

Adult Basic Education
Mathematics

Mathematics 2105A

Wages, Salaries and Expenses Personal Banking

Curriculum Guide

Prerequisite: Grade 9 Mathematics

Credit Value: 1

Mathematics Courses [General College Profile]

Mathematics 2105A

Mathematics 2105B

Mathematics 2105C

Mathematics 3107A

Mathematics 3107B

Mathematics 3107C

Mathematics 3109A

Mathematics 3109B

Mathematics 3109C

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To the Instructor

I. Introduction to Mathematics 2105A

The primary topics of Unit 1, income and spending, should better equip students to effectively manage income and make informed decisions. This unit will be immediately applicable to most students who are already holding full or part-time jobs.

The intent of the second unit is for students to gain familiarity with current banking procedures and to complete appropriate banking forms. Students who have bank accounts will find this unit especially pertinent. The instructor should encourage students who do not have bank accounts to open one before they finish this unit. The topics addressed should help students in making a decision on which type of account best meets their needs.

II. Prerequisites

Students should know how to work with percents, decimals and fractions. The instructor should provide review worksheets on these topics to ensure that students can do these calculations efficiently.

III. Textbook

Essentials of Mathematics 10 is designed to emphasize the skills needed in adult life as well as in the workplace. Students should appreciate that mathematics is practical and useful for accomplishing real-world activities. With this in mind, this resource has been developed with contents that are real and relevant to the lives of students.

Each chapter begins with an introduction which presents the key mathematical ideas that will be encountered. The following categories are in each chapter:

Chapter Goals: Located on the bottom of each introductory page, this section lists the major concepts to be learned.

Chapter Project and Project Activity: Each chapter contains a guided project. This type of group work is not well suited for the Adult Basic Education environment. Therefore, **these sections have been omitted from the course**. However, if there are several students working on the same chapter, instructors may use their discretion in assigning the **Chapter Project**, or some modification of it, for an assessment.

Exploration: Most of the concepts are introduced, developed and explained in these lessons. In this section, **Examples** and **Solutions** for typical problems are provided. The instructor should ensure that students carefully study and understand each **Example** before proceeding.

To the Instructor

Class Discussion, Small Group Discussion and Pairs Activities: As the titles imply, these activities are provided to give students an opportunity to work collaboratively. Some of these sections have been assigned in the Study Guide, especially if they can be completed by a student working alone.

Mental Math: The questions contained in these sections are often calculations that are similar to those required in the **Solutions** to the **Examples**. Although called **Mental Math**, students should not be required to complete these activities without pencil and paper. If students have difficulty with these problems, the instructor should provide practice worksheets. The solutions to **Mental Math** are found in the *Teacher Resource Book 10*.

Notebook Assignment: This section provides a series of problems similar to those in the **Exploration**. Students should attempt these problems only after the **Exploration** problems have been understood and all assigned **Mental Math** and practice worksheets have been completed. The textbook contains only answers to **Notebook Assignment**, but the *Teacher Resource Book 10* has solutions with workings and some explanations.

Chapter Review: This section contains a series of questions that review the chapter outcomes. Answers are in the textbook as well as the *Teacher Resource Book 10*.

Case Study: This part requires students to express their understanding of the skills they have learned. Answers are in the textbook as well as the *Teacher Resource Book 10*.

IV. **Technology**

The use of technology in our society is increasing and technological skills are becoming mandatory in the workplace. It is assumed that all students have a scientific calculator and its manual for their individual use. Ensure that the calculator used has “scientific” on it as there are calculators designed for business and statistics which would not have the functions needed for this course. Although students will sometimes use a calculator, they should first complete most problems using pencil and paper.

To the Instructor

V. Curriculum Guides

Each new ABE Mathematics course has a Curriculum Guide for the instructor and a Study Guide for the student. The Curriculum Guide includes the specific curriculum outcomes for the course. Suggestions for teaching, learning, and assessment are provided to support student achievement of the outcomes. Each course is divided into units. Each unit comprises a **two-page layout of four columns** as illustrated in the figure below. In some cases the four-column spread continues to the next two-page layout.

