## CHAPTER 10

## Current Liabilities and Payroll

ASSIGNMENT CLASSIFICATION TABLE

| Learning Objectives | Questions | Brief Exercises | Exercises | Problems Set A | Problems Set B |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Account for determinable or certain current liabilities. | $\begin{aligned} & 1,2,3,4 \\ & 5,6,7,12 \end{aligned}$ | $\begin{aligned} & 1,2,3,4, \\ & 5,6,7, \\ & 16,17 \end{aligned}$ | $\begin{aligned} & 1,2,3,4, \\ & 5,6,7,8, \\ & 9,10,14 \end{aligned}$ | $\begin{aligned} & 1,2,3,4, \\ & 5 \end{aligned}$ | $\begin{aligned} & 1,2,3,4, \\ & 5 \end{aligned}$ |
| 2. Account for uncertain liabilities. | $\begin{aligned} & 8,9,10, \\ & 11,12, \\ & 13,14, \\ & 15,16 \end{aligned}$ | $\begin{aligned} & 8,9,10 \\ & 11,12 \\ & 13,16 \end{aligned}$ | $\begin{aligned} & 11,12, \\ & 13,14,15 \end{aligned}$ | $\begin{aligned} & 1,2,5,6, \\ & 7,8 \end{aligned}$ | $\begin{aligned} & 1,2,5,6, \\ & 7,8, \end{aligned}$ |
| 3. Determine payroll costs and record payroll transactions. | $\begin{aligned} & 17,18, \\ & 19,20 \end{aligned}$ | 14, 15, 16 | $\begin{aligned} & 1,16,17, \\ & * 20 \end{aligned}$ | 5, 9, 10, | 5, 9, 10, |
| 4. Prepare the current liabilities section of the balance sheet. | 21, 22, 23 | 16, 17, 18 | 10, 18, 19 | $\begin{aligned} & 3,4,5,8, \\ & 11,12, \end{aligned}$ | $\begin{aligned} & 3,4,5,8, \\ & 11,12, \end{aligned}$ |
| *5. Calculate mandatory payroll deductions (Appendix 10A). | *24, *25 | *19, *20 | *20, *21 | *13 | *13 |

## ASSIGNMENT CHARACTERISTICS TABLE

| Problem Number | Description | Difficulty Level | Time Allotted (min.) |
| :---: | :---: | :---: | :---: |
| 1A | Prepare current liability entries and adjusting entries. | Moderate | 15-25 |
| 2A | Prepare current liability entries, adjusting entries and current liability section. | Moderate | 25-35 |
| 3A | Calculate current and non-current portion of notes payable, and interest payable. | Moderate | 15-25 |
| 4A | Record note transactions; show financial statement presentation. | Moderate | 30-40 |
| 5A | Record current liability transactions; prepare current liabilities section. | Moderate | 30-40 |
| 6A | Record warranty transactions. | Moderate | 15-25 |
| 7A | Record customer loyalty program and gift card transactions; determine impact on financial statements. | Moderate | 15-25 |
| 8A | Discuss reporting of contingencies and record provisions. | Moderate | 15-25 |
| 9A | Prepare payroll register and record payroll. | Moderate | 25-35 |
| 10A | Record payroll transactions and calculate balances in payroll liability accounts. | Moderate | 25-35 |
| 11A | Prepare current liabilities section; calculate and comment on ratios. | Moderate | 25-35 |
| 12A | Prepare current liabilities section; calculate and comment on ratios. | Moderate | 25-35 |
| *13A | Calculate payroll deductions; prepare payroll register. | Moderate | 25-35 |
| 1B | Prepare current liability entries and adjusting entries. | Moderate | 15-25 |
| 2B | Prepare current liability entries, adjusting entries and current liability section. | Moderate | 25-35 |
| 3B | Calculate current and non-current portion of notes payable, and interest payable. | Moderate | 15-25 |
| 4B | Record note transactions; show financial statement presentation. | Moderate | 30-40 |
| 5B | Record current liability transactions; prepare current liabilities section. | Moderate | 30-40 |

## ASSIGNMENT CHARACTERISTICS TABLE (Continued)

| Problem <br> Number | Description | Difficulty <br> Level | Time <br> Allotted (min.) |
| :---: | :--- | :---: | :---: |
| 6B | Record warranty transactions. | Moderate | $15-25$ |
| 7B | Record customer loyalty program and gift card <br> transactions; determine impact on financial statements. | Moderate | $15-25$ |
| 8B | Discuss reporting of contingencies and record <br> provisions. | Moderate | $15-25$ |
| 9B | Prepare payroll register and record payroll. | Moderate | $25-35$ |
| 10B | Record payroll transactions and calculate balances in <br> payroll liability accounts. | Moderate | $25-35$ |
| 11B | Prepare current liabilities section; calculate and <br> comment on ratios. | Moderate | $25-35$ |
| 12B | Prepare current liabilities section; calculate and <br> comment on ratios. | Moderate | $25-35$ |
| *13B | Calculate payroll deductions; prepare payroll register. | Moderate | $25-35$ |

## BLOOM'S TAXONOMY TABLE

Correlation Chart between Bloom's Taxonomy, Study Objectives and End-of-Chapter Material

| Learning Objectives | Knowledge | Comprehension | Application |  | Analysis | Synthesis | Evaluation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Account for determinable or certain current liabilities. | Q10-1 <br> Q10-2 <br> Q10-4 <br> Q10-5 <br> Q10-12 <br> BE10-16 | $\begin{aligned} & \hline \text { Q10-6 } \\ & \text { Q10-7 } \\ & \text { E10-14 } \end{aligned}$ | Q10-3 <br> BE10-1 <br> BE10-2 <br> BE10-3 <br> BE10-4 <br> BE10-5 <br> BE10-6 <br> BE10-7 <br> BE10-17 <br> E10-1 <br> E10-2 <br> E10-3 <br> E10-4 <br> E10-5 <br> E10-6 | $\begin{aligned} & \text { E10-7 } \\ & \text { E10-8 } \\ & \text { E10-9 } \\ & \text { E10-10 } \\ & \text { P10-1A } \\ & \text { P10-2A } \\ & \text { P10-3A } \\ & \text { P10-4A } \\ & \text { P10-5A } \\ & \text { P10-1B } \\ & \text { P10-2B } \\ & \text { P10-3B } \\ & \text { P10-4B } \\ & \text { P10-5B } \end{aligned}$ |  |  |  |
| 2. Account for uncertain liabilities. | $\begin{aligned} & \hline \text { Q10-12 } \\ & \text { BE10-16 } \end{aligned}$ | Q10-8 <br> Q10-9 <br> Q10-10 <br> Q10-11 <br> Q10-13 <br> Q10-14 <br> Q10-15 <br> Q10-16 <br> BE10-12 <br> E10-14 | BE10-8 <br> BE10-9 <br> BE10-10 <br> BE10-11 <br> BE10-13 <br> E10-11 <br> E10-12 <br> E10-13 <br> E10-15 <br> P10-1A <br> P10-2A | $\begin{aligned} & \text { P10-5A } \\ & \text { P10-6A } \\ & \text { P10-7A } \\ & \text { P10-8A } \\ & \text { P10-1B } \\ & \text { P10-2B } \\ & \text { P10-5B } \\ & \text { P10-6B } \\ & \text { P10-7B } \\ & \text { P10-8B } \end{aligned}$ |  |  |  |
| 3. Determine payroll costs and record payroll transactions. | $\begin{aligned} & \hline \text { Q10-19 } \\ & \text { BE10-13 } \end{aligned}$ | $\begin{aligned} & \text { Q10-17 } \\ & \text { Q10-18 } \\ & \text { Q10-20 } \end{aligned}$ | BE10-14 <br> BE10-15 <br> BE10-16 <br> E10-1 <br> E10-16 <br> E10-17 <br> *E10-20 | P10-5A P10-9A P10-10A P10-5B P10-9B P10-10B |  |  |  |
| 4. Prepare the current liabilities section of the balance sheet. | $\begin{aligned} & \text { Q10-21 } \\ & \text { Q10-22 } \\ & \text { Q10-23 } \\ & \text { BE10-16 } \end{aligned}$ |  | BE10-17 <br> BE10-18 <br> E10-10 <br> E10-18 <br> E10-19 <br> P10-3A <br> P10-4A <br> P10-5A <br> P10-8A | $\begin{aligned} & \hline \text { P10-10A } \\ & \text { P10-11A } \\ & \text { P10-12A } \\ & \text { P10-3B } \\ & \text { P10-4B } \\ & \text { P10-5B } \\ & \text { P10-8B } \\ & \text { P10-11B } \\ & \text { P10-12B } \end{aligned}$ |  |  |  |
| *5. Calculate mandatory payroll deductions (Appendix 10A). | $\begin{aligned} & \text { *Q10-24 } \\ & \text { *Q10-25 } \end{aligned}$ |  | *BE10-19 <br> *BE10-20 <br> *E10-20 <br> *E10-21 | $\begin{aligned} & \text { *P10-13A } \\ & \text { *P10-13B } \end{aligned}$ |  |  |  |
| Broadening Your Perspective |  |  | Santé Smo <br> Cumulative <br> Chapters 3 <br> BYP10-3 <br> BYP10-4 | thie Saga Coverage - 10 | BYP10-1 | $\begin{aligned} & \text { BYP10-2 } \\ & \text { BYP10-5 } \end{aligned}$ |  |

## ANSWERS TO QUESTIONS

1. A determinable liability is also referred to as a certain liability or a known liability. Examples include accounts payable, salaries payable, HST payable, and CPP and EI payable.
2. The transaction does not meet the definition of a liability. A liability is defined as a present obligation, arising from past events, to make future payments of assets or services. A commitment to purchase is usually not an obligation and no past event (a purchase) has occurred since goods have not been delivered or services received.
3. (a) Cash $\qquad$
Unearned Revenue 400,000
(5,000 $\times$ \$80)
(b) Unearned Revenue $\qquad$ 66,667 Service Revenue (\$400,000 $\div 6$ )
4. Interest payable is calculated as the product of the principal, the interest rate, and the fraction of the year in the accrual. The amount of interest payable at the fiscal year end is calculated with reference to the amount of time since the last interest payment if regular interest payments are required.
5. An operating line of credit is a pre-authorized bank loan that allows a company to borrow up to a pre-set limit, and repay the loan, as needed. When the company borrows against its line of credit, the cash account balance is increased and notes payable are increased.
A bank overdraft occurs when a bank account is overdrawn due to withdrawals and cheques in excess of deposit amounts. In this case, the cash account will show a credit balance. There is no separate liability shown, as the overdraft is itself a liability.
6. The roommate is confusing different taxes. Incorporated businesses pay income tax on profits. Those taxes do appear as expenses on the income statement. Sales taxes, on the other hand, do not appear on the income statement. Merchants are directed by law to charge sales taxes on the selling price of most goods and services. In doing so, the merchant is acting as an agent of the federal and provincial governments when the business is charging, collecting, and remitting the sales taxes when due. Until the sales taxes are remitted, they appear as current liabilities on the balance sheet.
7. Laurel is not correct. Some long-term debts have portions that will be due in the coming year. This portion is classified as a current liability since it will be paid within one year of the balance sheet date.

## QUESTIONS (Continued)

8. I don't agree. Although you don't know which specific appliances will be returned for repair, you can estimate the cost of repairs that will be required under warranty based on past experience or industry information. If repair costs are not recorded until units are brought in, liabilities on the balance sheet will be understated and the expenses will not be properly matched with revenue on the income statement. If sales are increasing, this will probably result in an overstatement of income.
9. Future savings provided to customers through customer loyalty programs produces a future performance obligation. This future performance obligation results in unearned revenue, in that the entity has promised to deliver goods or services in the future. When the promised goods or services are delivered, the performance obligation is met, and this results in the recognition of the related revenue.
10. The company should estimate the number of vouchers that will likely be used and the stand-alone value of these vouchers. The total of the standalone value of the vouchers and the stand-alone value of the restaurant meals sold should be used to allocate the revenue to current sales and unearned revenue. When the vouchers are redeemed, the restaurant has satisfied its future performance obligation and it can then recognize this unearned revenue as earned.
11. Gift cards are similar to unearned revenues in that they represent cash received from customers for future products or services. They are classified as a liability because they are an obligation for the issuing company to provide assets or services in the future. Unearned passenger revenue usually has a determinable time at which the flight will be taken and the unearned revenue becomes earned. Gift cards however do not have a fixed date at which the obligation will be satisfied, and frequently are not used at all. In some cases, a portion or the entire amount of the gift card is not used at all. Over time, companies need to determine if a portion of this unearned revenue can be considered earned since the likelihood of redemption becomes more remote.
12. A determinable liability has a known amount, payee, and due date. An estimated liability is an obligation that exists but whose amount and timing are uncertain. There is no uncertainty about the existence of a determinable liability and an estimated liability. Under ASPE, a contingent liability is an obligation that is uncertain with respect to existence, timing, and amount. The existence of a contingent liability depends on the resolution of a future event outside of the company's control. Under IFRS, situations where it is probable an obligation exists and the amount can be reasonably estimated are treated as estimated liabilities. Contingent liabilities are possible obligations that the company probably will not have to settle, or obligations for which the amount cannot be reliably measured.

## QUESTIONS (Continued)

13. Under ASPE, a contingent liability is defined as a possible obligation that will be confirmed by the occurrence or non-occurrence of an uncertain future event. An estimated liability is an obligation that exists but whose amount and timing are uncertain. A contingent liability may be recognized as an estimated liability if it is likely that a present obligation exists and the amount can be reliably estimated. Under IFRS, a contingent liability is a possible obligation that does not meet the criteria for recognition and does not meet the definition of a liability. Under IFRS, situations where it is probable an obligation exists and the amount can be reasonably estimated are treated as estimated liabilities.
14. Under ASPE, if a contingent liability is both likely to occur and reasonably estimable, it is recorded in the accounts. If its likelihood is not determinable, or if it is not reasonably estimable, it is not recorded in the accounts but disclosed in a note. If it is unlikely to occur, but could have a substantial negative effect on the company's financial position, it should be disclosed. Otherwise, contingent liabilities are neither recorded nor disclosed.
15. Under IFRS, a contingent liability is never recorded because it is a possible liability that does not meet the criteria for recognition, either because it is not probable or the amount cannot be reliably measured. The criteria for recognition of an estimated liability are that it is probable a present obligation exists and that the amount can be reliably estimated. Under IFRS, the threshold for recognizing liabilities is "probable" rather than "likely" as used under ASPE. This threshold is generally considered lower.
16. If the chance of a contingency occurring is considered small, it should still be disclosed if the occurrence could have a substantial effect on the company's financial position.
17. Gross pay is the amount an employee actually earns. Net pay, the amount an employee is paid, is gross pay reduced by both mandatory and voluntary deductions, such as income tax, union dues, etc. Gross pay should be recorded as wages or salaries expense.
18. Employee payroll deductions are the amounts subtracted from an employee's gross pay in determining net pay. Mandatory employee payroll deductions include federal and provincial income taxes, Canada Pension Plan, and Employment Insurance. When an employer withholds these amounts from an employee pay cheque, the employer is merely acting as a collection agent for the taxing body. Since the employer holds employees' funds, these withholdings are a liability for the employer until they are remitted to the government. Employee payroll deductions also include voluntary deductions for things such as insurance, pensions, union dues, and donations to charities.

## QUESTIONS (Continued)

18. (Continued)

Employer payroll deductions are amounts the employer is expected to pay. These include CPP where the employer is expected to pay the same amount as the employee and El where the employer is expected to pay 1.4 times the amount the employee has paid. These are expenses for the employer over and above gross pay.
19. The employee earnings record is used in (1) determining when an employee has earned the maximum earnings subject to CPP and El deductions, (2) filing information returns with the CRA, and (3) providing each employee with a statement of gross earnings and tax withholdings for the year on the T4 form.

The payroll register accumulates gross earnings, deductions, and net pay for all employees for each pay period. It provides the documentation to support the preparation of the paycheque for each employee.
20. Income tax, CPP, and El deductions are remitted to the Receiver General, usually on a monthly basis. Workplace, Health, Safety, and Compensation is remitted quarterly (or monthly depending on the province) to the Workplace, Health, Safety and Compensation Commission (or similar body depending on the province). Other deductions are paid to different organizations, such as the United Way, and would normally be made on a monthly basis.
21. Current liabilities are usually listed in order of their liquidity, by maturity date. It may not be possible to list current liabilities in order of liquidity because of the varying maturity dates that may exist for certain specific obligations. They are also often listed in order of magnitude with the largest items listed first.
22. If companies have used their line of credit and are overdrawn or show a negative cash balance, the amount is included in current liabilities and called bank indebtedness, bank overdraft, or bank advances. Note disclosure will include security or collateral that was required by the bank, the maximum amount that can be withdrawn, as well as the interest rate charged on the bank overdraft. Terms associated with notes payable are also disclosed.
23. A company can determine if its current liabilities are too high by monitoring the relationship of current assets to current liabilities and calculating the current ratio (current assets $\div$ current liabilities). This relationship is critical in evaluating a company's short-term ability to repay debt.

## QUESTIONS (Continued)

*24. Contribution rates for CPP are set by the federal government (Quebec government for QPP) and are adjusted every January if applicable. Employee contributions under the Canada Pension Plan Act are set at a percentage of pensionable earnings (currently 4.95\%). Pensionable earnings are gross earnings less a basic yearly exemption (currently $\$ 3,500$ ). A maximum ceiling or limit is imposed on pensionable earnings ( $\$ 53,600$ for 2015). The exemption and ceiling are prorated to the relevant pay period (e.g., weekly, biweekly, semimonthly, monthly).

