the end of its life if the company does not manage the environmental issues properly. This is supported by the current lawsuit. - The depreciation would also allow for the allocation of the asset retirement obligation, which is part of the cost of the land, matching it to revenue for the appropriate period of use.	- The land has historically held its value (as long as there are no toxins present). Therefore, an estimate of salvage value might be based on past land values. - Currently, it is in the best interest of the company to deal with environmental issues and ensure that there are no toxins given that existing and future customers assess this on an ongoing basis. The bank will also watch for this since toxins will destroy the land value. - The government will assess for compliance with regulations.

Recommendation: It might be more prudent to depreciate the landfill values. Environmental standards change (and are increasing) and given the potential liability if toxins are subsequently found, the land could be rendered worthless.

IC 13.2 LANDFILL LIMITED (CONTINUED)

Issue: Potential liabilities related to land that has been sold. LL guarantees that the land is toxin-free and will pay for clean-up if toxins are subsequently found. LL recently received notification from the purchaser's lawyers that high levels of toxins have been found leaking into the water table and LL must decide how to account for these costs.

Disclose	Accrue
- The issue of toxins being discovered must at least be disclosed since this could be material. - The company has guaranteed that there are no toxins and has agreed to pay if there are. The existence of the toxins is yet to be proved. - The question is also one of measurement. Given the early stages of the notification by the lawyers, it is unlikely that the company will be able to measure the potential cost. - Disclosing or accruing a specific amount might prejudice the company's position in terms of how much is owed to the purchaser.	- The company must reflect the potential costs in the financial statements and must try to estimate these costs. The discovery of toxins is very material to users (the bank, purchaser, and potential customers). - Even though the purchaser has yet to prove the existence of toxins, it might be argued that the company has a constructive obligation, particularly since it works hard to signal that it is responsible and environmentally friendly. - IFRS requires an accrual if the obligation is probable and ASPE requires an accrual if it is likely. - Measurement may also differ under ASPE versus IFRS as noted above.

Recommendation: It would be more prudent to accrue the costs if they are measurable. The company should contact the lawyers and verify the status of this claim.

IC 13.3 CANDELABRA LIMITED

Case Overview

There is currently one major user of the financial statements, the creditors related to the bond debt. Therefore, GAAP is likely a constraint. The bond debt would imply that the company is publicly accountable if the bonds are traded in a public market, and the company would be required to follow IFRS. Alternatively, if the bonds are not publicly traded, Candelabra may chose to follow ASPE or IFRS .

Company revenues are steadily increasing and there may be pressure from the various stakeholders to preserve this trend. The bondholder is a key stakeholder give that the bond contains a debt covenant of 2:1. This ratio is particularly sensitive since the company is operating close to the covenant limit. The auditor will want to ensure full disclosure.

Analysis and recommendations

Issue: The production facility was financed by a 100-year bond that pays 5% interest annually. The bond includes a covenant that stipulates that the debt-to-equity ratio must not exceed 2:1.

This is clearly a liability since there is an obligation to deliver cash in the form of interest payments and ultimately the principal repayment.

IC 13.3 CANDELABRA LIMITED (CONTINUED)

Issue: The government introduced a system to control pollution through the issue of “carbon credits.” The carbon credits allow the company to produce a certain amount of carbon dioxide as a by-product from its production facilities. CL has been allocated a fixed number of these credits by the government at no cost. CL has also purchased several carbon credit contracts in the marketplace.

Recognize the carbon credits	Do not recognize the carbon credits
- The carbon credits represents an asset to the company since it allows the company to produce pollution without incurring a penalty. - Credits trade on a market and have a measurable value. - The credits given by the government are essentially government grants that should be reflected in the financial statements. - If recognized, is this a derivative instrument? If yes, would the credits be valued at fair value with gains/losses booked to income (note that derivatives are discussed in chapter 16)? Note that the contracts meet the definition of a derivative under IFRS, since their value changes as the supply of carbon dioxide changes, little was paid for the credits upfront, and they will likely be settled in future. Under ASPE, derivative accounting would not apply since these are not exchange-traded futures; therefore, they are not covered by Section 3856.	- There was no cost to the company for the allocated credits initially received from the government. - Under the historical cost principle there was no cost incurred. Therefore, the credits should be valued at \$0. - It may be difficult to measure this since the government-established marketplace is informal and may not have many transactions.

Recommendation: These represent an asset to the company. Therefore, in the interest of transparency, Candelabra should recognize the carbon credits. Since the credits trade on a market and meet the definition of a derivative, they should be valued at fair value (which appears to be measurable) if IFRS is followed. Note that recognition of positive value will improve the debt-to-equity ratio. If ASPE is followed, recognize the asset as a government grant, but do not revalue it subsequently.

IC 13.3 CANDELABRA LIMITED (CONTINUED)

Issue: CL is investigating diverting excess carbon dioxide to an underground cave that is situated on company-owned property. Currently, CL has spent a significant amount of money to determine if it can divert and store the extra carbon dioxide it produces. The engineers working on the project are still not convinced this type of storage is workable on a larger scale. The company has started to store some excess carbon dioxide on a test basis.

Capitalize the research costs	Expense the research costs
- This diversion and storage process may become valuable if it is feasible (future benefit). - The company is already storing carbon dioxide on a test basis so one could argue that it is already feasible. - There is a strong motivation for the engineers to succeed, since the company produces significant amounts of carbon dioxide and will otherwise have to pay to purchase carbon credits. Also there has been a significant amount of funds committed to this project. The company has a vested interest in its success and reaching the completion stages.	- The project has not yet been deemed feasible as per the engineers. - This is clearly a matter of judgement and there is significant uncertainty. - There is no evidence that future benefits exist.