Curriculum Guide Organization: The Two-Page, Four-Column Spread

Unit Number - Unit Title		Unit Number - Unit Title	
Outcomes Specific curriculum outcomes for the unit.	Notes for Teaching and Learning Suggested activities, elaboration of outcomes, and background information.	Suggestions for Assessment Suggestions for assessing students' achievement of outcomes.	Resources Authorized and recommended resources that address outcomes.

VI. Study Guides

The Study Guide provides the student with the name of the text(s) required for the course and specifies the sections and pages that the student will need to refer to in order to complete the required work for the course. It guides the student through the course by assigning relevant reading and providing questions and/or assigning questions from the text or some other resource. Sometimes it also provides important points for students to note. (See the *To the Student* section of the Study Guide for a more detailed explanation of the use of the Study Guides.) The Study Guides are designed to give students some degree of independence in their work. Instructors should note, however, that there is much material in the Curriculum Guides in the *Notes for Teaching and Learning* and *Suggestions for Assessment* columns that is not included in the Study Guide and instructors will need to review this information and decide how to include it.

To the Instructor

VII. Resources

Essential Resources

Essentials of Mathematics 10, ISBN: 0-7726-4675-9

Essentials of Mathematics 10, Teacher Resource Book 10, ISBN: 0-7726-4808-5

Mathematics 2105A Study Guide

Resources

Math Link: <http://mathforum.org>
<http://edHelper.com>
<http://www.purplemath.com/index.htm>
<http://www.educationindex.com/math/>
<http://www.learner.org/exhibits/dailymath/resources.html>
<http://cba.ca> (Canadian Bankers Association)

VIII. Recommended Evaluation

Written Notes	10%
Assignments	10%
Test(s)	30%
Final Exam (<i>entire course</i>)	<u>50%</u>
	100%

Wages, Salaries and Expenses

Personal Banking

Unit 1 - Wages, Salaries and Expenses

Outcomes

- 1.1 Estimate income and expenses.
- 1.2 Calculate hours worked and gross pay.
 - 1.2.1 Change mixed fractions to improper fractions and vice versa.
- 1.3 Calculate time problems using the 24-hour clock.
 - 1.3.1 Convert hours to minutes and vice versa.

Notes for Teaching and Learning

The goals of this unit are to equip students to effectively manage income and expenses and to make informed financial decisions.

Since the Chapter Project is best suited as a group activity, it is not required for this course.

In the Study Guide, students are reminded to read **Hints** and do **Mental Math** problems which are on the bottom of the textbook pages. The instructor should encourage students to complete these activities.

Instructors should ensure that students work through and understand the given solution for each **Example**.

Before students complete **Exploration 3** on page 23, the instructor should review changing mixed fractions to improper fractions and changing improper fractions to mixed fractions.

Worksheets on these and other topics are easily accessed if the instructor has a subscription to www.edHelper.com.

Blackline Master 1 (Clock Face) is in the back of the *Teacher Resource Book 10*. It may be useful when students are doing **Exploration 4** on page 30.

The instructor may need to give an introduction to converting hours to minutes and vice versa. When converting from a 12-hour clock to a 24-hour clock, students may need some help in finding the strategy which works best.

Unit 1 - Wages, Salaries and Expenses

Suggestions for Assessment

Study Guide questions 1.1 to 1.12 should meet the objectives of Outcomes 1.1 to 1.3.

The Appendix contains two practice worksheets, *Calculating Wages* and *Calculating Salaries*, which could be assigned for homework or review.