Contribution rates for El are based upon a percentage (currently 1.88\%) of insurable earnings, to a maximum earnings ceiling ( $\$ 49,500$ for 2015). In most cases, insured earnings are gross earnings plus any taxable benefits.
*25. The amount deducted from an employee's salary for income tax is determined by using payroll accounting software programs, CRA payroll deduction tables easily accessible online, or using the payroll deductions online calculator. The income tax that should be withheld from gross salary is based on the number of personal tax credits claimed by an employee as shown on their TD1 form.

## SOLUTIONS TO BRIEF EXERCISES

## BRIEF EXERCISE 10-1

(a) No
(b) Yes
(c) Yes for $\$ 30,000$
(d) Yes
(e) Yes
(f) Yes

## BRIEF EXERCISE 10-2

| (a) | ```Cash``` $\qquad$ ```None \[ (2,000 \times \$ 120) \] ``` | 240,000 | 240,000 |
| :---: | :---: | :---: | :---: |
| (b) | Unearned Revenue $\qquad$ <br> Service Revenue $\qquad$ $(\$ 240,000 \div 6)$ | 40,000 | 40,000 |

## BRIEF EXERCISE 10-3

| (a) | $\begin{aligned} & \text { Cash ............................................... } \\ & \text { Unearned Revenue................ } \\ & (15,000 \times \$ 18) \end{aligned}$ | 270,000 | 270,000 |
| :---: | :---: | :---: | :---: |
| (b) | Unearned Revenue $\qquad$ Revenue $\qquad$ $(\$ 270,000 \div 12)$ | 22,500 | 22,500 |

## BRIEF EXERCISE 10-4

(a)
$\underline{2017}$
July 1 Cash ............................................... 60,000
Notes Payable ........................... 60,000
(b)
2017
Dec. 31 Interest Expense ( $\$ 60,000 \times 4 \% \times 6 / 12$ )..................... 1,200 Interest Payable ........................ 1,200
(c)

## 2018

July 1 Interest Expense (\$60,000 $\times 4 \% \times 6 / 12$ ) 1,200
Interest Payable
1,200
Notes Payable
60,000
Cash

## BRIEF EXERCISE 10-5

(a)

Calculation of sales tax payable - Ottawa store:
HST payable $=\mathbf{\$ 7 , 2 0 0} \times 13 \%=\$ 936$
Calculation of sales tax payable - Regina store:
GST payable $=\$ 8,400 \times 5 \%=\$ 420$
PST payable $=\$ 8,400 \times 5 \%=\$ 420$

## BRIEF EXERCISE 10-5 (Continued)

## (b)

## Ottawa store:

Mar. 12 Cash
Sales ............................................... $\mathbf{7 , 2 0 0}$
HST Payable ..... 936
Regina store:
Mar. 12 Cash ..... 9,240
Sales ..... 8,400
GST Payable ..... 420
PST Payable ..... 420
BRIEF EXERCISE 10-6
(a)
May 10, 2017:
Calculation of sales tax collected:HST: $\$ 1,800 \times 13 \% \times 40=$\$9,360
May 17, 2017:Calculation of sales tax collected:HST: $\$ 1,800 \times 13 \% \times 95=$\$22,230
(b)
May. 10 Cash ..... 81,360
Sales $(\$ 1,800 \times 40)$ ..... 72,000
HST Payable ..... 9,360
May 17 Cash ..... 193,230
Sales (\$1,800 x 95) ..... 171,000
HST Payable ..... 22,230
BRIEF EXERCISE 10-7
Mar. 31 Property Tax Expense (\$9,600 $\times \mathbf{3} / \mathbf{1 2}$ ) 2,400 Property Tax Payable

$\qquad$ ..... 2,400
June 30 Property Tax Payable ..... 2,400
Property Tax Expense (\$9,600 $\times 3 / 12$ ) ..... 2,400
Prepaid Property Tax (\$9,600 $\times 6 / 12$ ) $\mathbf{4 , 8 0 0}$Cash
$\qquad$9,600
Dec. 31 Property Tax Expense ..... 4,800Prepaid Property Tax4,800
BRIEF EXERCISE 10-8
Dec. 31 Warranty Expense ..... 18,700
Warranty Liability ..... 18,700
[(4,400 units $\times 5 \%) \times \$ 85 /$ unit]
BRIEF EXERCISE 10-9
July 3 Unearned Revenue-Loyalty Program ..... 50
Sales ..... 50
To recognize the loyalty program redemption.

Note: Each time One-Stop has a point redemption it satisfies the related performance obligation and therefore the unearned revenue becomes earned.

## BRIEF EXERCISE 10-10



## Allocate as follows:

Earned revenue $=(\$ 400,000 / \$ 410,000)^{\star} \$ 400,000=390,244$
Unearned revenue $=(\$ 10,000 / \$ 410,000) * \$ 400,000=9,756$
(b)
July Cash
Sales
BRIEF EXERCISE 10-11400,000390,244
Unearned Revenue-Loyalty Program ..... 9,756
Dec. 2017 Cash ..... 4,750
Unearned Revenue ..... 4,750
Jan. 2018 Unearned Revenue ..... 2,425
Sales ..... 2,425
Cost of Goods Sold ..... 1,070
Merchandise Inventory ..... 1,070

## BRIEF EXERCISE 10-12

(a) (2) Disclosed: This liability should be disclosed. The outcome is neither likely nor unlikely (not determinable). The treatment would be the same under both IFRS and ASPE.
(b) (1) Recorded: This liability is likely and can be reasonably estimated. The treatment would be the same under both IFRS and ASPE.

## BRIEF EXERCISE 10-12 (Continued)

(c) (1) Recorded under IFRS: This liability is "probable" and can be reasonably estimated.
(2) Disclosed under ASPE: The outcome is not "likely"; the chance of occurrence is not considered sufficiently high.

## BRIEF EXERCISE 10-13

The arguments for recording this liability are that the outcome is probable and the amount can be estimated. Since the company is public, IFRS applies. In this case, the lawsuit is considered an estimated liability and is recorded since the loss is considered probable. Management may be reluctant to disclose this information separately on the financial statements for fear it will be taken as an admission of guilt.

## BRIEF EXERCISE 10-14

(a) Gross pay:
Regular pay ( $40 \times \$ 12.50$ )................................... \$500.00
Overtime pay ( 6 \$ 18.75 ) ................................. 112.50 \$612.50
Less: CPP contributions.................................. \$26.99
El premiums .......................................... 11.21
Income tax withheld............................... 94.56
132.76
Net pay
$\$ 479.74$
(b)

## Employer costs:

CPP contributions \$26.99
El premiums (\$11.21 $\times 1.4$ )................................ 15.69
$\$ 42.68$
The employer does not bear any costs for employee income taxes.

## BRIEF EXERCISE 10-15

Aug. 22 Employee Benefits Expense 5,123
CPP Payable $\qquad$ 3,330
El Payable (\$1,281 $\times 1.4$ )
1,793

## BRIEF EXERCISE 10-16

(a) Current liability
(b) Current liability
(c) Current liability
(d) Current liability
(e) Current liability
(f) Current asset
(g) Disclosed in the notes to the financial statements as a contingent liability
(h) Current liability
(i) Current asset
(j) Current liability $(\$ 5,000)$ and long-term liability $(\$ 70,000)$

## BRIEF EXERCISE 10-17

(a) Current liability: $\$ 12,000$

Non-current liability: \$48,000
Only the portion of principal to be repaid in 2018 would be shown as a current liability.
(b) Current liability: $\$ 24,000$ ( $\$ 2,000$ per month $\times 12$ months) Non-current liability: \$66,000 (\$96,000 - [\$2,000 × 3] - \$24,000) The principal repayments of $\$ 2,000$ per month to be repaid in 2018 would be shown as a current liability.
BRIEF EXERCISE 10-18(a)SUNCOR ENERGY INC.(Partial) Balance SheetDecember 31, 2014(in millions)
Liabilities
Current liabilities
Accounts payable and accrued liabilities ..... \$5,704
Income taxes payable ..... 1,058
Current portion of provisions ..... 752
Short-term debt ..... 806
Current portion of long-term debt ..... 34
Total current liabilities ..... \$8,354

Note: This presentation lists the accounts in order of size, with the largest one (accounts payable and accrued liabilities) listed first. Other alternatives are also possible, such as listing the accounts in order of liquidity, by estimated maturity date.
(b)

$$
\text { Current Ratio = Current Assets } \div \text { Current Liabilities }
$$

$$
\$ 13,916^{\star} \div \$ 8,354=1.67 \text { to } 1
$$

* \$4,275 + \$5,495 + \$680 + \$3,466 = \$13,916

Acid-Test Ratio $=($ Cash + AR + Income Tax Recoverable $) \div$ Current Liabilities
$(\$ 4,275+\$ 5,495+\$ 680) \div \$ 8,354=1.25$ to 1

## *BRIEF EXERCISE 10-19

Monthly Pay $=(\mathbf{\$ 6 0 , 1 0 0} /$ year $\div 12$ months $)=\mathbf{\$ 5 , 0 0 8 . 3 3}$
(a) January 2015:

CPP deduction $=(\$ 5,008.33-[\$ 3,500 \div 12]) \times 4.95 \%=\$ 233.47$
El deduction $=\$ 5,008.33 \times 1.88 \%=\$ 94.16$
(b) December 2015:

No deductions for CPP or El. The cumulative salary up to November 30, 2015 is $\$ 55,091.63(\$ 5,008.33 \times 11)$. The cumulative salary exceeds the annual maximum pensionable earnings of $\$ 53,600$ and maximum insurable earnings of \$49,500.

## *BRIEF EXERCISE 10-20

Gross salary for the week $=\mathbf{\$ 1 , 0 7 5}$
(a) CPP $[(\$ 1,075.00-\$ 67.31) \times 4.95 \%] \quad \$ 49.88$

El ( $\$ 1,075 \times 1.88 \%)$
20.21
(b) Federal income tax (claim code 1) 130.95

Ontario income tax (claim code 1)
Total deductions
$\$ 266.24$

## SOLUTIONS TO EXERCISES

## EXERCISE 10-1

March 1 Supplies ..... 350
Accounts Payable ..... 350
5 Cash ..... 200
Unearned Revenue ..... 200
12 Unearned Revenue ..... 200
Service Revenue ..... 200
15 Salaries Expense ..... 5,000
CPP Payable ..... 230
El Payable ..... 94
Income Tax Payable ..... 1,400
Cash ..... 3,276
30 Accounts Payable ..... 350
Cash ..... 350

## EXERCISE 10-2

2017
July 1 Cash ..... 50,000
Notes Payable ..... 50,000
Nov. 1 Cash ..... 60,000
Notes Payable ..... 60,000
Dec. 31 Interest Expense ..... 2,600
Interest Payable ..... 2,600
$(\$ 50,000 \times 8 \% \times 6 / 12)=\$ 2,000$
$+(\$ 60,000 \times 6 \% \times 2 / 12)=\$ 600$
2018
Feb. 1 Notes Payable ..... 60,000
Interest Payable ..... 600
Interest Expense ..... 300
Cash 60,900$(\$ 60,000 \times 6 \% \times 1 / 12)=\$ 300$
Apr. 1 Notes Payable ..... 50,000
Interest Payable.................................. 2,000 Interest Expense ................................ 1,000 Cash ..... 53,000
$(\$ 50,000 \times 8 \% \times 3 / 12)=\$ 1,000$

## EXERCISE 10-3

(a) June 1 Cash ..... 90,000
Notes Payable ..... 90,000
(b) June 30 Interest Expense ..... 450Interest Payable450$(\$ 90,000 \times 6 \% \times 1 / 12)=\$ 450$(c) Dec. 1 Notes Payable..................................... 90,000Interest Payable.................................. 2,700Cash2,70092,700
(d) Total financing cost was $\$ 2,700(\$ 90,000 \times 6 \% \times 6 / 12)$

## EXERCISE 10-4

## Novack Company

2017
June 1 Equipment................................. 50,000
Accounts Payable $\qquad$
July 1 Accounts Payable..................... 50,000 Notes Payable $\qquad$ 50,000
Aug. 1 Interest Expense....................... 292 Cash 292 (\$50,000 $\times 7 \% \times 1 / 12$ )

Aug. 31 Interest Expense....................... 292
Interest Payable
292
Sep. 1 Interest Payable ............................................................ 292 292
Oct. 1 Interest Expense....................... 292
Notes Payable ........................... 50,000
Cash..................................... 50,292

## EXERCISE 10-5

(a) Tundra Trees
Mar. 1 Equipment ..... 30,000
Notes Payable

$\qquad$ ..... 30,000
July 31 Interest Expense ..... 1,000
Interest Payable ..... 1,000
(\$30,000 $\times 8 \% \times 5 / 12$ )
Oct. 1 Interest Expense* ..... 400
Interest Payable ..... 1,000
Notes Payable ..... 30,000
Cash ..... 31,400

* $(\$ 30,000 \times 8 \% \times 2 / 12)$
(b) Edworthy Equipment
Mar. 1 Notes Receivable ..... 30,000
Sales

$\qquad$ ..... 18,000
Merchandise Inventory

$\qquad$ ..... 18,000
May 31 Interest Receivable ..... 600
Interest Revenue ..... 600
( $\$ 30,000 \times 8 \% \times 3 / 12$ )
Oct. 1 Cash ..... 31,400
Interest Receivable ..... 600
Interest Revenue* ..... 800
Notes Receivable ..... 30,000

* $(\$ 30,000 \times 8 \% \times 4 / 12)$


## EXERCISE 10-6

## 1. Sainsbury

| April 10 | Cash | 14,916 |
| :---: | :---: | :---: |
|  | Sales | 13,200 |
|  | HST Payable (\$13,200 $\times 13 \%$ ) | 1,716 |

2. Montgomery

| April 21 | Cash ..................................... | 31,500 |  |
| :---: | :---: | :---: | :---: |
|  | Sales ................................ |  | 30,000 |
|  | GST Payable (\$30,000 $\times 5 \%$ ) |  | 1,500 |

3. Winslow

April 27
Cash ......................................... 28,112
Sales
25,100
GST Payable (\$25,100 $\times 5 \%$ )
1,255 PST Payable (\$25,100 $\times 7 \%$ )

1,757

## EXERCISE 10-7

(a) Quebec

| April 10 | Cash | 91,980 |
| :---: | :---: | :---: |
|  | Sales (\$80,000) | 80,000 |
|  | GST Payable (\$80,000 x 5\%) ...... | 4,000 |
|  | QST Payable (\$80,000 x 9.975\%) | 7,980 |

(b) Nova Scotia

| April 10 | Cash ........................................... | 92,000 |  |
| :---: | :---: | :---: | :---: |
|  | Sales ....................................... |  | 80,000 |
|  | HST Payable (\$80,000x 15\%) ..... |  | 12,000 |

(c) Alberta

| April 10 | Cash | 84,000 |
| :---: | :---: | :---: |
|  | Sales | 80,000 |
|  | GST Payable (\$80,000 x 5\%) .... | 4,000 |

## EXERCISE 10-8

## 2017

(a) Oct. 31 Cash................................................... 21,000

Unearned Revenue
21,000
(100 $\times \$ 210$ )
(b)

1. Nov. 30 Unearned Revenue............................. 3,500 Admission Revenue ..................... 3,500 ( $\$ 21,000 \times 1 / 6$ )

2018
2. Mar. 31 Unearned Revenue............................. 3,500

Admission Revenue ..................... 3, 3,500 (\$21,000 × 1/6)*
3. Apr. 30 Unearned Revenue 3,500
Admission Revenue
3,500 $(\$ 21,000 \times 1 / 6)^{*}$

* Charleswood adjusts its accounts on a monthly basis. There would be a similar entry at December 31, 2017, January 31, 2018, and February 28, 2018.
(c) Parts 1, 2 and 3.

Unearned Revenue

| Date | Explanation | Ref. | Debit | Credit |
| :--- | :--- | :--- | :--- | ---: | Balance | $\underline{2017}$ |  |  | 21,000 |
| :--- | :--- | ---: | ---: |
| Oct. 31 |  | 21,000 |  |
| Nov. 30 | Adjusting entry |  | 3,500 |
|  |  | 17,500 |  |
| Dec. 31 | Adjusting entry | 3,500 |  |
| 2018 |  |  |  |
| Jan. 31 | Adjusting entry | 3,500 |  |
| Feb. 28 | Adjusting entry | 3,500 |  |
| Mar. 31 | Adjusting entry | 3,500 |  |
| Apr. 30 | Adjusting entry | 3,500 | 7,000 |
|  |  |  | 3,500 |
|  |  |  | 0 |

## EXERCISE 10-9

2017

(b) Dec. 31 Unearned Revenue............................. 22,500

Revenue
22,500
(\$270,000 $\times 1 / 12$ )
2018


## EXERCISE 10-10

(a) May 31 Property Tax Expense
(\$24,000 $\times 1 / 12$ ) ......................... 2,000
Property Tax Payable.........