Recommendation: Candelabra should not recognize this as an asset, particularly given that the engineers, as the feasibility experts, are uncertain that this will work and are suggesting that there is significant uncertainty.

RESEARCH AND ANALYSIS

RA 13.1 EMPIRE COMPANY LIMITED

- a. Note 1 to Empire's financial statements indicates that the company's main businesses are food retailing – primarily under the Sobeys logo, and real estate related to the retail operations.
- b. Note 3o provides information about Empire's intangible assets. The note mentions that the company has loyalty programs that are included in this category. The company does not explain how they account for these programs. This suggests that the amounts involved are not material. The loyalty programs are also mentioned in Note 12 – Intangibles as being grouped in Other Intangibles for an amount of \$11.4 million.
Note 3r provides information about Empire's participation in the AIR MILES® customer loyalty program. This is a loyalty program used by many retailers. Under this arrangement, customers earn AIR MILES® points based on their in-store purchases, and Empire pays AIR MILES® a fee for each point earned by the customer. The cost of these points is recorded as a reduction to revenue.

RA 13.1 EMPIRE COMPANY LIMITED (CONTINUED)

- c. Empire reported Provisions in current liabilities of \$48.7 million and another \$54.7 million in other (long-term) liabilities, for a total of \$103.4 million at May 2, 2020. According to Note 3s, provisions are recognized “when there is a present legal or constructive obligation as a result of a past event, for which it is probable that a transfer of economic benefits will be required to settle the obligation, and where a reliable estimate can be made of the amount of the obligation”. Where the obligations are material and won’t be met currently, the amount of the provision is discounted using a rate that takes into account the time value of money and the specific risks associated with the obligation. Over time, the company recognizes the increase (accretion) of the liability as a finance expense in net income.

Note 15 explains that Empire’s provisions relate to onerous lease contracts, where the unavoidable costs of fulfilling the obligations are higher than the future benefits expected from the contracts; to legal costs associated with outstanding claims that result from ordinary business operations; to environmental costs related to locations requiring environmental restoration; to provisions for restructuring costs related to company initiatives to improve financial performance by lowering costs.

Under IAS 37, a “provision” is defined as “a liability of uncertain timing or amount.” In all the situations where Empire has recognized a provision, the company has a present legal or constructive obligation resulting from a past event requiring a probable future transfer of economic benefits (a liability), the associated amounts have required estimation and reliable measurements were made of the liability amount. In most cases, the timing of when the obligation is required to be satisfied is also uncertain.

- d. As indicated in (c) above, when the obligation will not be met until some future date, measurement of the provision requires discounting to take into account the time value of money. Note that the provision for legal costs has not been increased for the interest factor, likely because the entire amount is considered a current obligation. For the other categories, the longer term nature of the obligation has caused an increase in the provision.

RA 13.2 CANADIAN TIRE CORPORATION, LIMITED.

- a. Canadian Tire's current liabilities include the following amounts:

	January 2, 2021
(\$ millions)	Balance
Deposits	\$ 1,228.0
Trade and other payables	2,508.3
Provisions	196.7
Short-term borrowings	165.4
Loans	506.6
Current portion of lease liability	329.9
Income taxes payable	120.4
Current portion of long-term debt	<u>150.5</u>
	<u>\$5,205.8</u>

"Trade and other payables" on the consolidated balance sheet includes trade payables and accrued liabilities, derivatives, deferred revenue, insurance reserves, and other liabilities, primarily consisting of the short-term portion of share based payment transactions and sales taxes payable. The majority of the \$2,508.3 million relates to trade payables and accrued financial liabilities. This amount (\$1,962.4 million) most likely relates to regular trade accounts payable for inventory purchases, office supplies and utility costs, and to accrued liabilities for wages and salaries payable, dividends payable, vacation pay accruals, and interest payable.

Note 17 describes deposits, a significant part of the current liabilities, which are related to the financial services (including a bank) segment of Canadian Tire's business activities and represent the monies owed to various parties who hold investment accounts with its banking subsidiary. This is made up of broker deposits and retail deposits. Broker deposits originate when the company issues GICs (guaranteed investment certificates) to brokers instead of directly to retail customers. Retail deposits include amounts held for, and therefore owed to, retail clients in high interest savings (HIS) accounts, GICs, and tax-free savings accounts (TFSA's).

RA 13.2 CANADIAN TIRE (CONTINUED)

- b. (1) Working capital = Current assets less current liabilities

\$ In millions	2020	2019
Current assets	10,546.8	9,555.3
Current liabilities	5,205.8	5,751.4
Working capital	5,341.0	3,803.9

$$(2) \quad \text{Acid-test ratio} = \frac{\text{Cash + short-term investments + trade and other receivables + loans receivable}}{\text{Current liabilities}}$$

$$2020: \quad 1.53 \text{ times} = \frac{\$1,327.2 + \$643.0 + \$973.6 + \$5,031.8}{\$5,205.8}$$

$$2019: \quad 1.24 \text{ times} = \frac{\$205.5 + \$201.7 + \$938.3 + \$5,813.8}{\$5,751.4}$$

$$(3) \quad \text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

$$2020: \quad 2.03 \text{ times} = \frac{\$10,546.8}{\$5,205.8}$$

$$2019: \quad 1.66 \text{ times} = \frac{\$9,555.3}{\$5,751.4}$$

- (4) Four-year history:

	2020	2019	2018	2017
Current assets	10,546.8	9,555.3	9,255.8	8,796.1
Current liabilities	5,205.8	5,751.4	5,258.2	4,529.7
Working capital	5,341.0	3,803.9	3,997.6	4,266.4
Current ratio	2.03	1.66	1.76	1.94

RA 13.2 CANADIAN TIRE (CONTINUED)

b. (continued)

(4) (continued)

Canadian Tire Corporation's liquidity is good in general, since it has sufficient current assets to meet current liabilities. Its sound working capital position is reflected in its current ratio. The acid-test ratios over the last two years are consistent with the current ratio performance. The company's liquidity has been fluctuating within a fairly narrow range for the past 4 years. The current ratio has remained relatively stable from 2017 to 2020 except for a decrease in 2018 due to an increase in the level of current liabilities, and in 2020, when the current ratio increased due to an increase in the level of current assets (specifically in the amount of cash and cash equivalents).

$$(5) \quad \text{Inventory turnover} = \frac{\text{COGS}^*}{\text{Average inventory}}$$

$$2020: \quad 4.33 \text{ times} = \frac{\$9,794.4}{(\$2,312.9 + \$2,212.9)/2}$$

* from consolidated statement of income or note 29 of financial statements.

The inventory and receivables tend to be a large proportion of the current assets used in assessing liquidity using working capital and the current ratio. Calculating the turnover of both the receivables and inventory provides information useful in assessing the current ratio by indicating how long it takes to convert the company's inventory into receivables and then into cash. The turnover ratio also provides information about the legitimacy of including inventory in the determination of the current ratio and whether the acid-test ratio would be a better indicator of liquidity.

The inventory turnover provides information about the saleability of the inventory and the number of days it takes to sell on average. Canadian Tire's turnover of 4.33 times represents an average of 84 days that the inventory is held before being sold. The company sells many different types of inventory items, and the turnover figure calculated is an average for all inventories. It is not possible to determine whether this turnover is high or low without calculating the amount over several years and comparing it to other companies in the same industry as this would provide more meaningful information. Canadian Tire's current ratio makes it important to calculate an acid test ratio as well.

RA 13.2 CANADIAN TIRE (CONTINUED)

b. (continued)

In the case of receivables, the company has several types of receivables including credit card receivables and loans from dealers (see Notes 8 and 9). Many of these receivables may not arise from sales in Canadian Tire retail outlets, since the credit card can be used with many different merchants. The loans from associates do not relate to sales. As a result, a meaningful accounts receivable turnover ratio cannot be calculated. However, the large amount of cash that will be collected from these receivables and loans aids in paying current liabilities and increases working capital and current ratios.

- c. The current portion of long-term debt (all numbers are found in Note 23) at January 2, 2021, is \$150.5 million. This amount represents the portion of long-term debt that is payable by the company within the next 12 months. The amount will be paid from current assets and includes only the principal portion of the debt, not any interest payable for the coming year. In this case, the current portion amount of \$150.5 million is related to a Debenture that comes due on June 1, 2021.

If the company's long-term debt does not increase, the current portion of long-term debt will be \$709.0 million on the 2021 end-of-year balance sheet. This amount represents the company's Senior (\$522.8 million) and Subordinated (\$36.4 million) notes, as well Debentures (\$149.8 million). This was determined by reviewing the maturity dates of all the outstanding items of long-term debt for those maturing in 2022. This is a higher amount compared to 2020, but is lower than the current portion shown in 2019 (\$788.2 million). Since the company's long-term liabilities consist primarily of the maturity of specific notes, fluctuations of maturity amounts are to be expected. Based on the lower amount paid in 2020, the company should plan for an increased cash outflow. An examination of the company's statement of cash flows also shows large amounts of cash generated from operating activities and cash outflows used to acquire assets, pay dividends and repay debt. This indicates that the company has a strong cash position and will be able to honour its current liability commitments.

RA 13.2 CANADIAN TIRE (CONTINUED)

d. Commitments and Contingencies:

Commitments: As per Note 34, the company has Capital Commitments. As at January 2, 2021, the Company had capital commitments for the acquisition of property and equipment, investment property and intangible assets for an aggregate cost of approximately \$263.9 million (2019 – \$201.5 million).

Note 34 provides information related to guarantees and commitments, most of which are in the nature of guarantees. These include:

- Standby letters of credit for Dealers' loans from a third party.
- Indemnification to purchasers of the company's businesses or property that it will cover costs relating to any covenants, breaches of representations and warranties resulting from its past conduct, including those related to environmental remediation.
- Guarantees of lease payments by sublessees of space Canadian Tire had leased and vacated before the lease terms had ended.
- Third-party financial guarantees of the debt of certain Dealers.
- Indemnification of its lenders under its credit facilities for any increased costs due to changes in laws and regulations.
- Other indemnification agreements to compensate various counterparties for additional costs incurred as a result of specific events.

RA 13.2 CANADIAN TIRE (CONTINUED)

d. (continued)

Guarantees are required to be recorded as liabilities in the financial statements when the criteria for accrual are met. If the criteria are not met, note disclosure is required. Wherever it can be measured, Canadian Tire discloses the maximum potential liability that could result from these guarantees. The company indicates that no amounts have been accrued in the consolidated financial statements with respect to these guarantees and agreements. Management indicates that because no significant amounts have historically been paid under such guarantees, they deemed it was not necessary to accrue any amounts.