Resources

Essentials of Mathematics 10,
Beginning a Budget: Income
and Expenses, pages 18 - 22

Essentials of Mathematics 10,
Gross Pay, pages 23 - 29

Essentials of Mathematics 10,
Keeping Track of Time,
pages 30 - 35

Teacher Resource Book 10,
Blackline Master 1 (Clock
Face)

Appendix, Practice Exercises
1 and 2, *Calculating Wages*
and *Calculating Salaries*

www.edHelper.com

Unit 1 - Wages, Salaries and Expenses

Outcomes

1.4 Read data from time cards.

1.5 List possible payroll deductions.

1.6 Calculate a change in earnings.

1.6.1 Change a percent to a decimal and vice versa.

Notes for Teaching and Learning

Students may need some practice on changing hours and minutes to decimal hours before completing **Exploration 5** on page 36. Blackline Master 2 (Time Card) located in the *Teacher Resource Book 10* may be useful. The “quarter hour penalty” may need some clarification; especially the term “quarter of an hour or part thereof”.

Students should read the introduction and **Examples 1** and **2**. These examples provide students with some samples of the various payroll deductions that are possible. All calculations are omitted.

Students are asked to only read **Exploration 6**, Payroll Deductions, for the purpose of becoming familiar with the possible *types* of deductions.

Students **should not calculate** deductions.

The instructor should note that **none** of the exercises in **Notebook Assignment** for **Exploration 6** have been assigned.

Exploration 8 shows how a percentage increase or decrease would affect the monthly gross pay. Students will need a review on calculating a percent raise, changing from a percent to a decimal and from a decimal to a percent.

Example 3 on page 73 offers two ways to find a % increase in salary.

Unit 1 - Wages, Salaries and Expenses

Suggestions for Assessment

Study Guide questions 1.13 to 1.16 should meet the objectives of Outcomes 1.4 to 1.6.

Practice worksheets, *Overtime Pay* and *Rounding and Estimating* are useful resources for homework or review.

In the Study Guide, students have been assigned the appropriate questions from the **Chapter Review**. Instructors may choose to use these questions for an assessment.

The Appendix also has two Chapter Tests.

The instructor can assess basic skills by asking questions such as the following:

- a) Change 70 minutes into hours.
- b) Calculate gross pay if the rate is \$5 per hour and the hours worked are 20.
- c) 9:00 p.m. is _____ on the 24-hour clock.
- d) How many hours and minutes do you work if you work from 8:17 to 11:50?
- e) What is the net pay if the gross pay is \$313 and deductions are \$37?
- f) Using the quarter-hour rule, what is the penalty if you arrived nine minutes late?
- g) If your old salary is \$255 and you receive a 10% increase, what is your new salary?
- h) If your old salary is \$350 and you receive a \$35 raise, what is your percent rate of increase?

Resources

Essentials of Mathematics 10,
Time Cards, pages 36 - 52

Essentials of Mathematics 10,
Payroll Deductions, pages
54 - 60

Essentials of Mathematics 10,
Changing Earnings, pages 71
- 75

Essentials of Mathematics 10,
Chapter Review, pages 79 -
86

Teacher Resource Book 10,
Blackline Master 2
(Time Card)

Appendix, Practice Exercises
3 and 4, *Overtime Pay* and
Rounding and Estimating

Appendix, Chapter 1 Tests A
and B

Unit 2 - Personal Banking

Outcomes

- 2.1 Complete various bank forms.
 - 2.1.1 Complete deposit slips.
 - 2.1.2 Complete withdrawal slips.
 - 2.1.3 Write cheques.
- 2.2 Keep records of financial transactions such as deposits and withdrawals.
- 2.3 Describe the use of a bank card for automated teller machines (ATMs) and debit payments.
- 2.4 Reconcile financial statements such as cheques books and electronic bank transactions with bank statements.

Notes for Teaching and Learning

The intent of this unit is for students to gain familiarity with current banking procedures and to complete appropriate banking forms.