The company would have accrued property tax expense on a monthly basis using the 2016 monthly expense of \$2,200 per month. An adjustment would be required when the property tax bill is received for the over accrual:

May 31 Property Tax Payable .............. 800
Property Tax Expense ......... 800
$[(\$ 24,000 \times 1 / 12)-\$ 2,200] \times 4$ months
The company accrues property tax expense on June 30, 2017 for one month.

| July 31 | Property Tax Payable $(\$ 24,000 \times 6 / 12)$ $\qquad$ <br> Property Tax Expense $(\$ 24,000 \times 1 / 12)$ $\qquad$ <br> Prepaid Property Tax $(\$ 24,000 \times 5 / 12)$ $\qquad$ <br> Cash $\qquad$ | 12,000 2,000 10,000 |
| :---: | :---: | :---: |

The company makes monthly adjusting entries for property tax expense on from August to December, as follows:

Property Tax Expense .............. 2,000
Prepaid Property Tax
2,000
(b) Since the company's fiscal year matches the annual property tax bill, there are no prepaid property taxes or property taxes payable.

## Income Statement, Year Ended December 31, 2017 (Partial) Operating expenses <br> Property tax expense <br> \$24,000

## EXERCISE 10-10 (Continued)

(b) (Continued)

| Prepaid Property Tax |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Date | Explanation | Ref. | Debit | Credit | Balance | Jul. 31 |
| :--- |
| Aug. 31 |

Property Tax Expense

| Date | Explanation | Ref. | Debit |
| :--- | ---: | ---: | ---: |
| Jan. 31 | 2,200 |  | Balance |
| Feb. 28 | 2,200 |  | 4,400 |
| Mar. 31 | 2,200 |  | 6,600 |
| Apr. 30 | 2,200 |  | 8,800 |
| May 31 | 2,000 |  | 10,800 |
| May 31 |  | 800 | 10,000 |
| June 30 | 2,000 |  | 12,000 |
| July 31 | 2,000 |  | 14,000 |
| Aug. 31 | 2,000 |  | 16,000 |
| Sep. 30 | 2,000 | 18,000 |  |
| Oct. 31 | 2,000 | 20,000 |  |
| Nov. 30 | 2,000 | 22,000 |  |
| Dec. 31 | 2,000 | 24,000 |  |

## EXERCISE 10-11

(a) Estimated warranty costs for November and December sales:

Number of units sold $(30,000+32,000) \quad 62,000$
Estimated rate of defective units
Total estimated defective units
+2.5\%
1,550
Average warranty repair cost $\begin{array}{r}1520 \\ \times \$ 1,000 \\ \hline\end{array}$
Estimated warranty costs for Nov. and Dec.
\$31,000
Dec. 31 Warranty Expense 31,000
Warranty Liability

31,000
(b) Dec. 31 Warranty Liability ............................. 21,600

Repair Parts Inventory, Salaries Payable, Cash, etc....

21,600
$(450+630) \times \$ 20=\$ 21,600$ $\qquad$
(c)

Income Statement, Year Ended December 31, 2017 (Partial)
Operating expenses
Warranty expense. \$31,000

Balance Sheet, at December 31, 2017 (Partial)

## Current Liabilities

Warranty liability (\$31,000 - \$21,600)..................... \$9,400

## EXERCISE 10-12

(a) Warranty expense:

2015: $(\$ 2,000 \times 500$ units sold $\times 5 \%)=\$ 50,000$
2016: $(\$ 2,000 \times 600$ units sold $\times 5 \%)=\$ 60,000$
2017: $(\$ 2,000 \times 525$ units sold $\times 5 \%)=\$ 52,500$
(b) Warranty liability at the end of the year:

Estimated warranty expense for 2015: \$50,000
Less: Cost incurred in $2015 \quad(30,000)$
Warranty liability at end of 2015: 20,000
Add: Estimated warranty expense for 2016: 60,000
Less: Cost incurred $2016 \quad(46,000)$
Warranty liability at end of 2016: 34,000
Add: Estimated warranty expense for 2017: 52,500
Less: Cost incurred 2017
$(53,500)$
Warranty liability at end of 2017:
\$33,000

## EXERCISE 10-13

(a) $2016: 900,000 \times 35 \% \times \$ 0.01=\$ 3,150$ 2017:1,200,000 $\times 35 \% \times \$ 0.01=\$ 4,200$
(b) 2016- Stand-alone sales $=\$ 300,000$

Total value of goods $=\$ 300,000+\$ 3,150=\$ 303,150$
Amount to allocate to revenue $=\$ 300,000 *(\$ 300,000 / \$ 303,150)=$ \$296,883
Amount to allocate to unearned revenue-rewards program = $=\$ 300,000^{*}(\$ 3,150 / \$ 303,150)=\$ 3,117$

2016
Cash 300,000
Sales
296,883
Unearned Revenue-Loyalty Program

2017- Stand-alone sales= $\$ 400,000$
Total value of goods $=\$ 400,000+\$ 4,200=\$ 404,200$
Amount to allocate to revenue= $\$ 400,000 \times(\$ 400,000 / \$ 404,200)=$ \$395,844
Amount to allocate to unearned revenue-rewards program = $\$ 400,000$ X (\$4,200/\$404,200) = \$4,156
Cash ..... 400,000
Sales ..... 395,844
Unearned Revenue-Loyalty Program ..... 4,156

## EXERCISE 10-13 (Continued)

(c)

When the points are redeemed, the following entry would be done:

$$
\begin{aligned}
& \text { Unearned Revenue-Loyalty Program } \quad X X X \\
& \text { Cash ................................................. XXX } \\
& \text { Sales } \\
& X X X \\
& \text { Cost of Goods Sold......................... XXX } \\
& \text { Inventory } \\
& \text { XXX }
\end{aligned}
$$

The redemption of the points increases net income as the unearned revenue is now recognized as earned. There is no impact on cash when the points are redeemed as the entry is to debit Unearned Revenue-Loyalty Program and credit Sales.

## EXERCISE 10-14

(1) (a) Estimable. The amount and timing with respect to brake replacement is uncertain. The existence of the liability to replace the brakes is certain and the amount can be reasonably estimated. The liability should be recorded in the financial statements.
(b) Not required.
(2) (a) Estimable. The amount and timing with respect to "money back, no questions asked" guarantee is uncertain. The existence of the money back guarantee is certain.
(b) Not required.
(3) Same as (2) above.
(4) (a) Determinable. The timing with respect to the prizes to be distributed is uncertain. The existence of the liability and the cost of the trip are certain. The liability should be recorded in the financial statements.
(b) Not required.
(5) (a) Contingent Liability under both IFRS and ASPE. The contingent liability is neither likely nor unlikely and the amount cannot be reasonably estimated.
(b) Under both IFRS and ASPE, the contingent liability would be disclosed in the notes to the financial statements because the outcome and the amount are both unknown.

## EXERCISE 10-15

(a) The company should record an estimate of the cost of replacing the cribs in its financial statements. This liability is probable and can be reasonably estimated. The company also has a contingent liability with respect to the lawsuit. If the probability of loss of the lawsuit is remote, the company does not have to report or disclose anything else. If it is either possible (and the loss cannot be estimated) or if it cannot be determined if the lawsuit will be successful, the lawsuit should be disclosed in the notes as a contingent liability. If it is probable the lawsuit will be successful and the $\$ 1,500,000$ is a reasonable estimate, it should be accrued as an estimated liability.
(b) If Sleep-a-Bye Baby Company's lawyers advise that it is likely that the company will have to pay damages of $\$ 100,000$, then a journal entry should be recorded. The liability is likely and the amount can be reasonably estimated. The journal entry would be as follows:

Loss due to Damages 100,000
Liability for Damages Due to Unsafe Cribs
100,000
(c) If Sleep-a-Bye Baby Company is a private company, the answer to part (a) will be changed to assess the likelihood of loss from the lawsuit as "likely" rather than "probable". If the likelihood of loss of the lawsuit is remote, the company does not have to report or disclose anything else. If it is either "likely" (and the loss cannot be estimated) or if it cannot be determined if the lawsuit will be successful, the lawsuit should be disclosed in the notes as a contingent liability. If it is "likely" the lawsuit will be successful and the $\$ 1,500,000$ is a reasonable estimate, it should be recorded. Part (b) stays the same, since the higher threshold of "likely" was applied.

## EXERCISE 10-16

(a)
Apr. 30 Salaries Expense
CPP Payable ..... 46,600 ..... 2,162
El Payable ..... 853
Income Tax Payable ..... 9,011
Cash ..... 34,574
(b)
Apr. 30 Employee Benefits Expense ..... 5,686
CPP Payable ..... 2,162
El Payable (\$853 $\times 1.4$ ) ..... 1,194
Workers' Compensation Payable (\$46,600 x 1\%) ..... 466
Vacation Pay Payable (\$46,600 $\times 4 \%$ ) 1,864
(c)May 15 CPP Payable (\$2,162 + \$2,162) ......... 4,324El Payable (\$853 + \$1,194) ................ 2,047Income Tax Payable ........................... 9,011Cash15,382

## EXERCISE 10-17

| (a) |  | AHMAD COMPANY Payroll Register Week Ended May 31 |  |  |  |  |  |  |  | Net <br> Pay |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Gross Earnings |  |  | Deductions |  |  |  |  |  |  |
| Employee | Total Hours | Regular | Overtime | Gross Pay | CPP | El | Income Tax | Health Insurance | Total |  |  |
| A. Kassam | 47 | \$ 520.00 | \$136.50 | \$ 656.50 | \$29.17 | \$12.34 | \$ 85.55 | \$10.00 | \$137.06 |  | 519.44 |
| H. Faas | 45 | 560.00 | 105.00 | 665.00 | 29.59 | 12.50 | 87.10 | 15.00 | 144.19 |  | 520.81 |
| G. Labute | 46 | 600.00 | 135.00 | 735.00 | 33.05 | 13.82 | 102.55 | 15.00 | 164.42 |  | 570.58 |
| Totals |  | \$1,680.00 | \$376.50 | \$2,056.50 | \$91.81 | \$38.66 | \$275.20 | \$40.00 | \$445.67 |  | 1,610.83 |
| (b) | May | 31 Sala | ies Expens | ........... | ......... | .... | .......... | 2,056.50 |  |  |  |
|  |  |  | P Payable |  |  |  | ......... |  | 91.81 |  |  |
|  |  |  | Payable.. |  |  |  |  |  | 38.66 |  |  |
|  |  |  | come Tax P | ayable ... |  |  | ........ |  | 275.20 |  |  |
|  |  |  | alth Insura | ance Payabl |  |  |  |  | 40.00 |  |  |
|  |  |  | alaries Paya | ble ........... | ....... | ...... | ......... |  | 1,610.83 |  |  |
|  |  | 31 Emplor | oyee Bene | its Expens | ... | .......... | ........... | 309.32 |  |  |  |
|  |  |  | P Payable | (\$91.81 $\times 1$ |  |  | ......... |  | 91.81 |  |  |
|  |  |  | Payable (\$38 | 88.66 $\times 1.4$ ) |  |  |  |  | 54.12 |  |  |
|  |  |  | orkers' Com | pensation | Payable | (\$2,056. | 50 $\times 2 \%$ ) |  | 41.13 |  |  |
|  |  |  | cation Pay | Payable (\$2, | 056.50 $\times$ | + $4 \%$ ).... | .......... |  | 82.26 |  |  |
|  |  |  | alth Insura | nce Payabl | ......... | .......... | .......... |  | 40.00 |  |  |

## EXERCISE 10-18

|  | Principal | Date <br> Issued | Rate | Term | Current <br> Portion | Non- <br> Current <br> Portion | Interest <br> Payable |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: | ---: |
| 1. | $\$ 60,000$ | $\mathbf{3 / 3 1 / 1 6}$ | $6 \%$ | 6 yrs. | $\$ 10,000$ | $\$ 50,000$ | $\$ 2,700$ |
| 2. | $\$ 30,000$ | $7 / 1 / 16$ | $4 \%$ | 7 mo. | $\$ 30,000$ | $\$ 0$ | $\$ 600$ |
| 3. | $\$ 120,000$ | $9 / 1 / 16$ | $5 \%$ | 30 mo | $\$ 48,000$ | $\$ 60,000$ | $\$ 450$ |

## Current Portion:

Note 1: One payment of $\$ 10,000$ will be made in the coming year.
Note 3: $\$ 48,000=12$ monthly payments $\times \$ 4,000$
Non-Current Portion:
Note 1: $\$ 50,000=\$ 60,000-\$ 10,000$
Note 3: \$60,000 = \$120,000 - (3 payments in $2016 \times \$ 4,000$ ) \$48,000

## Interest Payable:

Note 1: $\$ 2,700=\$ 60,000 \times 6 \% \times 9 / 12$
Note 2: $\$ 600=\$ 30,000 \times 4 \% \times 6 / 12$
Note 3: $\$ 450=[\$ 120,000-(3$ payments in $2016 \times \$ 4,000)] \times 5 \% \times$ 1/12

## EXERCISE 10-19

## MEDLEN MODELS <br> (Partial) Balance Sheet December 31, 2017

Current liabilities
Accounts payable ..... \$ 63,000
Salaries payable ..... 32,000
Unearned revenue ..... 70,000
Notes Payable ..... 40,000
Litigation liability ..... 25,000
Mortgage payable-current portion ..... 90,000
Total current liabilities \$320,000
*EXERCISE 10-20
(a) Gross Pay $=(40$ hours $\times \$ 22.60)+(4$ hours $\times[\$ 22.60 \times 1.5])$ $=\$ 904.00$ + \$135.60 = \$1,039.60
Deductions (using Illustration 10A-3):
CPP [(\$1,039.60-(\$3,500 $\div 52)) \times 4.95 \%]$ ..... $\$ 48.13$
El (\$1,039.60 $\times 1.88 \%$ ) ..... 19.54
Federal income tax (claim code 1) ..... 123.05
Ontario income tax (claim code 1) ..... 61.70
Total deductions ..... \$252.42
(b) June 15 Salaries Expense. ..... $1,039.60$
CPP Payable ..... 48.13
El Payable. ..... 19.54
Income Tax Payable (\$123.05 + \$61.70) ..... 184.75
Cash ..... 787.18
(c) June 15 Employee Benefits Expense ..... 75.49CPP Payable48.13
El Payable (\$19.54 × 1.4) ..... 27.36

## *EXERCISE 10-21

|  | Gross | Cumulative | CPP | El |
| :---: | ---: | :---: | :---: | :---: |
| Month | $\underline{\text { Salary }}$ | Salary | $\underline{4.95 \%}$ | $\underline{1.88 \%}$ |
| Jan. - Oct. | $\$ 47,500.00$ | $\$ 47,500.00$ | $\$ 2,206.90^{2}$ | $\$ 8893.00^{4}$ |
| November | $4,750.00$ | $52,250.00$ | $220.69{ }^{1}$ | $37.60^{5}$ |
| December | $\underline{4,750.00}$ | $57,000.00$ | $\underline{52.36}^{3}$ | $\underline{0}$ |
| Totals | $\underline{\$ 57,000.00}$ |  | $\underline{\$ 2,479.95}$ | $\underline{\$ 930.60}$ |

1. $C P P=(\$ 4,750-[\$ 3,500 \div 12]) \times 4.95 \%=\$ 220.69$
2. $C P P=\$ 220.69 /$ month $\times 10$ months $=\$ 2,206.90$
3. $\mathrm{CPP}=\$ 52.36$ (annual CPP maximum - CPP to end of November = maximum to be deducted in November [\$2,479.95-(\$220.69 $\times 11$ )
4. $\mathrm{El}=\$ 4,750 \times 1.88 \%=\$ 89.30$

EI $=\$ 86.93 /$ month $\times 10$ months $=\$ 893.00$
5. $\mathrm{El}=(\$ 49,500$ maximum insurable earnings $-\$ 47,500) \times$ $1.88 \%$ = \$37.60

## SOLUTIONS TO PROBLEMS

## PROBLEM 10-1A

Feb. 2 Supplies ..... 2,500
Accounts Payable. ..... 2,500
10 Cash ..... 48,816
Sales ..... 43,200
GST Payable ..... 2,160
PST Payable ..... 3,456
15 Cash ..... 35,000
Notes Payable ..... 35,000
21 Salaries Expense ..... 50,000
CPP Payable ..... 2,308
El Payable ..... 940
Income Tax Payable ..... 8,900
Salaries Payable ..... 37,852
21 Employee Benefits Expense ..... 3,624
CPP Payable ..... 2,308
El Payable (\$940 x 1.4) ..... 1,316
28 Interest Expense ..... 87.50
Interest Payable ..... 87.50
(\$35,000 x 6\% x 1/12 X .5)
28 Warranty Expense ..... 14,000
Warranty Liability ..... 14,000
28 Salaries Payable ..... 37,852
Cash ..... 37,852

## PROBLEM 10-1A (Continued)

Mar. 1 GST Payable ..... 2,160
PST Payable ..... 3,456Cash
$\qquad$,5,616
2 Accounts Payable ..... 2,500Cash2,500
15 CPP Payable (\$2,308 x 2) ..... 4,616
El Payable (\$940 + \$1,316) ..... 2,256
Income Tax Payable ..... 8,900
Cash15,772

## Taking It Further:

Some additional mandatory employee benefits paid entirely by the employer include payments to fund the workplace health, safety, and compensation plan. Vacations are also mandatory and the amounts and limits vary among provinces. The remaining benefits are not mandatory and have more to do with the negotiated employment package with employees. The latter could include full or partial payments into pension plans, savings plans, and medical or life insurance related coverage. Finally, again based on a business' practice, paid absences for sick leave, for example, are additional employee benefits paid by the employer.