Contingencies: Note 20 outlines that the company is dealing with tax assessments from 2011 to 2015 that are currently in tax court. In addition, years 2016 and 2017 have been reassessed by the CRA. The note indicates that management does not agree with the rulings. As at the financial statement date, it has been determined that it is more likely than not that the court will find in favour of the company. A provision has not been made on the financial statements.

- e. Note 4 on Capital Management discloses extensive information about the company's covenants, requirements, and objectives related to managing capital. The key financial covenant for the company is a requirement to maintain at all times a ratio of debt to capital equal to or lower than a specified maximum. The company was in compliance with all requirements as of December 31, 2020, and 2019.

RA 13.3 DEUTSCHE LUFTHANSA AG

a. The current liabilities for Lufthansa are made up of the following amounts:

(in millions EUR)	2020	2020	2019	2019
	€	% of total	€	% of total
Other provisions	831	5.7	794	5.0
Borrowings	3,116	21.3	1,634	10.2
Trade payables and other financial liabilities	3,321	22.7	5,351	33.5
Liabilities from unused flight documents	2,064	14.1	4,071	25.5
Other contract liabilities	2,977	20.3	2,675	16.7
Advance payments received, deferred income and other non-financial liabilities	1,295	8.8	382	2.4
Derivative financial instruments	366	2.5	137	0.9
Effective income tax obligations	689	4.6	402	2.5
Liabilities in connection with assets held for sale			540	3.3
Total	14,659	100.0	15,986	100.0

As can be seen from the table, borrowings, trade payables and other financial liabilities, and liabilities from unused flights represent the largest proportion of the current liabilities in both years. Other contract liabilities also represents a significant proportion of current liabilities in both years. The year-over-year comparisons of the percentages indicate the percentages fluctuated from 2019 to 2020. There was an 11.1 percentage point increase in borrowing, an 11.4 percentage point decrease in the liabilities from unused flight documents, and an 11.1 percentage point increase in the Borrowings.

b. The notes provide further disclosure of the types of obligations included in the accounts as indicated below.

Other provisions (Note 36) include obligations under partial retirement contracts, other staff costs, obligation to return emissions certificates, onerous contracts, environmental restoration, legal proceedings, restructuring/severance payments, maintenance of lease aircraft, warranties, and other provisions.

RA 13.3 DEUTSCHE LUFTHANSA AG (CONTINUED)

Trade payables and other (current) financial liabilities (Note 41) include trade payables and other liabilities to affiliated companies, trade payables and other liabilities to other equity investments, trade payables to third parties, liabilities to banks, and other financial liabilities.

Advance payments received, deferred income and other non-financial liabilities (Nte 42) include advance payments received, deferred income, and other non-financial liabilities.

Liabilities from unused flight documents, as outlined in Note 3, are flights that have been sold, but not yet used. These coupons or tickets will be recognized as traffic revenue when used. Coupons that have not been used and are unlikely to be used in future, based on previous years' statistical data, are recognized as traffic revenue.

- c. According to Note 36, employee benefit obligations under partial retirement contracts, representing its underfunded benefit plan, and other staff costs are included in Other Provisions. The provision for other staff costs relate to anniversary bonuses and other current obligations that are not detailed.

The environmental restoration obligations are estimated based on surveyors' reports and the clean-up is assumed to be fully completed within 10 years.

Note 42 also provides information about other accruals related to employee benefits as follows:

- Outstanding holiday allowance and overtime, and
- The current portion of fair value obligations under share-based remuneration agreements.

RA 13.3 DEUTSCHE LUFTHANSA AG (CONTINUED)

- d. Note 36 provides a reconciliation of the Other Provisions between the opening and closing balances (although it does not split out the current and long-term portions). Reconciliation of the opening and closing balances:

	EUR millions
As of 1.1.2020	1,284
Changes in the group of consolidated companies	-
Currency translation differences	-16
Utilization	-407
Increase/addition	631
Interest added back	13
Reversal	-105
Transfers	-11
As of 31.12.2020	1,389

- e. As per Note 3, customer loyalty plans exist. The largest bonus miles plan is the Miles & More programme. As per Note 40, there is a liability within Contract Liabilities of 2,220.0 million EUR attributed to the customer loyalty programmes. A total of 228 billion miles were used to measure this liability.
- f. As explained in Note 46, the company has measured the following types of contingent liabilities: guarantees, bills of exchange and cheque guarantees totalling EUR 664 million; warranty contracts of EUR 192 million (including EUR 69 million in connection with creditors of joint ventures); and provisions of collateral for third parties totalling EUR 16 million. Legal risks incurred during the normal course of business are uncertain and are therefore not accrued in the financial statements.

RA 13.3 DEUTSCHE LUFTHANSA AG (CONTINUED)

- g. The balance sheet shows current borrowings of EUR 3,116 million and noncurrent borrowings of EUR 12,252 million. As per Note 37, the current portion totalling EUR 3,116 million can be broken down into the following categories (in million EUR); Bonds 200, Liabilities to banks 2,071, Leasing liabilities 454, and Other loans 391.

RA 13.4 MEMO TO CFO

- a. Memo prepared by: ProVizzion Controller
Date: January 2024

ProVizzion Corporation
December 31, 2023

Issue 1: Warranties

During June of this year, the company began the manufacturing and sales of a new line of dishwasher. Sales of 100,000 dishwashers during this period amounted to \$50,000,000. These dishwashers were sold with a one-year warranty, with a warranty cost estimated on average to be \$25 per appliance for a total estimated cost of \$2,500,000. Management indicates that similar warranties are available for sale for \$75.