The *Teacher Resource Book 10* contains Blackline Masters of all the required banking forms. In the back of the textbook, *Essentials of Mathematics 10*, there are copies of these forms. The instructor should also provide copies of local bank forms and brochures.

The instructor should ensure that the various bank forms are completed with close attention to the details.

If there are several students working on this unit, it would be beneficial to have a bank employee visit the classroom as a guest speaker to talk about basic banking services.

Students are required to complete **Small Group Activity** on page 92. This question can be done by a group or an individual student.

Unit 2 - Personal Banking

Suggestions for Assessment

Study Guide questions 2.1 to 2.9 will meet the objectives of Outcomes 2.1 to 2.4.

In the Study Guide, students have been assigned Practice Exercise 5, *Deposit Slip and Cheque* and Practice Exercise 6, *Transaction Record and Bank Statement*. The instructor may choose to use these worksheets as a homework assignment or a test.

Resources

Essentials of Mathematics 10,
Using Bank Accounts, pages
92 - 99

Essentials of Mathematics 10,
Keeping Records, pages 100 -
104

Essentials of Mathematics 10,
Using a Bank Card,
pages 105 - 109

Essentials of Mathematics 10,
Reconciling a Bank
Statement, pages 112 - 125
Blackline Masters
4 (Deposit Slip)
5 (Withdrawal Slip)
6 (Blank Cheque)
7 (Transaction Record)
9 (Reconciliation Statement)

Appendix, Practice
Exercise 5, *Deposit Slip and
Cheque*

Appendix, Practice
Exercise 6, *Transaction
Record and Bank Statement*

Unit 2 - Personal Banking

Outcomes

2.5 Identify different types of bank accounts and their service charges and their relative costs.

2.6 Describe telephone and internet banking.

Notes for Teaching and Learning

It would be useful if the instructor discussed the various types of banking charges with students:

- transactions fees (e.g. cheques, transfers, bill payments, ABM withdrawals)
- service fees (e.g. safety deposit boxes, bank drafts, foreign currency exchange, traveler's cheques)
- NSF (overdraft) penalties
- fees for ABM usage, telephone banking and banking online
- extra charges for independent cash machines

Unit 2 - Personal Banking

Suggestions for Assessment

Study Guide questions 2.10 to 2.12 will meet the objectives of Outcomes 2.5 and 2.6.

Questions from or similar to the **Chapter Review** could be used for assessment. Depending on the class, the **Case Study** could be an opportunity for group work.

There is a Chapter 2 Test in the Appendix.

Resources

Essentials of Mathematics 10,
Choosing the Best Account,
pages 127 - 132

Essentials of Mathematics 10,
Internet and Telephone
Banking, pages 133 - 136

Essentials of Mathematics 10,
Chapter Review, pages 137 -
141

Essentials of Mathematics 10,
Case Study, pages 143 and
144

Appendix, *Chapter 2 Test*

Bank Brochures

The Canadian Bankers
Association website:
www.cba.ca

Appendix

Practice Exercise 1: Calculating Wages

Name: _____

You have a part-time job. This means that you work fewer hours than a full work week. The money you earn is called your wages.

Suppose you work at Kim’s Donut Shop after school and on Saturday. The chart shows how much part-time workers earned last week.

Workers	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Weekly Wages
You	\$13.50	\$14.50	-----	\$21.00	-----	\$12.25	\$61.25
Rita	\$11.50	\$17.75	-----	\$21.00	-----	\$15.75	
Gerry	\$13.50	\$15.50	-----	\$16.75	-----	\$15.75	

1. Find Rita’s Weekly Wage. _____
2. Find Gerry’s Weekly Wage. _____
3. How much did you earn on Monday and Tuesday? _____
4. Who earned more by the end of the week, Rita or Gerry? _____
5. How much more? _____
6. At the end of the week, Gerry received a paycheque for \$58.75. Is the amount of his cheque correct? _____
7. If not, how much more or less should he have received? _____
8. Estimate if \$300 is enough to pay the part-time workers for this week? _____
9. Explain how you could estimate how many weeks you need to work to buy a jacket for \$97.75.