## Mandatory and negotiated employee benefit costs are accounted for as expenses when incurred.

## PROBLEM 10-2A

(a)
Jan. 2 Cash ..... 27,000
Notes Payable ..... 27,000
5 Cash ..... 23,165
Sales ..... 20,500
HST Payable (\$20,500 x 13\%) ..... 2,665
12 Unearned Revenue 10,000 Service Revenue .......................... 8,849HST Payable1,151
14 HST Payable ..... 7,700
Cash7,700
20 Accounts Receivable ..... 50,850
Sales (900 X \$50) ..... 45,000
HST Payable (\$45,000 x 13\%) ..... 5,850
25 Cash ..... 14,125
Sales ..... 12,500
HST Payable (\$12,500 x 13\%) ..... 1,625
(b)
31 Interest Expense ..... 135
Interest Payable. ..... 135
(\$27,000 x 6\% x 1/12)
31 Warranty Expense ..... 3,150
Warranty Liability ..... 3,150
(\$45,000 x 7\%)

PROBLEM 10-2A (Continued)
(c)

> ACCARDO COMPANY (Partial) Balance Sheet January 31, 2017
Current liabilities
Accounts payable ..... \$52,000
HST payable (\$2,665 + \$1,151+ \$5,850 + \$1,625) ..... 11,291
Interest payable ..... 135
Warranty liability ..... 3,150
Unearned revenue (\$16,000-\$10,000) ..... 6,000
Notes payable ..... 27,000
Total current liabilities ..... \$99,576
Taking lt Further:

Warranty liabilities and the related expenses are accrued at the time of the sale of the product on which the warranty applies. Merchants accrue the expenses before a customer has any issues with the product in order to recognize the expense in the same accounting period as the sale. This fulfills the matching principle in the conceptual framework of accounting. Doing so also honours the accrual basis of accounting. Failing to do so could result in the benefit of the sale occurring in one accounting period and the related expenses being incurred in a subsequent accounting period. This latter treatment would provide financial information that would be misleading to the financial statement users.

## PROBLEM 10-3A

|  | Original Principal | Date issued | Rate | Term | (a) <br> Current Portion |  | (b) <br> Noncurrent Portion |  | (c) <br> Interest Payable |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | \$ 35,000 | Aug. 1/17 | 5.0\% | 10 months | \$ 35,000 |  | \$ |  | \$ 145.83 | 1 |
| 2 | \$ 15,000 | Sept. 1/17 | 4.0\% | 4 months | \$ 15,000 |  | \$ |  | \$ 200.00 | 2 |
| 3 | \$ 26,000 | Nov. 1/17 | 4.5\% | 6 months | \$ 26,000 |  | \$ |  | \$ 195.00 | 3 |
| 4 | \$ 60,000 | Mar. 31/17 | 3.5\% | 5 years | \$ 12,000 |  | \$ 48,000 |  | \$1,575.00 | 4 |
| 5 | \$ 100,000 | Oct. 1/17 | 5.0\% | 6 years | \$ 24,000 | 7 | \$ 72,000 | 8 | \$ 400.00 | 5 |
| 6 | \$ 40,000 | Jan. 31/16 | 5.0\% | 4 years | \$ 10,000 |  | \$ 20,000 | 9 | \$ | 6 |

$1 \quad \$ 145.83=\$ 35,000 \times 5.0 \% \times 1 / 12$
$2 \quad \$ 200.00=\$ 15,000 \times 4.0 \% \times 4 / 12$
$3 \quad \$ 195.00=\$ 26,000 \times 4.5 \% \times 2 / 12$
$4 \quad \$ 1,575.00=\$ 60,000 \times 3.5 \% \times 9 / 12$
$5 \quad \$ 400.00=\$ 96,000 \times 5.0 \% \times 1 / 12$
6 Interest was paid on December 31, 2017

7 current: $\$ 24,000=\$ 2,000 \times 12$ months
8 non-current: $\$ 72,000=\$ 100,000-\$ 24,000-\$ 4,000$
9 non-current: $\$ 20,000=\$ 40,000-(\$ 10,000 \times 2)$

## PROBLEM 10-3A (Continued)

## Taking It Further:

For the maker, a note payable bears interest which is an additional cost. Some liabilities, such as accounts payable to suppliers are usually non-interest bearing as long as they are paid within the credit period. In addition, the term of the note may call for periodic payments of interest. This adds to the administrative burden of managing the note. The benefit to the maker is that the terms of the note are usually negotiated with the payee and the interest rate is more favourable than financing obtained through a bank. If the note is used to pay a supplier, the term of the note gives the maker additional time to repay the principal.

For the payee, the note provides a stream of interest revenue. Because it is a signed document, it also provides additional security of collection. The cost to the payee is that cash is not received until the note reaches maturity.

## PROBLEM 10-4A

(a) Jan. 12 Merchandise Inventory ..... 25,000 Accounts Payable ..... 25,000
31 Accounts Payable ..... 25,000
Notes Payable ..... 25,000
Feb. 28 Interest Expense ..... 146
(\$25,000 $\times 7 \% \times 1 / 12$ ) Cash ..... 146
Mar. 31 Notes Payable ..... 14,000
Interest Payable ..... 490
Interest Expense (\$14,000 $\times 7 \% \times 3 / 12$ ) ..... 245Cash14,735
Mar. 31 Interest Expense ..... 146
( $\$ 25,000 \times 7 \% \times 1 / 12$ ) Cash ..... 146
Apr. 30 Notes Payable ..... 25,000
Interest Expense ( $\$ 25,000 \times 7 \% \times 1 / 12$ ) ..... 146
Cash ..... 25,146
Aug. 1 Equipment. ..... 41,000
Cash ..... 11,000
Notes Payable ..... 30,000
Sept. 30 Cash ..... 100,000
Notes Payable ..... 100,000
Dec. 31 Interest Expense ..... 1,250 (\$100,000 $\times 5 \% \times 3 / 12$ )
Cash ..... 1,250

## PROBLEM 10-4A (Continued)

## (a) (Continued)

$$
\begin{array}{ll}
\text { Dec. } 31 & \text { Interest Expense ....................... } \\
& (\$ 30,000 \times 6 \% \times 50 \\
& \text { Interest Payable ..................... }
\end{array}
$$

(b)

$$
\begin{aligned}
& \text { LEARNSTREAM COMPANY } \\
& \text { (Partial) Balance Sheet } \\
& \text { December 31, } 2017
\end{aligned}
$$

Current liabilities
Notes payable ..... \$30,000
Current portion of long-term notes payable ..... 10,000
Interest payable ..... 750
40,750
Long-term liabilitiesNotes payable
$\qquad$\$100,000
Less current portion $(10,000)$ ..... 90,000
(c)

$$
\begin{aligned}
& \text { LEARNSTREAM COMPANY } \\
& \text { (Partial) Income Statement } \\
& \text { Year Ended December 31, } 2017
\end{aligned}
$$

Other expense
Interest expense ..... \$2,683
$(\$ 146$ X 3) $+\$ 245+\$ 1,250+\$ 750)=\$ 2,683$

## PROBLEM 10-4A (Continued)

## Taking It Further:

Notes payable are classified according to their maturity dates as being either current or non-current. This classification is also extended to the portion of long-term debt that is repayable in the current term. This classification is important because it represents amounts that must be settled within the next year and is an important factor in assessing the company's liquidity.

## PROBLEM 10-5A

(a) Jan. 2 Cash ..... 46,000
Notes Payable ..... 46,000
5 Cash 9,718
Sales ..... 8,600
HST Payable (\$8,600 × 13\%) ..... 1,118
Cost of Goods Sold ..... 4,100Merchandise Inventory4,100
12 Unearned Revenue ..... 8,000
Service Revenue ..... 7,080
HST Payable ..... 920
14 HST Payable ..... 8,630
Cash

$\qquad$ ..... 8,630
15 CPP Payable ..... 1,320
El Payable ..... 680
Income Tax Payable ..... 3,340
Cash

$\qquad$ ..... 5,340
17 Accounts Payable ..... 14,800
Cash ..... 14,800
20 Accounts Receivable ..... 118,085
Sales (1,900 × \$55) ..... 104,500
HST Payable (\$104,500 $\times 13 \%$ ) ..... 13,585
Cost of Goods Sold (1,900 $\times \$ 25$ ) . 47,500 Merchandise Inventory ..... 47,500

## PROBLEM 10-5A (Continued)

(a) (Continued)
Jan. 29 Unearned Revenue-Loyalty Program ..... 2,300
HST Payable ..... 265
Revenue from Rewards Program ..... 2,035
(\$2,300-\$265)
31 Cash ..... 250,000
Sales ..... 244,141
Unearned Revenue-Loyalty Program ..... 5,859
Stand-alone sales ..... \$250,000
Stand-alone value of loyalty points(30,000 $\times \$ 1 \times 20 \%$ ).6,000
Total Value ..... \$256,000
Allocate as follows:
Earned revenue $\mathbf{( \$ 2 5 0 , 0 0 0 / \$ 2 5 6 , 0 0 0 )} \mathbf{X} \mathbf{\$ 2 5 0 , 0 0 0 = \$ 2 4 4 , 1 4 1}$ Unearned revenue= $(\$ 6,000 / \$ 256,000) X \$ 250,000=\$ 5,859$
31 Salaries Expense ..... 18,750
CPP Payable ..... 764
El Payable ..... 343
Income Tax Payable ..... 3,481
Salaries Payable. ..... 14,162
31 Salaries Payable ..... 14,162
Cash ..... 14,162
(b)
(1) Jan. 31 Interest Expense ..... 268
Interest Payable ..... 268
(\$46,000 $\times 7 \% \times 1 / 12$ )

## PROBLEM 10-5A (Continued)

## (b) (Continued)

(2) Jan. 31 Warranty Expense(1,900 $\times 9 \% \times \$ 10$ ) .......................... 1,710Warranty Liability ..................... 1,710(3) Jan. 31 Employee Benefits Expense ..... 1,994
CPP Payable ..... 764
El Payable (\$343 $\times 1.4$ ) ..... 480
Vacation Pay Payable ..... 750(\$18,750 x 4\%) = \$750
(4) Jan. 31 Property Tax Expense (\$8,820 $\div 12$ ) ..... 735
Property Tax Payable ..... 735
(c)
SHUMWAY SOFTWARE COMPANY(Partial) Balance SheetJanuary 31, 2017
Current liabilities
Notes payable ..... \$ 46,000
Accounts payable (\$40,000 - \$14,800) ..... 25,200
Unearned revenue (\$15,300-\$8,000 ..... 7,300
Unearned revenue-loyalty program (\$3,700-\$2,300 + \$5,859) ..... 7,259
HST payable
$(\$ 8,630+\$ 1,118+\$ 920-\$ 8,630+\$ 13,585+\$ 265)$. ..... 15,888
Income tax payable ( $\$ 3,340-\$ 3,340+\$ 3,481$ ) ..... 3,481
CPP payable (\$1,320 - \$1,320 + \$764 + \$764) ..... 1,528
El payable ( $\$ 680-\$ 680+\$ 343+\$ 480)$ ..... 823
Vacation pay payable (\$8,660 + \$750) ..... 9,410
Property tax payable ..... 735
Warranty liability ..... 1,710
Interest payable ..... 268
Total current liabilities ..... \$ 119,602

## PROBLEM 10-5A (Continued)

## Taking It Further:

Most companies require employees to take their vacation as soon as possible after it is earned, usually after a year of work when the full annual entitlement is earned. This prevents the accumulation of vacation pay liability for the company, and ensures staff is rotated and cross-trained for other functions. Ensuring staff take vacation on a regular basis also results in stronger internal controls and reduces the likelihood of fraud and theft by ensuring one staff member's work is performed by another staff member. When employees take their vacation, the Vacation Pay Payable account is debited. The credit side of the entry is the same as for regular payroll: CPP Payable, EI Payable, Income Taxes Payable, and Salaries payable are credited.

## PROBLEM 10-6A

$$
\text { (a) Warranty expense } \begin{aligned}
& 2015-(1,500 \times 5 \% \times \$ 30)=\$ 2,250 \\
& 2016-(1,700 \times 5 \% \times \$ 30)=\$ 2,550 \\
& 2017-(1,800 \times 5 \% \times \$ 30)=\$ 2,700 \\
& \\
& \text { Warranty liability at year end } \\
& 2015-(\$ 0-\$ 2,250+\$ 2,250)=\$ 0 \\
& 2016-(\$ 0-\$ 2,400+\$ 2,550)=\$ 150 \\
& 2017-(\$ 150-\$ 2,640+\$ 2,700)=\$ 210
\end{aligned}
$$

Note: See analysis of Warranty Liability account in (b) below.
(b)

$$
\begin{array}{cccc}
2015 & \begin{array}{c}
\text { Warranty Liability.................................. } \\
\text { Repair Parts Inventory................. }
\end{array} & & 2,250 \\
\text { Warranty Expense }(1,500 \times 5 \% \times \$ 30) . & 2,250 & \\
\text { Warranty Liability } . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ & & 2,250
\end{array}
$$


Warranty Expense (1,700×5\% $\times \mathbf{\$ 3 0}$ ). 2,550
Warranty Liability ............................. 2,550

Warranty Expense (1,800 $\times 5 \% \times \$ 30$ ) . 2,700
Warranty Liability
2,700

PROBLEM 10-6A (Continued)
(b) (Continued)

## Warranty Liability

| Date | Explanation | Ref. | Debit | Credit |
| :--- | :---: | :---: | :---: | :---: |
| Balance |  |  |  |  |
| 2015 |  |  |  |  |
| During | 2,250 |  | $2,250 \mathrm{Dr}$ |  |
| Dec. 31 |  |  | 2,250 | 0 |
| 2016 |  | 2,400 |  | $2,400 \mathrm{Dr}$ |
| During |  |  | 2,550 | 150 |
| Dec. 31 | 2,640 |  | $2,490 \mathrm{Dr}$ |  |
| 2017 |  |  | 2,700 | 210 |

(c) Percentage of units returned for repair = Number of units returned $\div$ Number of units sold

|  | Returned | Sold |
| ---: | :---: | ---: |
| 2015 | 75 | 1,500 |
| 2016 | 90 | 1,700 |
| 2017 | $\underline{105}$ | $\underline{1,800}$ |
|  | $\underline{\underline{270}}$ | $\underline{\underline{5,000}}$ |

Percentage returned $=270 \div 5,000=5.4 \%$
Average actual warranty cost per unit =
Total actual warranty costs $\div$ Total units returned

|  | Actual costs |
| :---: | :---: |
| 2015 | $\$ 2,250$ |
| 2016 | 2,400 |
| 2017 | $\underline{2,640}$ |
|  | $\underline{\$ 7,290}$ |

Average warranty cost per unit over the three-year period: \$7,290 $\div \mathbf{2 7 0}=\mathbf{\$ 2 7}$

## PROBLEM 10-6A (Continued)

## Taking It Further:

Revisions of estimates are applied prospectively. This means that the changes in estimates will be applied to 2017 only. The January 1, 2017 opening balance in the Warranty Liability account remains at $\$ 150$. The revised warranty expense for 2017 is calculated as follows:

Warranty expense 2017:
$1,800 \times 7 \% \times \$ 27=\$ 3,402$
Warranty liability at December 31, 2017:
\$150 - \$2,640 + \$3,402 = \$912

## PROBLEM 10-7A

(a) 1. Will reduce revenues and profit as a portion of the sales are allocated to the future performance obligation and therefore recorded as unearned revenues.
2. Increases revenues and profit (form of unearned revenue)
3. No effect on revenues, expenses, and profit
4. Increases revenues, expenses (cost of goods sold), and profit
(b) 2016:
1.

Cash ........................................... 4,560,000
$\begin{array}{lr}\text { Sales ................................. } & 4,447,334 \\ \text { Unearned Revenue-Loyalty Program } & 112,666\end{array}$

Stand-alone gas sales....................................... \$4,560,000
Stand-alone value of loyalty coupons
((3,800,000 x \$0.038 x 80\%),
Total Value. 115,520
\$4,675,520

## Allocate as follows:

Earned revenue= (\$4,560,000/\$4,675,520) X \$4,560,000 = \$4,447,334 Unearned revenue $=(\$ 115,520 / \$ 4,675,520) \times \$ 4,560,000=\$ 112,666$
2. Unearned Revenue-Loyalty Program.. 46,000

Revenue from Rewards Program 46,000

## PROBLEM 10-7A (Continued)

## (b) (Continued) <br> 2017:

| 3. | Cash | 6,045,000 |  |
| :---: | :---: | :---: | :---: |
|  | Sales |  | 5,906,870 |
|  | Unearned Revenue-Loyalty | Program | 138,130 |

Stand-alone gas sales ..... \$6,045,000
Stand-alone value of loyalty coupons (4,650,000 x \$0.038 x 80\%) ..... 141,360
Total Value \$6,186,360
Allocate as follows:Earned revenue $=(\$ 6,045,000 / \$ 6,186,360) \times \$ 6,045,000=\$ 5,906,870$Unearned revenue $=(\$ 141,360 / \$ 6,186,360) \times \$ 6,045,000=\$ 138,130$
4. Unearned Revenue-Loyalty Program ..... 53,500 Revenue from Rewards Program ..... 53,500
5. Cash ..... 82,000
Unearned Revenue ..... 82,000
Unearned Revenue 45,000
Sales ..... 45,000

PROBLEM 10-7A (Continued)
(c)

Unearned Revenue-Loyalty Program

| Date | Explanation | Ref. | Debit | Credit |
| :--- | :--- | :--- | :--- | :--- |
| Balance |  |  |  |  |
| 2016 |  |  |  |  |
| During |  | 112,666 | 112,666 |  |
| Dec. 31 |  | 46,000 |  | 66,666 |

2017
During
138,130 204,796
Dec. 31
53,500
151,296

Unearned Revenue

| Date | Explanation | Ref. | Debit | Credit | Balance |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2017 |  |  |  |  |  |
| During |  | 82,000 | 82,000 |  |  |
| Dec. 31 |  | 45,000 |  | 37,000 |  |

Taking It Further:
Management should consider the following factors:

- The historical rate of redemption on the grocery coupons. Some coupons will never be redeemed and management needs to determine over time, if the estimated redemption rate should be revised.
- Factors to consider for the gift cards include long periods of inactivity by customers, or low residual balances. These factors increase the likelihood that the cards will not be used. Unearned revenue linked to gift cards where there is a remote chance they will be used can be transferred to a revenue account.