As at the balance sheet date, ProVizzion has paid out \$1,000,000 in warranty expenditures and these have been expensed in the income statement. No recognition of any further liability associated with the warranty has yet been made.

There are two kinds of warranties for accounting purposes, each with its own method of recognizing the associated costs, revenues, and liabilities: the service-type and the assurance-type.

Under the service-type warranty, the assumption is that the \$500 price charged for each dishwasher covers two separate performance obligations on our part. That is, the sale of each dishwasher is a bundled sale that includes (1) providing the dishwasher and (2) providing the warranty service, which expires one year from the date of sale. Therefore, the \$500 sale amount is bifurcated/split out into two different types of revenue. The revenue related to the warranty service of \$75 per unit sold is deferred at the point of sale, the costs of making good on the warranties are recognized in expense as incurred, and the deferred revenue is recognized as revenue as the warranty work is performed. The remaining \$425 per unit is recognized as revenue on delivery of the dishwasher. The entries to record the years' events under this method are:

- | | | |
|---|------------|------------|
| 1. Accounts Receivable | 50,000,000 | |
| Sales Revenue (100,000 X \$425) | | 42,500,000 |
| Unearned Warranty Revenue (100,000 X \$75) | | 7,500,000 |
| (To record sale of 100,000 dishwashers and unearned warranty revenue) | | |

RA 13.4 MEMO TO CFO (CONTINUED)

a. (continued) Issue 1

2. Warranty Expense 1,000,000
 Materials, Cash, Payables, etc. 1,000,000
 (To record warranty expense as the costs are incurred)
3. Unearned Warranty Revenue 3,000,000
 Warranty Revenue 3,000,000
 [To record estimated warranty revenue earned based on costs incurred in
 year relative to total estimated cost of warranties on units sold:
 \$1,000,000/\$2,500,000 = 40% of estimated revenue or 40% X \$7,500,000]

Under the assurance-type warranty approach, the assumption is that the warranty guarantees or assures the purchaser that the product was manufactured without defects. If this is not the case, the company will take responsibility for its repair. In this situation, 100% of the \$500 we charge the customer is for the dishwasher alone and any subsequent costs incurred under the warranty should be recognized as an expense that is matched with the sales revenue. The entries would be:

1. Accounts Receivable 50,000,000
 Sales Revenue 50,000,000
 (To record sale of 100,000 dishwashers at \$500 each)
2. Warranty Expense 1,000,000
 Materials, Cash, Payables, etc. 1,000,000
 (To record warranty costs incurred)
3. Warranty Expense 1,500,000
 Warranty Liability 1,500,000
 [To accrue estimated remaining warranty costs (\$2,500,000 – \$1,000,000)]

As can be seen, the amounts to be reported on the income statement will be different under the two approaches:

	Service-type approach	Assurance-type approach
Sales revenue - Dishwashers	\$42,500,000	\$50,000,000
Warranty revenue	3,000,000	
Warranty expense	(1,000,000)	(2,500,000)
Net impact on income	\$44,500,000	\$47,500,000

RA 13.4 MEMO TO CFO (CONTINUED)

a. (continued) Issue 1

The service-type warranty method more closely reflects the contract-based approach for revenue recognition, and more faithfully presents outstanding performance obligations as a result of the sale transactions. This approach is consistent with both IFRS and, increasingly, with current ASPE practice. The liability on the statement of financial position is reflected at the fair value of the services still to be provided, as indicated in IFRS 13 that deals with fair value measurements. It is consistent with a warranty that protects the customer from defects that arise after the point of sale of the underlying asset. The gross profit on the warranty is actually deferred until the related work is performed.

The assurance-type warranty method corresponds well with a warranty that protects the customer from defects that exist when the product is transferred to the customer. All the revenue is therefore recognized when the product is sold, and the costs are matched with the revenue generated. The liability is measured under IAS 37 as a provision for the estimated costs to correct the product.

While recognizing income earlier rather than later (and therefore the assurance-type method is usually preferred by management), the choice should be made based on the particular circumstances of the warranty we provide on the dishwashers. This would be consistent with both ASPE's bifurcation model and with the requirements of IFRS 15. In this way, the accounting reports will best reflect the economic circumstances associated with our business model.

Issue 2: Rental Charges of Retail Division Based on Retail Profits

In reviewing the estimates used for bad debt expense and warranty costs, I noticed an increase from previous years. Burt Wilson, CEO had instructed the previous accountant to increase these estimates in order to keep the retail division's profits at \$475,000. Since a portion of the rental costs are based on retail profits in excess of \$500,000, the increase in estimates results in lower rent expense as it prevents income from reaching the \$500,000 threshold.

If the increases in estimates seem to be justified, based on current year actual experience, and/or by changes in economic conditions, the creditworthiness of customers, past experience, or changes in product quality, I recommend continuing with the higher percentages. If not justified, I recommend reverting to estimates that can be substantiated. If a higher profit is indicated, we should recognize the additional rent expense and an increase in our rent payable liability.

RA 13.4 MEMO TO CFO (CONTINUED)

a. (continued)

Issue 3: Asset retirement obligation

The treatment of asset retirement obligations under ASPE and IFRS are different. In both cases, the present value of the estimated future cash flows has to be determined. In the case of ASPE, the dismantling of the equipment and any added costs that result from the production process are added to the cost of the asset, and these are amortized over the life of the capital assets. Under IFRS, only the cost of dismantling the equipment is added to the capital cost. Any costs resulting from the production process are added to the cost of inventory as production costs and are expensed through cost of goods sold as the dishwashers are sold. The present value of the dismantling costs alone at June 1, 2023 is the present value of \$3 million due in 120 months. This, using a 0.5% per month discount rate is $\$3,000,000 \times 0.54963 = \$1,648,890$.

Dismantling costs under IFRS and ASPE: the journal entry required to record the dismantling costs related to the equipment itself and the asset retirement obligation:

Equipment	1,648,890	
Asset Retirement Obligation		1,648,890

Accumulated cleanup costs under ASPE: the accumulated cleanup costs related to the production process and the asset retirement obligation to December 31, 2023:

Estimated cash flows $\$600,000/120 \times 7$ months = \$35,000

The present value of the estimated cleanup costs and the entry to record them are:

Present value of \$35,000 to be paid in 113 months' time at 0.5% per month

$\$35,000 \times 0.56916 = \$19,921$

Equipment	19,921	
Asset Retirement Obligation		19,921

Accumulated cleanup costs under IFRS: these costs will be charged to Inventory cost as they are considered a production cost:

Inventory.....	19,921	
Asset Retirement Obligation		19,921

RA 13.4 MEMO TO CFO (CONTINUED)

a. (continued) Issue 3

Depreciation expense under ASPE: the amount of the 7 months' depreciation on the equipment at December 31, 2023 is: $[(\$11,648,890 \times 7/120) + \$19,921] = \$699,440$

Note: While the cost of the ARO that has been capitalized for the equipment as a whole is amortized over the full 120 months, the cost of the monthly clean-up costs should be recognized in the months the clean-up costs relate to. While these costs are recognized at their present value, the obligation will have to be accreted because the obligation for these costs will not be paid for another 113 months.

Depreciation Expense	699,440	
Accumulated Depreciation – Equipment		699,440

(Note that these costs which are charged to Depreciation Expense are production overhead costs. These will be either expensed in Cost of Goods Sold or included in ending inventory, depending on the number of dishwashers sold and still in inventory.)

Depreciation expense under IFRS: because the present value of the cleanup costs was charged directly to Inventory as a production cost instead of to the Equipment account, the depreciation expense under IFRS is limited to the balance in the Equipment account of \$11,648,890. Depreciation expense = $\$11,648,890 \times 7/120 = \$679,519$.

Depreciation Expense	679,519	
Accumulated Depreciation – Equipment		679,519

(Note that these costs which are charged to Depreciation Expense are production overhead costs. These will be either expensed in Cost of Goods Sold or included in ending inventory, depending on the number of dishwashers sold and still in inventory.)

Interest/accretion expense under IFRS and ASPE: to record the interest/accretion expense of the asset retirement obligation assuming there is no change in the estimate of cash flows, timing, or discount rate. Present value at December 31, 2023 is:

RA 13.4 MEMO TO CFO (CONTINUED)

a. (continued) Issue 3

Present value of \$3 million in 113 months at 0.5%
 = \$3,000,000 X .56916 = \$1,707,480
 Accretion = \$1,707,480 – \$1,648,890

Interest Expense (IFRS)/Accretion Expense (ASPE)	58,590	
Asset Retirement Obligation		58,590

Note: The present value of the \$35,000 clean-up costs of \$19,921 is already at its Dec. 31, 2023 present value in the ARO. Therefore, the book value and PV of the ARO at Dec. 31/23 is now \$1,707,480 + \$19,921 = \$1,727,401. At Dec. 31/24, this total will be subject to a full year's accretion.

Effect on net income ASPE and IFRS: As can be seen, the amounts to be reported on the income statement will likely be the same under the two approaches. The clean-up costs incurred for the 7 months under ASPE are recognized in depreciation expense which is a production overhead cost that is ultimately charged to Inventory, and under IFRS they are charged to production costs of Inventory. In both cases, the production/conversion costs will then be allocated between inventory and cost of goods sold.

	ASPE	IFRS
Depreciation expense (to Inventory as a production overhead cost)*	\$699,440	\$679,519
Inventory (production overhead cost)*		19,921
Interest expense		58,590
Accretion expense	58,590	

*allocated between cost of goods sold and ending inventory

Issue 4: Litigation

Loss Contingency on Patent Infringement Litigation

Under ASPE, the contingent liability is recognized if it is "*likely*" to occur and can be reliably measured. In this case, since the lawsuit is still pending and has been assessed as "*more likely than not*," this is not quite as high as "*likely*" as interpreted under ASPE. There is a 45% probability that no settlement will be required. As a result, under ASPE, there would be no liability recognized, but note disclosure would be required.

RA 13.4 MEMO TO CFO (CONTINUED)

a. (continued) Issue 4

Since the liability recognition criteria have not been met, it must be disclosed in the notes to the financial statements. This note should include a discussion of this pending litigation along with the lawyer's assessment that the outcome is indeterminable.

Under IFRS, the treatment is different. Since the threshold of *more likely than not* has been met at a 55% probability, the next step is to determine its expected value.

Using the information provided by Roberta Dowski, the best estimate is calculated as follows:

$$(20\% \times \$5 \text{ million}) + (35\% \times \$3 \text{ million}) + (45\% \times 0) = \$2.05 \text{ million}$$

A liability of \$2.05 million would be accrued as follows:

Litigation Expense	2,050,000	
Litigation Liability.....		2,050,000

Therefore, before-tax income would be lower under IFRS by \$2,050,000.