## PROBLEM 10-8A

1. Note disclosure: It does not appear that it is probable that the company will lose the lawsuit. If the possibility of loss is considered remote, Mega Company would not need to disclose the lawsuit.
2. Note disclosure: Since it is likely that the company will lose the lawsuit, but the amount of the liability cannot be reliably measured, the lawsuit should be disclosed.
3. Accrue in the financial statements: Because Mega has negotiated a settlement, it now has a liability and the amount is measurable.

Taking It Further:
Making an accrual for a contingency reflects the impact of the loss on the current year's profit. If the contingency is only reflected in the notes and not accrued, its impact on the financial results is not as readily visible. Thus a benefit of recording the accrual is that it allows users of financial statements to make better informed decisions. Also, by reflecting the amounts in the financial statements, this improves the ability of users to generate meaningful ratios.

The cost of accruing a contingency is that companies must be very careful in wording the information in order to avoid the appearance of admitting culpability in matters that are not fully resolved. In addition, until the loss and liability are probable and measurable, the company risks damaging its ability to attract investors or obtain credit by portraying weaker financial results if the loss and liability are not realized in a later period.

## PROBLEM 10-9A

(a)

## SURE VALUE HARDWARE <br> Payroll Register <br> Week Ended March 14, 2017

| Employee | Hours | Gross Earnings |  |  | Deductions |  |  |  |  | Net Pay |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Regular | Overtime | Gross Pay | CPP | El | $\begin{gathered} \text { Income } \\ \quad \mathrm{Tax} \\ \hline \end{gathered}$ | United Way | Total |  |
| I. Dahl | 37.5 | \$637.50 | 0 | \$637.50 | \$27.80 | \$11.83 | \$82.25 | \$ 7.50 | \$129.38 | \$508.12 |
| F. Gualtieri | 42.5 | 660.00 | \$61.88 | 721.88 | 32.40 | 13.57 | 91.20 | 8.00 | 145.17 | 576.71 |
| G. Ho | 43.5 | 620.00 | 81.38 | 701.38 | 31.39 | 13.19 | 97.50 | 5.00 | 147.08 | 554.30 |
| A. Israeli | 45 | 600.00 | 112.50 | 712.50 | 31.94 | 13.40 | 107.75 | 10.00 | 163.09 | 549.41 |
| Totals |  | \$2,517.50 | \$255.76 | \$2,773.26 | \$123.53 | \$51.99 | \$378.70 | $\underline{\text { \$30.50 }}$ | \$584.72 | \$2,188.54 |

## PROBLEM 10-9A (Continued)

(b) Mar. 14 Salaries Expense ..... 2,773.26
CPP Payable ..... 123.53
El Payable ..... 51.99
Income Tax Payable ..... 378.70
United Way Contributions Payable ..... 30.50
Salaries Payable. ..... 2,188.54
14 Employee Benefits Expense ..... 307.25
CPP Payable ( $\$ 123.53 \times 1$ )... ..... 123.53
El Payable (\$51.99 $\times 1.4$ ) ..... 72.79
Vacation Pay Liability ..... 110.93
Vacation pay liability $=\$ 2,773.26 \times 4 \%$
(c) Mar. 14 Salaries Payable ..... 2,188.54
Cash ..... 2,188.54
(d) Apr. 15 CPP Payable
(\$123.53 + \$123.53) ..... 247.06
El Payable (\$51.99 + \$72.79) ..... 124.78
Income Tax Payable ..... 378.70
Cash ..... 750.54

## PROBLEM 10-9A (Continued)

Taking It Further:
The owner of a proprietorship is not considered an employee for income tax purposes. Since the business is not a separate legal entity, the owner is considered to own all of the profit of the business and is taxed on his/her personal income tax return for the profit of the business and not on the drawings. Income tax payments are usually made through the payment of instalments rather than through monthly remittances with the employees' payroll.

A proprietor is not required, nor able, to pay El on business profit for purposes of collecting employment insurance if he or she is not working. However, a proprietor can choose to pay El for special benefits such as sickness or maternity benefits. Business profit is considered pensionable earnings for CPP and the owner must make CPP remittances on the business profit. This is accomplished through the owner's personal income tax return and is not calculated or remitted as part of the payroll function.

## PROBLEM 10-10A

(a)
Feb. 4 Union Dues Payable........................... 1,450
$\qquad$
7 Disability Insurance Payable ............. 1,280 Life Insurance Payable ...................... 855 Cash. 2,135
13 CPP Payable ..... 7,887
El Payable ..... 3,755
Income Tax Payable ..... 16,252
Cash ..... 27,894
20 Workers' Compensation Payable ..... 4,275
Cash4,275
28 Salaries Expense ..... 92,600
CPP Payable ..... 4,281
El Payable ..... 1,695
Income Tax Payable ..... 17,595
Union Dues Payable ..... 1,574
Disability Insurance Payable ..... 1,380
Salaries Payable ..... 66,075
28 Salaries Payable ..... 66,075
Cash ..... 66,075
28 Employee Benefits Expense. ..... 15,914
CPP Payable ..... 4,281
El Payable (\$1,695 × 1.4) ..... 2,373
Workers' Compensation Payable (\$92,600 $\times 5 \%$ ) ..... 4,630
Vacation Pay Payable (\$92,600 $\times 4 \%$ ) ..... 3,704
Life Insurance Payable (\$92,600 $\times 1 \%$ ) ..... 926

## PROBLEM 10-10A (Continued)

(b)

Canada Pension Plan Payable

| Date | Explanation | Ref. | Debit | Credit | Balance |
| :--- | :--- | :---: | :---: | ---: | ---: |
| Feb. | 1 | Balance |  |  |  |
| 13 |  | $\checkmark$ |  |  | 7,887 |
| 28 |  |  | 7,887 |  | 0 |
| 28 |  |  |  | 4,281 | 4,281 |
|  |  |  |  |  |  |

Employment Insurance Payable

| Date | Explanation | Ref. | Debit | Credit | Balance |
| :--- | :--- | :---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
| Feb. | 1 | Balance | $\checkmark$ |  |  |
| 13 |  |  | 3,755 |  | 3,755 |
| 28 |  |  |  | 1,695 | 1,695 |
| 28 |  |  |  | 2,373 | 4,068 |

## Income Tax Payable

| Date | Explanation | Ref. | Debit | Credit | Balance |
| :--- | :--- | :---: | :---: | ---: | ---: |
| Feb. | 1 | Balance |  |  |  |
| 13 |  |  |  |  | 16,252 |
| 28 |  |  |  | 17,252 |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |


| Workers' Compensation Payable |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Date | Explanation | Ref. | Debit | Credit | Balance |
|  |  |  |  |  |  |
| Feb. | 1 | Balance | $\checkmark$ |  |  |
| 20 |  |  | 4,275 |  | 4,275 |
| 28 |  |  |  | 4,630 | 4,630 |

## PROBLEM 10-10A (Continued) <br> (b) (Continued)

## Union Dues Payable

| Date |  | Explanation | Ref. | Debit | Credit |
| :--- | :--- | :--- | :--- | :--- | ---: |
|  |  |  | Balance |  |  |
| Feb. | 1 | Balance | $\checkmark$ |  |  |
| 4 |  |  | 1,450 |  | 1,450 |
| 28 |  |  |  | 1,574 | 1,574 |

Life Insurance Payable

| Date |  | Explanation | Ref. | Debit | Credit |
| :--- | :--- | :--- | :--- | ---: | ---: |
|  |  |  | Balance |  |  |
| Feb. | 1 | Balance |  |  |  |
|  | 7 |  |  |  |  |
|  | 28 |  |  | 855 |  |
|  |  |  |  | 956 | 026 |

Vacation Pay Payable

| Date | Explanation | Ref. | Debit | Credit | Balance |
| :--- | :--- | :---: | :---: | :---: | ---: |
| Feb. | 1 | Balance |  |  |  |
|  | 28 |  |  |  | 3,704 |
|  |  |  | 24,224 |  |  |

Disability Insurance Payable

| Date |  | Explanation | Ref. | Debit | Credit |
| :--- | :--- | :---: | :---: | ---: | ---: |
|  |  | Balance |  |  |  |
| Feb. | 1 | Balance |  |  |  |
| 7 |  | $\checkmark$ |  |  | 1,280 |
| 28 |  |  | 1,280 |  | 0 |
|  |  |  |  | 1,380 | 1,380 |

## Salaries Payable

| Date | Explanation | Ref. | Debit | Credit | Balance |
| :--- | ---: | :---: | ---: | ---: | ---: |
| Feb. 28 |  |  |  |  |  |
| 28 | $\checkmark$ |  | 66,075 | 66,075 |  |
|  |  |  | 66,075 |  | 0 |

## PROBLEM 10-10A (Continued)

Taking It Further:
The employee earning record is required to determine the employee's total earnings for the year and total deductions. This document is used to prepare the annual T4 slip that is required for the employee's income tax filing requirement. This information is also filed with CRA by the employer. The employee earning record also helps the employer determine when the employee has reached maximum pensionable and insurable earnings for CPP and El purposes. The earning record is also used for other requirements such as the statement of earnings for El benefits.

The payroll register contains the current pay information for all employees for a particular pay period. It allows the company to accumulate gross pay, CPP, EI, Income tax, and other amounts withheld from the employees' pay. The summary information can then be used to prepare the journal entry and paycheques for each employee.

## PROBLEM 10-11A

(a)

## LIGHTHOUSE DISTRIBUTORS (Partial) Balance Sheet September 30, 2017

## Current liabilities

Bank indebtedness ..... \$ 62,500
Accounts payable ..... 90,000
Warranty liability ..... 22,500
Property taxes payable ..... 10,000
CPP payable ..... 7,500
El payable ..... 3,750
Workers' compensation payable ..... 1,250
Vacation pay payable ..... 13,500
Income tax payable ..... 35,000
HST payable ..... 15,000
Interest payable ..... 10,000
Unearned revenue-loyalty program ..... 5,000
Unearned card revenue ..... 30,000
Current portion of notes payable ..... 12,000
Current portion of mortgage payable ..... 10,000
Total current liabilities \$328,000
(b) Current assets:
\$182,000 + \$275,000 + \$12,500 = \$469,500
Current ratio:
$\$ 469,500 \div \$ 328,000=1.43: 1$
Acid-test ratio:
$\$ 182,000 \div \$ 328,000=0.55: 1$

## PROBLEM 10-11A (Continued)

(c) LightHouse Distributors did not show any cash on the trial balance because the bank account is in overdraft which represents a loan to LightHouse from the bank. LightHouse is using its line of credit to pay off its current liabilities, until its accounts receivable are collected and can provide cash for use in operations. The current ratio is low, but LightHouse still has $\$ 75,000$ available in its line of credit for immediate cash needs.

## Taking It Further:

The accountant is not correct. Recording a full year of property tax expense when the payment is made, on the basis that the payment is unavoidable is not proper accounting. The property taxes are paid for a full calendar year of services to be delivered by the municipality or city. These services are not obtained at the time of the tax payment. The payment should be allocated to property tax expense in all accounting periods that benefit from the services provided during the year. The expense for property taxes is recognized through the passage of time, evenly over the fiscal year.

## PROBLEM 10-12A

(a)

## MAPLE LEAF FOODS INC. (Partial) Balance Sheet

December 31, 2014
(in thousands)

## Current liabilities

Accounts payable and accruals............................... \$275,249
Income taxes payable.............................................. 26,614
Current portion of long-term debt ........................... 472
Other current liabilities ............................................ 24,383
Provisions ................................................................ 60,443
Total current liabilities........................................ \$387,161
(b) Current assets $=\$ 496,328+\$ 60,396+\$ 105,743+\$ 270,401+$ \$110,209 + \$20,157 = \$1,063,234

Current ratio: $\$ 1,063,234 \div \$ 387,161=2.75: 1$
Acid-test ratio: $(\$ 496,328+\$ 60,396+\$ 110,209) \div \$ 387,161=$ 1.72:1
(c) Current ratio Dec. 31, 2013:

$$
\$ 1,183,171 \div \$ 966,522=1.22: 1
$$

Acid-test ratio Dec. 31, 2013: (\$506,670 + \$111,034+115,514) $\div$ \$966,522 = 0.76:1

Both the current ratio and the asset test ratio improved considerably in 2014.

## PROBLEM 10-12A (Continued)

Taking It Further:
In assessing liquidity, we should also look at the receivables and inventory turnover ratios to ensure that the current assets are liquid. A slow-down in the turnover ratios of receivables and inventory would trigger an increase in current assets and in the current ratio, but would signal a decrease in the liquidity of receivables and inventory.

We should also look at the difference between the acid-test ratio and the current ratio. The acid-test ratio uses only the liquid current assets (those that can be converted to cash readily). A significant difference between the current ratio and the acid-test ratio may indicate that the company has less short-term liquidity. In the case of Maple Leaf Foods Inc. the acid-test ratio is less than the current ratio indicating that the company has a high proportion of less liquid current assets.

Other factors to consider include general economic and industry conditions, as well as comparisons with ratios from other companies in the same or related industries.

## *PROBLEM 10-13A

(a)

## WESTERN ELECTRIC COMPANY

Payroll Register
Week Ended June 9, 2015

| Employee | Gross Pay | Deductions |  |  |  |  |  |  | Net Pay |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | CPP |  | EI |  | Federal | Ontario |  |  |
| C. Tanm | \$945.00 | \$43.45 | 1 | \$17.77 | 4 | \$99.85 | \$52.10 | \$213.17 | $\frac{\text { Net Pay }}{\text { \$731.83 }}$ |
| T. Ng | 1,130.00 | 52.60 | 2 | 21.24 | 5 | 125.90 | 64.45 | 264.19 | 865.81 |
| O. Stavtech | 1,130.00 | 52.60 | 2 | 21.24 | 5 | 141.50 | 69.60 | 284.94 | 845.06 |
| A. Mandell | 1,067.00 | 49.48 | 3 | 20.06 | 6 | 128.30 | 64.10 | 261.94 | 805.06 |
| Totals | \$4,272.00 | \$198.13 |  | \$80.31 |  | \$495.55 | \$250.25 | \$1,024.24 | \$3,247.76 |

1. $C P P=(\$ 945.00-[\$ 3,500 \div 52]) \times 4.95 \%=\$ 43.45$
2. $\mathbf{C P P}=(\$ 1,130.00-[\$ 3,500 \div 52]) \times 4.95 \%=\$ 52.60$
3. $C P P=(\$ 1,067.00-[\$ 3,500 \div 52]) \times 4.95 \%=\$ 49.48$
4. $\mathrm{El}=\$ 945.00 \times 1.88 \%=\$ 17.77$
5. $\mathrm{EI}=\$ 1,130.00 \times 1.88 \%=\$ 21.24$
6. $\mathrm{EI}=\$ 1,067.00 \times 1.88 \%=\$ 20.06$
*PROBLEM 10-13A (Continued)
(b) Semi-monthly Payroll Ended June 15, 2015:

|  | Annual | Gross | CPP | EI |  |
| :--- | ---: | :--- | :--- | :--- | :--- |
| Employee | Salary | Pay | $4.95 \%$ | $1.88 \%$ |  |
| S. Goodspeed | $\$ 43,440$ | $\$ 1,810.00$ | $\$ 82.38$ | 1 | $\$ 34.03$ |
| 4 |  |  |  |  |  |
| M. Giancarlo | 64,770 | $2,698.75$ | 126.37 | 2 | 50.74 |
| 5 | 5 |  |  |  |  |
| H. Ridley | 76,880 | $3,203.33$ | $151.35^{3}$ | 60.22 | 6 |

1. $C P P=(\$ 1,810.00-[\$ 3,500 \div 24]) \times 4.95 \%=\$ 82.38$
2. $\mathrm{CPP}=(\$ 2,698.75-[\$ 3,500 \div 24]) \times 4.95 \%=\$ 126.37$
3. $C P P=(\$ 3,203.33-[\$ 3,500 \div 24]) \times 4.95 \%=\$ 151.35$
4. $\mathrm{El}=\$ 1,810.00 \times 1.88 \%=\$ 34.03$
5. $\mathrm{EI}=\$ 2,698.75 \times 1.88 \%=\$ 50.74$
6. $\mathrm{El}=\$ 3,203.33 \times 1.88 \%=\$ 60.22$
(c) Pay period in which CPP maximum is reached = Maximum annual employee CPP contribution $\div$ semi-monthly contribution for the employee (the answer is rounded up since the maximum is reached in the next pay period).