- b. For Issue 1, there is a fine line between what is an assurance-type and a service-type warranty. In such a situation, management may revert to looking at which has the more favourable effect on income in making the choice. Professional ethics would require me to understand the underlying objective of the accounting standards so that the accounting measurements would best represent economic reality. Although ASPE does not use the terms "assurance" and "service" warranties, it is clear that ASPE standards require a separation of the selling price into a sale and a servicing component where one exists.

Issue 2 also requires an ethical perspective to be exercised with the same objective in mind as in Issue 1. In this case, however, and assuming that the higher percentages cannot be substantiated by current conditions, increasing the allowances for expected credit losses and warranties to reduce rental costs is blatantly unethical and should be corrected. The benefits of this type of behaviour are short-term in nature and will cause long-term difficulties for the company. The trend of higher estimates cannot be maintained indefinitely. The results can include losing the rental location, civil action against the company, as well as criminal action for fraudulent behaviour. In addition, the current shareholders are harmed because the lower net income reduces the current value of their holdings.

RA 13.4 MEMO TO CFO (CONTINUED)

There are no ethical considerations with Issues 3 and 4. The accounting in both cases depends on whether IFRS or ASPE is chosen. The choice in Issue 3 has no resulting difference in 2023 income. While there is a current year reduction in 2023 income associated with Issue 4 if IFRS is chosen, the total of 2023 and 2024 net incomes are likely to be the same under both sets of standards as the litigation is settled.

RA 13.5 CITY GOODS LIMITED: ASPE AND IFRS

1. The customer loyalty program represents an obligation for the company at January 31, 2024. Under IFRS, each sale has multiple deliverables that include not only the goods sold, but also the value of the points awarded. The fair value of the points must be recognized as unearned revenue until they are redeemed at some future date. Based on 700,000 points being awarded during the year, the amount of unearned revenue should be \$350,000 (700,000 X \$0.50). The journal entry to record the sales for the year should have been:

Cash / Accounts Receivable	XXXX	
Sales Revenue		XXX
Unearned Revenue.....		350,000

By the end of the year, 80,000 points have been redeemed out of a total expected redemption of 630,000 points or 90% of the 700,000 issued. Consequently, the amount of the unearned revenue to take into current year revenue is:

$$[80,000 / 630,000] \times \$350,000 = \$44,444$$

The journal entry to record the amount of revenue earned for the loyalty points is:

Unearned Revenue.....	44,444	
Sales Revenue		44,444

The treatment under ASPE would be similar.

RA 13.5 CITY GOODS LIMITED (CONTINUED)

2. The second issue is one of an onerous contract. The company is no longer gaining any benefits from the lease of this retail location since the store has been closed. However, it still has to make payments on the lease until March 1, 2025. The company has a legal obligation to continue to make the payments under the lease agreement, and these payments are unavoidable costs. The landlord is likely to accept a lump sum payment now equal to the present value of the remaining lease payments. Under IFRS, the liability must be recognized and measured at the present value of the unavoidable payments that must be made and unrecoverable loss expected to be incurred. At January 31, 2024, the company has 14 payments left from February 1, 2024 to March 1, 2025.

The present value of these annuity due payments is: \$2,300 each month, for 14 months at an interest rate of 0.5% per month = \$31,179 (found using a financial calculator or Excel). The January 31, 2024 journal entry required is:

Loss on Lease	31,179	
Liability for Onerous Contracts.....		31,179

Under ASPE, onerous contracts are not specifically addressed, but practice has been to recognize the liability and the loss based on the fact that the entity has an obligation to pay for something that provides no future benefit to the entity.

RA 13.6 EMPLOYEE BENEFITS

Item 1

The sick leave obligation arises as the employee provides a service to the company and therefore must be accrued at December 31, 2023. Under IFRS, the entity recognizes the expected cost of short-term employee benefits such as accumulating paid absences as the employees provide services that increase such entitlements. (IAS 19.11 and .13). In this case, the 3% increase has already been agreed to so the expected amount would include this increase and the best estimate is calculated as follows:

$$60 \text{ days} \times \$250 \text{ per day} \times 103\% = \$15,450$$

The following journal entry would be required on December 31, 2023:

Salaries and Wages Expense	15,450	
Sick Pay Wages Payable		15,450

ASPE does not provide any specific guidance on this type of benefit except that a liability arises from past transactions and requires settlement in the future with a possible transfer of assets. Established practice would record similar amounts as under IFRS.

Item 2

Parental leave is a non-accumulating benefit and only arises when an event that obligates the company takes place. In this case, the employee who has already started maternity leave on December 15 is entitled to the benefit. Conduit's obligation for the benefit to be paid in 2024 is accrued at December 31, 2023. The amount of this obligation is:

$$\$1,000 \times 11.5 \text{ months} = \$11,500.$$

The journal entry is:

Employee Benefit Expense	11,500	
Parental Leave Benefits Payable		11,500

For the other employee, the adoption has not yet taken place, and therefore the event obligating Conduit has not yet occurred. There will be no liability recognized in relation to this employee until the time of the adoption and the parental leave commences.

IFRS and ASPE treatments are the same for these benefits.