Pay period in which El maximum is reached = Maximum annual employee El premium $\div$ semi-monthly premium for the employee (the answer is rounded up since the maximum is reached in the next pay period).
S. Goodspeed: His annual salary is less than the maximum pensionable earnings and the maximum insurance earnings. He will not reach the maximum CPP and El payments for 2015.
M. Giancarlo:

Pay period in which CPP maximum is reached $=\mathbf{\$ 2 , 4 7 9 . 9 5} \div$ $\$ 126.37$ = 19.6; rounded up to pay period 20 (October 31).
*PROBLEM 10-13A (Continued)
(c) (Continued)

Pay period in which El maximum is reached $=\$ 930.60 \div \$ 50.74$ = 18.34; rounded up to pay period 19 (October 15).

## H. Ridley:

Pay period in which CPP maximum is reached $=\mathbf{\$ 2 , 4 7 9 . 9 5} \div$ $\$ 151.35$ = 16.39; rounded up to pay period 17 (September 15).

Pay period in which El maximum is reached $=\mathbf{\$ 9 3 0 . 6 0} \div \mathbf{\$ 6 0 . 2 2}$ = 15.45; rounded up to pay period 16 (August 31).

## Taking It Further:

The payroll tables are prepared for various pay periods used by different companies, or for different groups of employees of the same company. The amounts of CPP, EI, and income tax to be deducted are all dependent upon the length of the pay period, thus different tables are required.

## PROBLEM 10-1B

Feb. 1 Cash ..... 30,000
Notes Payable

$\qquad$ ..... 30,000
8 Accounts Receivable ..... 16,385
Sales ..... 14,500
HST Payable ..... 1,885
14 Salaries Expense ..... 15,000
CPP Payable ..... 692
El Payable ..... 282
Income Tax Payable ..... 2,700
Salaries Payable ..... 11,326
14 Employee Benefits Expense ..... 1,087
CPP Payable ..... 692
El Payable (\$282 x 1.4) ..... 395
15 Furniture ..... 1,975
Accounts Payable ..... 1,975
21 Salaries Payable. ..... 11,326
Cash11,326
28 Interest Expense ..... 125
Interest Payable ..... 125
(\$30,000 x 5\% x 1/12)
28 Warranty Expense ..... 500
Warranty Liability ..... 500

## PROBLEM 10-1B (Continued)

## Taking It Further:

The accountant is mostly correct. Accounts payable are an example of a current liability that can be expected to be paid within the next year. However, unearned revenue is a current liability that will not be paid within the year, but can be expected to be extinguished by goods or services being provided.

## PROBLEM 10-2B

(a)Jan. 1 Cash ..... 30,000
Notes Payable ............................... ..... 30,000
5 Cash ..... 11,648
Sales ..... 10,400
GST Payable (\$10,400 x 5\%) ..... 520
PST Payable (\$10,400 x 7\%). ..... 728
12 Unearned Revenue ..... 9,000
Service Revenue ..... 8,036
GST Payable ..... 402
PST Payable ..... 562
14 GST Payable ..... 5,800
Cash ..... 5,800
20 Accounts Receivable ..... 52,416
Sales (900 X \$52) ..... 46,800
GST Payable (\$46,800 x 5\%) ..... 2,340
PST Payable (\$46,800 x 7\%). ..... 3,276
25 Cash ..... 20,966Sales.18,720
GST Payable (\$18,720 x 5\%) ..... 936
PST Payable (\$18,720 x 7\%) ..... 1,310
(b)
31 Interest Expense ..... 200
Interest Payable ..... 200
(\$30,000 x 8\% x 1/12)
31 Warranty Expense ..... 2,340
Warranty Liability ..... 2,340
(\$46,800 x 5\%)
(c)

## EDMISTON SOFTWARE COMPANY (Partial) Balance Sheet <br> January 31, 2017

Current liabilities
Accounts payable ..... \$42,500
GST payable (\$520 + \$402 + \$2,340 + \$936) ..... 4,198
PST payable (\$728 + \$562 + \$3,276 + \$1,310) ..... 5,876
Interest payable ..... 200
Warranty liability ..... 2,340
Unearned revenue (\$15,000-\$9,000) ..... 6,000
Notes payable ..... 30,000
Total current liabilities ..... \$91,114

Taking It Further:
James is incorrect. The payroll taxes withheld are amounts that belong to the employee. The employer is instructed by law to take from the gross pay of employees and remit these amounts for income taxes, CPP, and El to the Receiver General. By doing so, these amounts reach the CPP and El funds to finance the benefits to which employees are entitled. As well, the remittances represent instalments on individual employees' tax liability accounts for federal and provincial income taxes withheld. The employer has already recognized the expense as part of the gross salaries paid to the employees. The gross amount of the salaries is debited to Salaries Expense. The employee benefits are paid by the employer to the Receiver General along with the employer's portion of CPP and El payments, which are over and above what has been deducted from the employee's pay.

## PROBLEM 10-3B

|  | Principal | Date issued | Rate | Term | (a) <br> Current <br> Portion |  | (b) <br> Noncurrent Portion |  | (c) <br> Interest Payable |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | \$ 25,000 | July 1/17 | 5.00\% | 9 months | \$ 25,000 |  | \$ |  | \$ 104.17 |  |
| 2 | \$ 10,000 | Sept. 1/17 | 4.00\% | 6 months | \$ 10,000 |  | \$ |  | \$ 133.33 |  |
| 3 | \$ 40,000 | Nov. 1/17 | 4.50\% | 7 months | \$ 40,000 |  | \$ |  | \$ 300.00 |  |
| 4 | \$ 80,000 | May 31/17 | 3.75\% | 5 years | \$ 16,000 |  | \$ 64,000 |  | \$1,750.00 |  |
| 5 | \$ 126,000 | Oct. 1/17 | 4.25\% | 3 years | \$ 42,000 | 7 | \$ 77,000 | 8 | \$ 421.46 |  |
| 6 | \$ 50,000 | Mar. 31/16 | 5.00\% | 4 years | \$ 12,500 | 9 | \$ 25,000 | 9 | \$ | 6 |

$1 \quad \$ 104.17=\$ 25,000 \times 5.0 \% \times 1 / 12$
$2 \quad \$ 133.33=\$ 10,000 \times 4.0 \% \times 4 / 12$
$3 \quad \$ 300.00=\$ 40,000 \times 4.5 \% \times 2 / 12$
$4 \quad \$ 1,750.00=\$ 80,000 \times 3.75 \% \times 7 / 12$
$5 \quad \$ 421.46=(\$ 126,000-[2 \times \$ 3,500]) \times$
6 Interest was paid on December 31, 2017

7 current: $\$ 42,000=\$ 3,500 \times 12$ months
8 non-current: $\$ 77,000=\$ 126,000-(\$ 3,500 \times 2)$

- \$42,000

9 non-current: $\$ 25,000=\$ 50,000-(\$ 12,500 \times 2)$

## PROBLEM 10-3B (Continued)

Taking It Further:
For the maker, a note payable bears interest, which is an additional cost. Some liabilities, such as accounts payable to suppliers, are usually non-interest bearing as long as they are paid within the credit period. In addition, the term of the note may call for periodic payments of interest. This adds to the administrative burden of managing the note. The benefit to the maker is that the terms of the note are usually negotiated with the payee and the interest rate is more favourable than financing obtained through a bank. If the note is used to pay a supplier, the term of the note gives the maker additional time to repay the principal.

For the payee, the note provides a stream of interest revenue. Because it is a signed document, it also provides additional security of collection. The cost to the payee is that cash is not received until the note reaches maturity.

## PROBLEM 10-4B

(a) 2016:
Dec. 1 Interest Expense ( $\$ 15,000 \times 6 \% \times 1 / 12$ ) 75
Interest Payable ..... 375
Notes Payable. ..... 15,000
Cash ..... 15,450
2017:
Apr. 1 Land ..... 75,000
Notes Payable ..... 75,000
Apr. 30 Equipment. ..... 8,000
Accounts Payable ..... 8,000
May 31 Accounts Payable. 8,000 Notes Payable ..... 8,000
July 1 Interest Expense ..... 1,313 (\$75,000 $\times 7 \% \times 3 / 12$ ) Cash ..... 1,313
Aug. 31 Interest Expense (\$8,000 × 8\% × 3/12) ..... 160
Note Payable ..... 8,000
Cash

$\qquad$ ..... 8,160
Oct. 1 Interest Expense (\$75,000 $\times 7 \% \times 3 / 12$ ) ..... 1,313
Cash ..... 1,313
Oct. 1 Cash ..... 90,000
Notes Payable ..... 90,000
31 Interest Expense ..... 888
$[(\$ 90,000 \times 6 \% \times 1 / 12)+(\$ 1,313 \times 1 / 3)]$ Interest Payable ..... 888

## PROBLEM 10-4B (Continued)

(b)

# MILEHI MOUNTAIN BIKES (Partial) Balance Sheet October 31, 2017 

## Current liabilities

Notes payable ..... \$75,000
Current portion of long-term notes payable ..... 18,000
Interest payable ..... 888
Total current liabilities ..... 93,888

Long-term liabilities
Notes payable\$90,000Less current portion................................ (18,000) 72,000
(c)

# MILEHI MOUNTAIN BIKES <br> (Partial) Income Statement 

Year ended October 31, 2017

## Other expenses

Interest expense \$3,749* *(\$75 + \$1,313 + \$160 + \$1,313 + \$888)

## Taking It Further:

Notes payable are classified according to their maturity dates as being either current or non-current. This classification is also extended to the current maturity of the portion of long-term debt that is repayable in the current term. This classification is important because it shows the amount that must be settled within one year, which is an important factor in evaluating the company's liquidity.

## PROBLEM 10-5B

(a) Jan. 5 Cash ..... 17,854
Sales ..... 15,800
HST Payable (\$15,800 $\times 13 \%$ ). ..... 2,054
12 Unearned Revenue 7,000
HST Payable805
Service Revenue ..... 6,195
14 HST Payable ..... 11,390
Cash

$\qquad$ ..... 11,390
15 CPP Payable ..... 2,152
El Payable ..... 1,019
Income Tax Payable ..... 4,563
Cash ..... 7,734
16 Cash ..... 18,000Notes Payable18,000
17 Accounts Payable ..... 35,000
Cash

$\qquad$
33,900
20 Accounts Receivable ..................... ..... 30,000
Sales (500 $\times \$ 60$ ) ..... 3,900
30 Unearned Revenue- Loyalty Program ..... 1,750
HST Payable (\$1,549 $\times 13 \%$ )... ..... 201
Service Revenue (\$1,750 $\div 1.13$ ) ..... 1,549

## PROBLEM 10-5B (Continued)

## (a) (Continued)

Jan. 31 Cash ..... 500,000Sales495,050
Unearned Revenue-Loyalty Program ..... 4,950
Stand-alone sales ..... \$500,000
Stand-alone value of loyalty points (50,000 $\times 10 \% \times \$ 1$ ) ..... 5,000
Total Value\$505,000
Allocate as follows:
Earned revenue $=(\$ 500,000 / \$ 505,000) \times \$ 500,000=\$ 495,050$
Unearned revenue $=(\$ 5,000 / \$ 505,000) \times \$ 500,000=\$ 4,950$
31 Warranty Liability ..... 875
Repair Parts Inventory ..... 875
31 Salaries Expense. ..... 25,350
CPP Payable ..... 1,183
El Payable. ..... 464
Income Tax Payable ..... 4,563
Salaries Payable ..... 19,140
31 Salaries Payable ..... 19,140
Cash ..... 19,140
(b) Jan. 31 Interest Expense ..... 45Interest Payable45$[(\$ 18,000 \times 6 \% \times 1 / 12) \times 1 / 2]$
31 Warranty Expense ..... 300
Warranty Liability ..... 300
(500 $\times 6 \% \times \$ 10$ )
31 Employee Benefits Expense ..... 2,847
CPP Payable ..... 1,183
El Payable (\$464 $\times 1.4$ ) ..... 650
Vacation Pay Payable (\$25,350 $\times 4 \%$ ) ..... 1,014

## ZAUR COMPANY (Partial) Balance Sheet January 31, 2017

## Liabilities

Current liabilities
Accounts payable (\$63,700 - \$35,000) ..... \$28,700
Notes payable ..... 18,000
Vacation pay liability (\$9,120 + \$1,014) ..... 10,134
Unearned revenue (\$16,000 - \$7,000) ..... 9,000
Unearned revenue-loyalty program (\$2,150 - \$1,750 + \$4,950) ..... 5,350
HST payable (\$11,390 + \$2,054 + \$805 - \$11,390 + \$3,900 + \$201) ..... 6,960
Warranty liability (\$5,750 - \$875 + \$300) ..... 5,175
Income tax payable (\$4,563 - \$4,563 + \$4,563) ..... 4,563
CPP payable (\$2,152 - \$2,152 + \$1,183 + \$1,183) ..... 2,366
El payable (\$1,019 - \$1,019 + \$464 + \$650) ..... 1,114
Interest payable ..... 45
Total current liabilities ..... \$91,407

## Taking It Further:

Most companies require employees to take their vacation as soon as possible after it is earned, usually after a year of work when the full annual entitlement is earned. This prevents the accumulation of vacation pay liability for the company, and ensures staff is rotated and cross-trained for other functions. Ensuring staff take vacation on a regular basis also results in stronger internal controls and reduces the likelihood of fraud and theft by ensuring one staff member's work is performed by another staff member. When employees take their vacation, the Vacation Pay Payable account is debited. The credit side of the entry is the same as for regular payroll: CPP Payable, El Payable, Income Taxes Payable, and Salaries Payable are credited.

## PROBLEM 10-6B

$$
\text { (a) Warranty expense } \begin{aligned}
& 2015-(1,200 \times 5 \% \times \$ 25)=\$ 1,500 \\
& 2016-(1,320 \times 5 \% \times \$ 25)=\$ 1,650 \\
& 2017-(1,420 \times 5 \% \times \$ 25)=\$ 1,775 \\
& \\
& \text { Warranty liability at year end } \\
& 2015-(\$ 0-\$ 1,275+\$ 1,500)=\$ 225 \\
& 2016-(\$ 225-\$ 1,600+\$ 1,650)=\$ 275 \\
& 2017-(\$ 275-\$ 1,960+\$ 1,775)=\$ 90
\end{aligned}
$$

Note: See analysis of Warranty Liability account in (b) below.
(b)

## $\underline{2015}$

> Warranty Liability ................................ 1,275
> Repair Parts Inventory................... 1,275

Dec. $31 \begin{gathered}\text { Warranty Expense }(1,200 \times 5 \% \times \$ 25) \\ \text { Warranty Liability......................... }\end{gathered} \quad 1,500$
1,500
$\underline{2016}$
Warranty Liability ............................... 1,600
Repair Parts Inventory................... 1,600
Dec. $31 \begin{gathered}\text { Warranty Expense }(1,320 \times 5 \% \times \$ 25) \\ \text { Warranty Liability.......................... }\end{gathered}$ 1,650 $\quad 1,650$
$\underline{2017}$
Warranty Liability
1,960
Repair Parts Inventory
1,960

## Dec. 31 Warranty Expense (1,420 $\times 5 \% \times \$ 25$ ) 1,775 Warranty Liability <br> 1,775

PROBLEM 10-6B (Continued)
(b) (Continued)

Warranty Liability

| Date | Explanation | Ref. | Debit | Credit |
| :--- | :---: | :---: | :---: | :---: |
| Balance |  |  |  |  |
| 2015 |  | 1,275 |  |  |
| During |  |  | $1,275 \mathrm{Dr}$ |  |
| Dec. 31 |  |  |  | 225 |
| 2016 |  | 1,600 |  | $1,375 \mathrm{Dr}$ |
| During |  |  | 1,650 | 275 |
| Dec. 31 <br> 2017 | 1,960 |  | $1,685 \mathrm{Dr}$ |  |
| During |  |  | 1,775 | 90 |

(c) Percentage of units returned for repair = Number of units returned $\div$ Number of units sold

|  | Returned | $\underline{\text { Sold }}$ |
| :--- | :--- | ---: |
|  | 60 | 1,200 |
| 2016 | 70 | 1,320 |
| 2017 | $\underline{80}$ | $\underline{1,420}$ |
|  | $\underline{\underline{210}}$ | $\underline{\underline{3,940}}$ |

Percentage returned $=210 \div 3,940=5.3 \%$
Average actual warranty cost per unit = Total actual warranty costs $\div$ Total units returned

## Actual costs

| 2015 | $\$ 1,275$ |
| :--- | ---: |
| 2016 | 1,600 |
| 2017 | $\underline{1,960}$ |
|  | $\underline{\$ 4,835}$ |

Average warranty cost over the three-year period:
$\$ 4,835 \div 210=\$ 23$

## PROBLEM 10-6B (Continued)

## Taking It Further:

Revisions of estimates are applied prospectively. This means that the changes in estimates will be applied to 2017 only. The January 1, 2017 opening balance in the Warranty Liability account remains at $\$ 275$. The revised warranty expense for 2017 is calculated as follows:

Warranty expense 2017:

$$
1,420 \times 7 \% \times \$ 25=\$ 2,485
$$

Warranty liability at December 31, 2017:

$$
\$ 275-\$ 1,960+\$ 2,485=\$ 800
$$

## PROBLEM 10-7B

(a) 1. Will reduce revenues and profit as a portion of the sales are allocated to the future performance obligation and therefore recorded as unearned revenues
2. Increases revenues and profit
3. No effect on revenues, expenses, and profit
4. Increases revenues, expenses (cost of goods sold), and profit

2016:

1. Cash 1,050,000
Sales ................................. 1,037,037
Unearned Revenue-Loyalty Program 12,963
Stand-alone gas sales....................................... \$1,050,000
Stand-alone value of loyalty coupons
(750,000 $\times$ \$0.025 x 70\%)
13,125
Total Value
\$1,063,125

## Allocate as follows:

Earned revenue= $(\$ 1,050,000 / \$ 1,063,125) \times \$ 1,050,000=\$ 1,037,037$
Unearned revenue= $(\$ 13,125 / \$ 1,063,125) \times \$ 1,050,000=\$ 12,963$
2. Unearned Revenue-Loyalty Program 5,950

Revenue from Rewards Program

## PROBLEM 10-7B (Continued)

## (b) (Continued)

2017:

| 3. | Cash. | 1,255,00 |  |
| :---: | :---: | :---: | :---: |
|  | Sales |  | 1,240,983 |
|  | Unearned Revenue-Loyalty | Program | 14,017 |

Stand-alone gas sales. ..... \$1,255,000
Stand-alone value of loyalty coupons(810,000 $\times$ \$0.025 x 70\%)14,175
Total Value\$1,269,175
Allocate as follows:
Earned revenue= $(\$ 1,255,000 / \$ 1,269,175) \times \$ 1,255,000=\$ 1,240,983$ Unearned revenue= $(\$ 14,175 / \$ 1,269,175) \times \$ 1,255,000=\$ 14,017$
4. Unearned Revenue-Loyalty Program ..... 9,500
Revenue from Rewards Program ..... 9,500
5. Cash ..... 3,950
Unearned Revenue ..... 3,950
Unearned Revenue ..... 1,500
Sales ..... 1,500

PROBLEM 10-7B (Continued)
(c)

Unearned Revenue-Loyalty Program

| Date | Explanation | Ref. | Debit | Credit |
| :--- | :--- | :--- | ---: | ---: | Balance | 2016 |  |  | 12,963 |
| :--- | :--- | :--- | ---: |
| During |  |  | 12,963 |
| Dec. 31 |  |  |  |
| 2017 |  |  |  |
| During |  | 14,017 | 21,030 |
| Dec. 31 |  |  |  |

Unearned Revenue

| Date | Explanation | Ref. | Debit | Credit |
| :--- | :--- | :--- | :--- | ---: |
| Balance |  |  |  |  |
| 2017 |  |  |  |  |
| During |  |  | 3,950 | 3,950 |
| Dec. 31 |  | 1,500 |  | 2,450 |

Taking It Further:
Management should consider the following factors:

- The historical rate of redemption on the service coupons should be reviewed and revised as needed to ensure an appropriate amount of revenue is being recorded and an appropriate amount of revenue is being deferred.
- The likelihood of redemption of the gift cards. Factors such as long periods of inactivity by customers, or low residual balances increase the likelihood that the cards will not be used. Unearned revenue linked to gift cards where the likelihood of use is remote should be transferred to a revenue account.


## PROBLEM 10-8B

1. Note disclosure: Since the amount of the liability cannot be reliably measured, the lawsuit cannot be recorded, but it should be disclosed.
2. It appears that it is unlikely that Big Fork will lose the lawsuit; therefore the company does not need to record or report it in the notes to the financial statements. If the loss from the lawsuit could have a substantial negative effect on the company's financial position, then note disclosure is still desirable.
3. Accrue in the financial statements: It appears likely that the company will lose this claim as it was at fault and the claim of $\$ 250,000$ appears to be a reasonable estimate.

## Taking It Further:

Making an accrual for a contingency reflects the impact of the loss on the current year's profit. This allows users of financial statements to make better informed decisions. If the contingency is only reflected in the notes and not accrued, its impact on the financial results is not as readily visible. Also, by reflecting the amounts in the financial statements, this improves the ability of users to generate meaningful ratios. The cost of accruing a contingency is that companies must be very careful in wording the information in order to avoid the appearance of admitting culpability in matters that are not fully resolved. In addition, until the loss and liability are likely and measurable, the company risks damaging its ability to attract investors or obtain credit by portraying weaker financial results if the loss and liability are not realized in a later period.

## PROBLEM 10-9B

(a)

$$
\begin{gathered}
\text { SCOOT SCOOTERS } \\
\text { Payroll Register } \\
\text { Week Ended February 17, } 2015
\end{gathered}
$$

| Employee | Hours | Earnings |  |  | Deductions |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Gross |  |  | Income | United |  |  |
|  |  | Regular | Overtime | Pay | CPP | 티 | Tax | Way | Total | Net Pay |
| P. Kilchyk | 40 | \$610.00 | 0 | \$610.00 | \$26.86 | \$11.16 | \$76.60 | \$5.00 | \$119.62 | \$490.38 |
| B. Quon | 42 | 600.00 | \$45.00 | 645.00 | 28.60 | 11.80 | 83.70 | 7.25 | 131.35 | 513.65 |
| C. Pospisil | 40 | 650.00 | 0 | 650.00 | 28.84 | 11.90 | 84.10 | 5.50 | 130.34 | 519.66 |
| B. Verwey | 44 | 580.00 | 87.00 | 667.00 | 29.68 | 12.21 | 87.10 | 8.25 | 137.24 | 529.76 |
| Totals |  | \$2,440.00 | \$132.00 | \$2,572.00 | \$113.98 | \$47.07 | \$331.50 | \$26.00 | \$518.55 | \$2,053.45 |

## PROBLEM 10-9B (Continued)

(b) Feb. 15 Salaries Expense ..........................2,572.00
CPP Payable ..... 113.98
El Payable ..... 47.07
Income Tax Payable ..... 331.50
United Way Contributions Payable ..... 26.00Salaries Payable2,053.45
15 Employee Benefits Expense ..... 282.76
CPP Payable ..... 113.98
El Payable (\$47.07 × 1.4) ..... 65.90
Vacation Pay Payable ..... 102.88
(\$2,572.00 × 4\%)
(c) Feb. 17 Salaries Payable ..... 2,053.45
Cash ..... 2,053.45
(d) Mar. 15 CPP Payable (\$113.98 + \$113.98). ..... 227.96
El Payable (\$47.07 + \$65.90) ..... 112.97
Income Tax Payable ..... 331.50Cash672.43

## PROBLEM 10-9B (Continued)

## Taking It Further:

The owner of a proprietorship is not considered an employee for income tax purposes. Since the business is not a separate legal entity, the owner is considered to own all of the profit of the business and is taxed on his/her personal income tax return for the profit of the business and not on the drawings. Income tax payments are usually made through the payment of instalments rather than through monthly remittances with the employees' payroll.

Business profit is not considered insurable profit for El purposes, so no El is deducted from business profit or drawings. Business profit is considered pensionable profit for CPP and the owner must make CPP remittances on the business profit. This is accomplished through the owner's personal income tax return and is not calculated or remitted as part of the payroll function.

## PROBLEM 10-10B

(a)
Apr. 4 Union Dues Payable............................ 1,285
Cash.
1,285
7 Disability Insurance Payable ..... 1,134
Life Insurance Payable ..... 756
Cash ..... 1,890
13 CPP Payable ..... 6,907
El Payable ..... 3,320
Income Tax Payable ..... 14,364
Cash ..... 24,591
20 Workers' Compensation Payable ..... 3,780
Cash. ..... 3,780
28 Salaries Expense ..... 83,160CPP Payable.3,799
El Payable ..... 1,522
Income Tax Payable ..... 15,800
Union Dues Payable ..... 1,414
Disability Insurance Payable ..... 1,247
Salaries Payable ..... 59,378
28 Salaries Payable ..... 59,378Cash.h................................................59,378
28 Employee Benefits Expense. ..... 14,246
CPP Payable ..... 3,799
El Payable ( $\$ 1,522 \times 1.4$ ) ..... 2,131
Workers' Compensation Payable (\$83,160 × 5\%) ..... 4,158
Vacation Pay Payable (\$83,160 $\times 4 \%$ ) ..... 3,326
Life Insurance Payable (\$83,160 $\times 1 \%$ ) ..... 832

## PROBLEM 10-10B (Continued)

(b)

Canada Pension Plan Payable

| Date | Explanation | Ref. | Debit | Credit | Balance |
| :--- | ---: | :--- | :--- | :--- | ---: |
|  |  | Bpr. | 1 | Balance |  |
| 13 |  |  |  |  |  |
| 28 |  |  | 6,907 |  | 6,907 |
| 28 |  |  |  | 3,799 | 3,799 |
|  |  |  |  | 3,799 | 7,598 |

## Income Tax Payable

| Date | Explanation | Ref. | Debit | Credit | Balance |
| :--- | ---: | :---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| 13 | Balance |  |  |  | 14,364 |
| 28 |  |  | 14,364 |  | 0 |
|  |  |  |  | 15,800 | 15,800 |

## Employment Insurance Payable

| Date | Explanation | Ref. | Debit | Credit | Balance |
| :--- | ---: | :---: | :---: | ---: | ---: |
|  |  |  |  |  |  |
|  | 1 | Balance | $\checkmark$ |  |  |
| 13 |  |  | 3,320 |  | 3,320 |
| 28 |  |  |  | 1,522 | 1,522 |
| 28 |  |  |  | 2,131 | 3,653 |

Workers' Compensation Payable

| Date | Explanation | Ref. | Debit | Credit | Balance |
| :--- | :--- | :---: | :---: | ---: | ---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Apr. | 1 | Balance | $\checkmark$ |  |  |
| 20 |  |  | 3,780 |  | 3,780 |
| 28 |  |  |  | 4,158 | 4,158 |

## PROBLEM 10-10B (Continued)

(b) (Continued)

Union Dues Payable

| Date | Explanation | Ref. | Debit | Credit | Balance |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Apr. 1 | Balance | $\checkmark$ |  |  | 1,285 |
| 4 |  |  | 1,285 |  | 0 |
| 28 |  |  |  | 1,414 | 1,414 |

Disability Insurance Payable

| Date | Explanation | Ref. | Debit | Credit | Balance |
| :--- | :--- | :--- | :--- | :--- | ---: |
|  |  |  |  |  |  |
|  |  |  |  |  | 1,134 |
| Apr. | 1 | Balance | 7 |  |  |
| 28 |  |  | 1,134 |  | 0 |
|  |  |  |  | 1,247 | 1,247 |



## PROBLEM 10-10B (Continued)

## Taking It Further:

The employee earning record is required to determine the employee's total earnings and total deductions for the year. This document is used to prepare the annual T4 slip that is required for the employee's income tax filing requirement. This information is also filed with CRA by the employer. The employee earning record also helps the employer determine when the employee has reached maximum pensionable and insurable earnings for CPP and El purposes. The earning record is also used for other requirements such as the statement of earnings for El benefits purposes.

The payroll register contains the current pay information for all employees for a particular pay period. It allows the company to accumulate gross pay, CPP, El, Income tax, and other amounts withheld from the employees' pay. The summary information can then be used to prepare the journal entry and paycheques for each employee.

## PROBLEM 10-11B

(a)

## CREATIVE CARPENTRY <br> (Partial) Balance Sheet <br> March 31, 2017

## Current liabilities

Bank indebtedness
\$ 55,200

Accounts payable ................................................ 60,000
Warranty liability ................................................... 12,500
CPP payable.......................................................... 2,300
El payable............................................................. 1,750
Vacation pay payable ............................................ 1,200
Income tax payable............................................... 25,000
HST payable .......................................................... 12,250
Interest payable ..................................................... 8,000
Unearned revenue ................................................ 9,385
Notes payable ...................................................... $\quad 30,000$
Current portion of mortgage payable................... 50,000
Total current liabilities..................................... \$267,585
(b) Current assets:
\$184,000 + \$120,600 + \$500 = \$305,100
Current ratio:
$\$ 305,100 \div \$ 267,585=1.14: 1$
Acid-test ratio:
$\$ 184,000 \div \$ 267,585=0.69: 1$

## PROBLEM 10-11B (Continued)

(c) Creative Carpentry did not show any cash on the trial balance because the bank account is in overdraft which represents a Ioan to Creative from the bank. Creative is using its line of credit to pay off its current liabilities, until its accounts receivable are collected and can provide cash for use in operations. The current ratio is low, but Creative still has $\mathbf{\$ 2 5 , 0 0 0}$ available in its line of credit for immediate cash needs.

Taking It Further:
When customers purchase gift cards from Creative Carpentry, no goods or services have yet been delivered by the business to earn the cash obtained. Consequently, the amount received for the gift cards is initially recorded to the Unearned Revenue account. Later on, when the card is redeemed, the Unearned Revenue account is reduced for the value redeemed and revenue is recorded, along with sales taxes if applicable. This fulfills the revenue recognition principle of accounting and provides a fair reporting of when revenue is being earned.

## PROBLEM 10-12B

(a)

> BCE INC.
> (Partial) Balance Sheet
> December 31, 2014
> (in millions of dollars)

## Current liabilities

Trade payables and other liabilities ..... \$4,398
Current tax liabilities ..... 269
Dividends payable ..... 534
Interest payable ..... 145
Debt due within one year ..... 3,743
Total current liabilities ..... \$9,089
(b) Current assets:

$$
\$ 142+\$ 424+\$ 333+\$ 198+\$ 379+\$ 3,069=\$ 4,545
$$

> Current ratio: $$
\$ 4,545 \div \$ 9,089=0.50: 1
$$

## Acid-test ratio:

$(\$ 142+\$ 424+\$ 3,069) \div \$ 9,089=0.40: 1$
(c) Current ratio Dec. 31, 2013:

$$
\$ 5,070 \div \$ 7,890=0.64: 1
$$

Acid-test ratio Dec. 31, 2013: $(\$ 335+\$ 3,043) \div \$ 7,890=0.43: 1$
Both the current and acid-test ratios weakened in 2014.

## PROBLEM 10-12B (Continued)

## Taking It Further:

In assessing liquidity, we should also look at the receivables and inventory turnover ratios to ensure that the current assets are liquid. A slow-down in the turnover ratios of receivables and inventory would trigger an increase in current assets and in the current ratio, but would signal a decrease in the liquidity of receivables and inventory.

We should also look at the difference between the acid-test ratio and the current ratio. The acid-test ratio uses only the liquid current assets (those than can be converted to cash readily). A significant difference between the current ratio and the acid-test ratio may indicate that the company has less short-term liquidity. In the case of BCE Inc. the acid-test and current ratios are relatively close, indicating that the company has a high proportion of liquid current assets.

Other factors to consider include general economic and industry conditions, as well as comparisons with ratios from other companies in the same or related industries.

## *PROBLEM 10-13B

(a)

## SLOVAK PLUMBING COMPANY <br> Payroll Register <br> Week Ended May 12, 2015

| Employee | Gross Pay | Deductions |  |  |  | Total | Net Pay |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Federal | Ontario |  |  |
|  |  | CPP | EI | Income Tax | Income Tax | Deductions |  |
| D. Quinn | \$985.00 | \$45.43 ${ }^{1}$ | \$18.52 ${ }^{5}$ | \$111.45 | \$56.70 | \$232.10 | \$752.90 |
| K. Holub | 1,037.00 | $48.00{ }^{2}$ | $19.50{ }^{6}$ | 113.65 | 57.90 | 239.05 | 797.95 |
| A. Lowhorn | 1,080.00 | $50.13{ }^{3}$ | $20.30{ }^{7}$ | 130.95 | 65.20 | 266.58 | 813.42 |
| I. Kostra | 950.00 | $43.69{ }^{4}$ | $17.86{ }^{8}$ | 87.40 | 48.70 | 197.65 | 752.35 |
| Totals | \$4,052.00 | \$187.25 | \$ $\underline{\underline{76.18}}$ | \$443.45 | \$228.50 | \$935.38 | \$3,116.62 |

1. $\mathbf{C P P}=(\$ 985.00-[\$ 3,500 \div 52]) \times 4.95 \%=\$ 45.43$
2. $C P P=(\$ 1,037.00-[\$ 3,500 \div 52]) \times 4.95 \%=\$ 48.00$
3. $C P P=(\$ 1,080.00-[\$ 3,500 \div 52]) \times 4.95 \%=\$ 50.13$
4. $\mathrm{CPP}=(\$ 950.00-[\$ 3,500 \div 52]) \times 4.95 \%=\$ 43.69$
5. $\mathrm{El}=\$ 985.00 \times 1.88 \%=\$ 18.52$
6. $\mathrm{EI}=\$ 1,037.00 \times 1.88 \%=\$ 19.50$
7. $\mathrm{EI}=\$ 1,080.00 \times 1.88 \%=\$ 20.30$
8. $\mathrm{El}=\$ 950.00 \times 1.88 \%=\$ 17.86$

## *PROBLEM 10-13B (Continued)

(b) Semi-monthly Payroll Ended May 15, 2015:

| Employee | Annual Salary | Gross Pay | $\begin{gathered} \text { CPP } \\ 4.95 \% \end{gathered}$ | $\begin{gathered} \text { El } \\ 1.88 \% \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| B. Dolina | \$80,700 | \$3,362.50 | \$159.23 | \$63.22 |
| H. Koleno | 62,500 | 2,604.17 | 121.69 | 48.96 |
| A. Krneta | 44,120 | 1,838.33 | $83.78{ }^{3}$ | 34.56 |

1. $C P P=(\$ 3,362.50-[\$ 3,500 \div 24]) \times 4.95 \%=\$ 159.23$
2. $\mathrm{CPP}=(\$ 2,604.17-[\$ 3,500 \div 24]) \times 4.95 \%=\$ 121.69$
3. $C P P=(\$ 1,838.33-[\$ 3,500 \div 24]) \times 4.95 \%=\$ 83.78$
4. $\mathrm{EI}=\$ 3,362.50 \times 1.88 \%=\$ 63.22$
5. $\mathrm{El}=\$ 2,604.17 \times 1.88 \%=\$ 48.96$
6. $\mathrm{El}=\$ 1,838.33 \times 1.88 \%=\$ 34.56$
(c) Pay period in which CPP maximum is reached = Maximum annual employee CPP contribution $\div$ semi-monthly contribution for the employee (the answer is rounded up since the maximum is reached in the next pay period).