RA 13.6 EMPLOYEE BENEFITS (CONTINUED)

Item 3

This bonus is payable at December 31, 2023, since it relates to compensation that was earned during 2023. The total amount of the bonus is $\$2 \text{ million} \times 3\% = \$60,000$. This equates to:

Managers – $30\% \times \$60,000 = \$18,000$

Non-managers – $70\% \times \$60,000 = \$42,000$. For each non-manager, the bonus is $\$42,000 \div 40 = \$1,050$

However, there is a stipulation that the bonus will only be paid to employees who are still working for the company on October 31, 2024 – 10 months from now. As a result, the best estimate of the liability would take into the consideration the turnover that is expected to occur over the next 10 months.

With the estimated turnover of 5%, this means that only 38 non-management employees ($40 \times 95\%$) are expected to still be employed by the company by the payout date. Therefore, the best estimate of the payment to non-managers is: $38 \times \$1,050 = \$39,900$.

Therefore, the total bonus payable is: $\$18,000 + \$39,900 = \$57,900$ and the December 31, 2023 journal entry required for the bonus payable is:

Bonus Expense.....	57,900	
Bonus Payable.....		57,900

Item 4

The vacation payable is an accumulating benefit that vests since the employee is entitled to this amount. However, the legal entitlement is only 2 weeks, and the additional amount of 1 week is a constructive obligation. Currently, 10 employees are still owed 2 weeks' vacation (having taken 1 week already during 2023). Under IFRS, the entire 2 weeks would be reported as an obligation at December 31, 2023, but adjusted for the probabilities related to all employees being entitled to this full amount. Based on the information, the expected value of the obligation would be calculated as follows:

$[10 \text{ employees} \times 10 \text{ days} \times \$250 \times 103\%]$ minus $[(1 \text{ employee} \times 5 \text{ days} \times \$250 \times 103\%) \times 0.15] = \$25,750 - \$193 = \$25,557$

The journal entry required is:

Salaries and Wages Expense	25,557	
Vacation Wages Payable.....		25,557

Under ASPE, this type of constructive obligation would also be recorded as it is the normal business practice.

RA 13.6 EMPLOYEE BENEFITS (CONTINUED)

Item 5

This relates to a possible contingent obligation. It appears that a settlement above the \$30,000 already recognized will be required, and the obligation arose from a past event. The employee is asking for \$62,500 (25 years X 10 days X \$250/day). Consequently, some amount above the \$30,000 must be reported at December 31, 2023.

Under IFRS, a probability- weighted expected value is determined. Using the estimates provided by the lawyer, this amount is estimated to be:

$$(25\% \times \$20,000) + (60\% \times \$28,000) + (15\% \times \$30,000) = \$26,300.$$

An additional provision will be accrued as follows:

Litigation Expense.....	26,300	
Litigation Liability.....		26,300

Reconciliations from opening balances to closing balances are required for each class of provision. The changes due to this litigation case would be aggregated with other litigation amounts, but no specific amounts would have to be disclosed about the expected outcome of this arbitration because such information would seriously prejudice Conduit's position.

Under ASPE, this contingency appears to be likely and it will require some amount of settlement based on the estimates provided by the lawyer. However, the amount to be recorded is either the best estimate within a range if it can be determined, or the lowest of the ranges of possible outcomes if no one amount is any more likely than any other. In this case, the range of settlements is \$20,000 to \$30,000. Assuming a most likely estimate of \$28,000 based on the information provided by the lawyer, this would be used to measure the additional amount of the liability.

The estimated obligation would be recorded as follows:

Litigation Expense.....	28,000	
Litigation Liability.....		28,000

The note disclosure required under ASPE includes the fact that a contingent loss exists at December 31, 2023 and that an exposure to loss exists in excess of the amount recognized.

RA 13.7 RESEARCH TOPICS

Sample Solution

Topic: Liability accruals on interim financial statements

International accounting standards (IFRS) use the approach that an enterprise should apply the same accounting policies in its interim financial statements as are applied in its annual financial statements. Therefore, an enterprise should apply the same criteria for recognizing and measuring a liability accrual at the end of an interim period as it does at the end of its fiscal year. This means liabilities are recognized if an enterprise has a present obligation, resulting from a past event, it is probable that an outflow of economic benefits will be required to settle that obligation, and a reliable estimate of the obligation can be made.

For example, if a year-end bonus is a legal obligation, or past practice makes the bonus a constructive obligation for which the enterprise has no realistic alternative but to make the payments, and a reliable estimate of the amount of the obligation can be made, the bonus is accrued for interim reporting purposes.

Since this type of bonus is usually based on a contract and is short-term in nature, it is recorded in the accounting records and reported in financial statements as the amount of cash that is payable in the future.

The accounting standard that is applied to this topic is *International Accounting Standard 34*, "Interim Financial Reporting."

IAS 34 mentions recognizing and measuring losses that require accounting estimates (e.g., inventory writedowns or restructurings). It states that if the estimates change in a subsequent interim period of that financial year, the original estimate is changed in the subsequent interim period either by accrual of an additional amount of loss or by reversal of the previously recognized amount. Several accounting issues are related to the fact that interim financial statements require many more estimates than annual financial statements, particularly for those costs and receipts that are annual in nature. These would include, for example, accruals for income taxes, bonuses, and customer and vendor rebates. While the general principles are included in IAS 34 itself, an Appendix to this standard (not considered part of IFRS) provides additional details for common issues that many companies must deal with in preparing their interim statements.

Under ASPE, there is no standard covering interim financial reports. However, following the ASPE standards (Section 1100, Generally Accepted Accounting Principles), it is likely that a private company wishing to prepare interim financial statements would look to be relatively consistent with IFRS requirements in determining the recognition and measurement principles

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