Pay period in which El maximum is reached = Maximum annual employee El premium $\div$ semi-monthly premium for the employee (the answer is rounded up since the maximum is reached in the next pay period).

## B. Dolina:

Pay period in which CPP maximum is reached $=\$ 2,479.95 \div$ $\$ 159.23$ = 15.57; rounded up to pay period 16 (August 31).

Pay period in which El maximum is reached $=\mathbf{\$ 9 3 0 . 6 0} \div \mathbf{\$ 6 3 . 2 2}$ = 14.72; rounded up to pay period 15 (August 15).
*PROBLEM 10-13B (Continued)

## (c) (Continued)

H. Koleno:

Pay period in which CPP maximum is reached $=\$ 2,479.95 \div$ $\$ 121.69$ = 20.38; rounded up to pay period 21 (November 15).

Pay period in which El maximum is reached $=\$ 930.60 \div \$ 48.96$ = 19.01; rounded up to pay period 20 (October 31).
A. Krneta: Her annual salary is less than the maximum pensionable earnings and the maximum insurance earnings. She will not reach the maximum CPP and El payments for 2015.

## Taking It Further:

The payroll tables are prepared for various pay periods used by different companies, or for different groups of employees of the same company. The amounts deducted for CPP, El, and income taxes depends on the length of the pay period, thus different tables are necessary.

## CUMULATIVE COVERAGE: CHAPTERS 3 TO 10

(a)

1. July 31 Operating Expenses.................. 50 Accounts Receivable ................ 650 Cash...................................... 700
2. 31 Bad Debt Expense..................... 1,850 Allowance for Doubtful Accounts (\$3,850-\$2,000) ................... 1,850
3. 31 Interest Receivable ................... 67 Interest Revenue ( $\$ 10,000 \times 8 \% \times 1 / 12$ months) 67
4. 

31 Cost of Goods Sold
6,700
Merchandise Inventory (\$45,900-\$39,200)

6,700
5.

31 Operating Expenses. 5,500
Prepaid Expenses
5,500
6. 31 Depreciation Expense (\$5,600 + \$5,120) 10,720 Amortization Expense............... 15,000

Accumulated Depreciation -Building.

5,600
Accumulated Depreciation
—Equipment ......................... 5,120
Accumulated Amortization -Patent 15,000

## Calculations

Building (\$155,000-\$15,000) $\div 25$ years $=\$ 5,600$
Equipment ( $\mathbf{2 5 , 0 0 0}-\mathbf{\$ 1 2 , 2 0 0 )} \times 40 \%^{*}=\$ 5,120$
*(2 $\times 1 \div 5$ years)
Patent $\$ 75,000 \div 5$ years $=\$ 15,000$

## CUMULATIVE COVERAGE (Continued)

(a) (Continued)
7. July 31 Interest Expense ..... 621Interest Payable(\$124,200 x 6\% x 1/12) ..........621
8. 31 Operating Expenses.................. 1,975Warranty Liability1,975

## CUMULATIVE COVERAGE (Continued)

(b)

## LEBRUN COMPANY Adjusted Trial Balance

 July 31, 2017|  | Debit | Credit |
| :---: | :---: | :---: |
| Cash | \$ 15,850 |  |
| Petty cash | 200 |  |
| Accounts receivable | 39,150 |  |
| Allowance for doubtful accounts. |  | \$ 3,850 |
| Note receivable | 10,000 |  |
| Interest receivable | 67 |  |
| Merchandise inventory | 39,200 |  |
| Prepaid expenses................................. | 10,500 |  |
| Land | 50,000 |  |
| Building............................................... | 155,000 |  |
| Accumulated depreciation-building ..... |  | 16,400 |
| Equipment........................................... | 25,000 |  |
| Accumulated depreciation-equipment. |  | 17,320 |
| Patent................................................. | 75,000 |  |
| Accumulated amortization-patent ........ |  | 30,000 |
| Accounts payable. |  | 78,900 |
| Interest payable................................... |  | 621 |
| Warranty liability |  | 7,975 |
| Note payable........................................ |  | 124,200 |
| S. LeBrun, capital................................. |  | 124,700 |
| S. LeBrun, drawings ............................ | 54,000 |  |
| Sales................................................... |  | 750,000 |
| Cost of goods sold............................... | 456,700 |  |
| Bad debt expense................................. | 1,850 |  |
| Operating expenses | 188,745 |  |
| Amortization expense ........................... | 15,000 |  |
| Depreciation expense ........................... | 10,720 |  |
| Interest revenue ................................... |  | 467 |
| Interest expense................................... | 7,451 |  |
| Total | \$1,154,433 | 1,154,433 |
| See the following page for calculations. |  |  |

## CUMULATIVE COVERAGE (Continued)

(b) This format not required but is presented to show calculations.

| Account | Unadjusted Trial Balance |  | Adjustments |  | Adjusted Trial Balance |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dr. | Cr. | Dr | Cr. | Dr. | Cr. |
| Cash | 16,550 |  |  | (1) 700 | 15,850 |  |
| Petty cash | 200 |  |  |  | 200 |  |
| Accounts receivable | 38,500 |  | (1) 650 |  | 39,150 |  |
| Allowance for doubtful accounts |  | 2,000 |  | (2) 1,850 |  | 3,850 |
| Note receivable | 10,000 |  |  |  | 10,000 |  |
| Interest receivable |  |  | (3) 67 |  | 67 |  |
| Merchandise inventory | 45,900 |  |  | (4) 6,700 | 39,200 |  |
| Prepaid expenses | 16,000 |  |  | (5) 5,500 | 10,500 |  |
| Land | 50,000 |  |  |  | 50,000 |  |
| Building | 155,000 |  |  |  | 155,000 |  |
| Accumulated depreciation -building |  | 10,800 |  | (6) 5,600 |  | 16,400 |
| Equipment | 25,000 |  |  |  | 25,000 |  |
| Accumulated depreciation -equipment |  | 12,200 |  | (6) 5,120 |  | 17,320 |
| Patent | 75,000 |  |  |  | 75,000 |  |
| Accumulated amortization —patent |  | 15,000 |  | (6)15,000 |  | 30,000 |
| Accounts payable |  | 78,900 |  |  |  | 78,900 |

## CUMULATIVE COVERAGE (Continued)

(b) (Continued)

| Account | Unadjusted TrialBalance |  | Adjustments |  | Adjusted Trial Balance |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dr. | Cr. | Dr. | Cr. | Dr. | Cr. |
| Interest payable |  |  |  | (7) 621 |  | 621 |
| Warranty liability |  | 6,000 |  | (8) 1,975 |  | 7,975 |
| Note payable |  | 124,200 |  |  |  | 124,200 |
| S. LeBrun, capital |  | 124,700 |  |  |  | 124,700 |
| S. LeBrun, drawings | 54,000 |  |  |  | 54,000 |  |
| Sales |  | 750,000 |  |  |  | 750,000 |
| Cost of goods sold | 450,000 |  | (4) 6,700 |  | 456,700 |  |
| Bad debt expense |  |  | (2) 1,850 |  | 1,850 |  |
| Operating expenses | 181,220 |  | $\begin{aligned} & \text { (5) } 5,500 \\ & \text { (8) } 1,975 \\ & \text { (1) } \\ & \hline \end{aligned}$ |  | 188,745 |  |
| Amortization expense |  |  | (6)15,000 |  | 15,000 |  |
| Depreciation expense |  |  | (6)10,720 |  | 10,720 |  |
| Interest revenue |  | 400 |  | (3) 67 |  | 467 |
| Interest expense | 6,830 |  | (7) 621 |  | 7,451 |  |
| Total | 1,124,200 | 1,124,200 | 43,133 | 43,133 | 1,154,433 | 1,154,433 |

## CUMULATIVE COVERAGE (Continued)

(c)

## LEBRUN COMPANY <br> Income Statement Year Ended July 31, 2017

Sales revenues
Sales ..... \$750,000
Cost of goods sold ..... 456,700
Gross profit ..... 293,300
Operating and other expenses Operating expenses ..... \$188,745
Amortization expense ..... 15,000
Depreciation expense ..... 10,720
Bad debt expense ..... 1,850
Total expenses ..... 216,315
Profit from operations ..... 76,985
Other revenues
Interest revenue ..... 467
Other expenses
Interest expense ..... 7,451 ..... 6,984
Profit \$70,001
LEBRUN COMPANY
Statement of Owner's Equity Year Ended July 31, 2017
S. LeBrun, capital, August 1, 2016 ..... \$124,700
Add: Profit ..... 70,001
194,701
Less: Drawings ..... 54,000
S. LeBrun, capital, July 31, 2017 \$140,701

## CUMULATIVE COVERAGE (Continued)

(c) (Continued)

## LEBRUN COMPANY Balance Sheet July 31, 2017

Assets
Current assets
Cash (\$15,850 + \$200) ..... \$ 16,050
Accounts receivable \$39,150
Less: Allowance for doubtful accounts ..... 3,850 ..... 35,300
Note receivable ..... 10,000
Interest receivable ..... 67
Merchandise inventory ..... 39,200
Prepaid expenses ..... 10,500
Total current assets ..... 111,117
Property, plant, and equipment
Land ..... 50,000
Building ..... \$155,000
Less: Accumulated depreciation ..... 16,400 138,600
Equipment ..... 25,000
Less: Accumulated depreciation ..... 17,320 ..... 7,680 196,280
Intangible assets
Patent ..... 75,000
Less: Accumulated amortization............... 30,000 ..... 45,000
Total assets ..... \$352,397

## CUMULATIVE COVERAGE (Continued)

## (c) (Continued)

## LEBRUN COMPANY <br> Balance Sheet (Continued) July 31, 2017

## Liabilities and Owner's Equity

Current liabilities
Accounts payable ..... \$ 78,900
Interest payable ..... 621
Warranty liability ..... 7,975
Current portion of note payable ..... 1,680
Total current liabilities ..... 89,176
Long-term liabilities
Note payable (\$124,200-\$1,680) ..... 122,520
Total liabilities ..... 211,696
Owner's equity
S. LeBrun, capital ..... 140,701
Total liabilities and owner's equity ..... \$352,397

## BYP10-1 FINANCIAL REPORTING PROBLEM

(a) Total current liabilities at August 31, 2014, were $\$ 175,725,000$. There was a $\$ 7,341,000$ increase from the previous year ( $\$ 175,725,000-\$ 168,384,000$ ), which was equivalent to a $4.4 \%$ increase ( $\$ 7,341,000 \div \$ 168,384,000$ ).
(b) The first of two components of total current liabilities on August 31, 2014 was accounts payable and accrued liabilities for the lion's share of the total followed by a modest amount for provisions. Since provisions usually involve estimates, the order used by Corus was liquidity order.
(c) Current ratio: 2014
\$217,394,000 $\div$ \$175,725,000 = 1.24:1
Current ratio: 2013
\$310,070,000 $\div$ \$168,384,000 = 1.84:1
Receivables turnover: 2014
$\$ 833,016,000 \div[(\$ 183,009,000+\$ 164,302,000) \div 2]=4.8$ times
Receivables turnover: 2013
$\$ 751,536,000 \div[(\$ 164,302,000+\$ 163,345,000) \div 2]=4.6$ times
While the current ratio has deteriorated substantially, showing poor liquidity, the receivables turnover is very similar and slightly better than 2013.
(d) As footnoted at the bottom of the Consolidated Statement of Financial Position, Corus directs us to the discussion of contingencies in note 27 to its financial statements. A very short paragraph describes litigation matters arising out of the ordinary course and conduct of the business. In management's opinion, the exposure from these matters is considered not material to the financial statements.

## BYP10-2 INTERPRETING FINANCIAL STATEMENTS

Loblaw does not accrue legal proceedings, as they are not expected to have a material impact on the reported results. It also does not accrue the class action proceedings as the company cannot predict the outcome with certainty. These class action proceedings however, if successful, would result in material losses for the company and it is desirable to disclose these items because they would have a substantial negative effect on the company's financial position.

## BYP10-3 COLLABORATIVE LEARNING ACTIVITY

All of the material supplementing the collaborative learning activity, including a suggested solution, can be found in the Collaborative Learning section of the Instructor Resource site accompanying this textbook.

## BYP10-4 COMMUNICATION ACTIVITY

RE: Accounting for Gift Certificates
TO: Show_Time_Movie_Theatre@gmail.com

FROM: Student@gmail.com
DATE:
In response to your request, I wish to answer your questions regarding the accounting for gift certificates in your theatre.
(a) A liability is recorded when these certificates are sold because there is still a service to be provided by the theatre. The certificates sold are considered unearned revenue until they are redeemed and the service provided. At this point, the theatre's obligation is fulfilled and the amounts can be transferred from a liability account to a revenue account.

The foregoing applies even though the gift certificates may, as you suggest, also generate additional revenues for the theatre.
(b) Since the gift certificates have no expiry date, the theatre will always have a liability for any gift certificates produced and redeemed. However, based upon the experience of your theatre and the theatre industry in general, estimates could be developed for the proportion of gift certificates that will never be redeemed.

An entry would be made to reduce the liability related to unearned revenue, and to record the estimated amount that will never be redeemed as earned (or perhaps as a gain), rather than carrying an unlikely liability on your books in perpetuity.

## BYP10-5 "ALL ABOUT YOU" ACTIVITY

(a) Some of the factors to consider in determining if a worker is an employee or self-employed include:

- the level of control the payer has over the worker;
- whether or not the worker provides the tools and equipment;
- whether the worker can subcontract the work or hire assistants;
- the degree of financial risk taken by the worker;
- the degree of responsibility for investment and management held by the worker;
- the worker's opportunity for profit; and
- any other relevant factors, such as written contracts.
(b) The amount of cash received each month is the gross pay less the payroll deductions:

Gross pay:
Less:
CPP Contribution \$134.06
El Contribution 54.90
Income taxes $\quad \underline{509.35}$
Cash received (net pay)
\$3,000.00

The total amount of cash received in a year:
Annual salary (\$3,000 $\times 12$ )
\$36,000.00

Less deductions:
CPP Contribution (\$134.06 $\times 12$ ) $1,608.72$
El Contribution (\$54.90 $\times 12$ )
Income tax (\$409.35 × 12)
Cash received (net pay)

4,912.20
\$28,820.28

## BYP 10-5 (Continued)

(c) The total CPP paid in the year will be $\$ 134.06 \times 12=$ $\$ 1,608.72$. Since the employee's annual salary of $\$ 36,000$ is less than the 2015 maximum pensionable earnings of $\$ 53,600$, the employee will not reach the maximum annual contribution.

The total El paid in the year will be $\$ 54.90 \times 12=\$ 658.80$. The employee's annual salary is less than the 2015 maximum insurable earnings of $\$ 49,500$, so the maximum annual employee El premium will not be reached.
(d) If you are self-employed, you will receive the full $\$ 3,000$ each month. As a self-employed individual, you will be responsible for making periodic instalmentt payments to CRA for personal income tax. The amount paid in income taxes may differ depending on the expenses that you may be able to claim as a self-employed individual.

If no expenses are claimed, the amount of CPP paid in a year will include the employee and the employer portion as follows: $\$ 1,608.72 \times 2=\$ 3,217.44$

If no expenses are claimed, and the individual has chosen to pay El, the amount of El paid in a year will include only the employee's contribution of $\$ 658.80$.

## BYP 10-5 (Continued)

(e) Consulting revenue $(\$ 3,000 \times 12)$
\$36,000.00
Less deductions:
Income tax (\$409.35 × 12)
4,912.20
CPP Contribution (\$134.06 $\times 12 \times 2$ )
Net pay

$$
3,217.44
$$

\$27,870.36
(f) Based on the calculations in (c) and (e), it is preferable to be an employee because the net pay is higher.
(g) The answer to (f) may change if there is more than one client. It would be likely that additional expenses, such as travelling to the client's location would be incurred. As a self-employed consultant, these costs could be deductible for income tax purposes and could decrease the amount of taxes paid.

## BYP10-6 Santé Smoothie Saga

1. The cash from the sale of gift certificates must be recorded as unearned revenue. Unearned revenue represents cash payments received in advance of earning the revenue because the service or goods has not been provided to the customer. With a gift certificate, Natalie's business owes a recipe book and all of the supplies needed to create two cups of smoothies. This is the same rationale as deposits received for pre-made smoothies.
2. If the sale of gift certificates is recorded as revenue, revenues on the income statement will be overstated and profit will also be overstated. The revenue is not earned until the recipe book and supplies are provided to customers. The gift certificate does not represent a good or service but rather an entitlement to receive goods in the future when they are redeemed.

If the gift certificates are never used, Natalie will need to use her past experience to determine what her liability is and the likelihood of the older gift certificates being redeemed. She can then recognize revenue on gift certificates unlikely to be redeemed.

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