Answer Key for Practice Exercise 1: Calculating Wages

1. \$66.00
2. \$61.50
3. \$28.00
4. Rita
5. \$4.50
6. No
7. \$2.75 more
8. Yes
9. 2 weeks at \$60 per week would give $2 \times \$60 = \120 , which is more than you need to buy the jacket.

Practice Exercise 2: Calculating Salaries

Name: _____

Show calculations.

1. Thomas has job-related expenses of \$12.50 for transportation, \$13.75 for lunches, and \$12.70 for insurance. What are his total weekly job-related expenses? _____

2. Jolene's salary is \$1750.00 per month, and she has job-related expenses of \$101.75 per month. What is the amount of salary left after job-related expenses are paid? _____

3. Ken's salary is \$31,177.00 per year and has job-related expenses of \$127.50 per month. What is the amount of salary left after job-related expenses are paid? _____

4. Sharon's salary is \$450.55 per month and has job-related expenses of \$25.50 per week. What is the amount of yearly salary left after job-related expenses are paid?

5. Suppose you need a job that will pay enough so that you will have at least \$125 a week left after you pay job-related expenses. A job at a local restaurant pays \$150 a week for a three day work week. It will cost you \$4.25 each day for transportation and \$2.50 each week to clean your uniform. Would you still earn at least \$125 per week? _____
Show how you found your answer. _____

6. Max's salary is \$225 per week. His job-related expenses include \$15.75 per week for transportation and \$12.50 per week for meals. Sandra's salary is the same as Max's. She works three days a week and pays \$3.50 per day for transportation and \$5.25 per day for meals. After paying weekly expenses, does Max or Sandra have the greater amount of salary left? _____
Show how you found your answer. _____

Answer Key for Practice Exercise 2: Calculating Salaries

1. \$38.95
2. \$1648.25 per month
3. \$29647.00
4. \$4080.60
5. Yes, because $\$150 - (3 \times \$4.25 + \$2.50) = \134.75 , which is more than \$125.00.
6. Sandra, because she earns $\$225.00 - (3 \times \$3.50 + 3 \times \$5.25) = \198.75 , and Max earns $\$225.00 - (\$15.75 + \$12.50) = \198.75 .

Practice Exercise 3: Overtime Pay**Name:** _____

If you have a full-time job, you must work a full work week, usually from 35 to 40 hours. To find your weekly salary, multiply your hourly wage (the amount you earn for each hour of work) by the number of hours you work in one week.

1. You now earn \$11.50 per hour and work 39 hours a week. Calculate your weekly salary.
-
-
-

2. You worked 8 hours overtime, or 8 more hours than your regular 38-hour work week. Your work rules say that overtime pay is one-and one half ($1\frac{1}{2}$ or 1.5 or $\frac{3}{2}$) times the regular hourly rate of \$14.20, or “time and a half”. Find out how much you would earn.
-
-
-

3. This chart shows hourly wages and hours worked per week for five people. Complete the columns showing the calculations to find your answer. The first one is partly done.

Worker	Hourly Wage	Regular hours per week	Weekly Earnings	Overtime rate of pay	Overtime hours	Overtime Earnings	Total Earnings
Joanne	\$7.40	40	$\$7.40 \times 40 =$		4		
Carl	\$9.25	38			6.5		
Scott	\$11.53	37.5			12		
Annette	\$13.25	38.5			6		
Paul	\$18.45	42			4.5		

4. Complete the chart.

Hourly Wage	Regular hours per week	Weekly salary	Overtime Rate	Overtime Hours Worked	Overtime Pay	Total Salary
\$6.85	40		1.5	7		
\$9.50	38		2	5		
\$14.50	37.5		1.5	6		
\$16.00	39		2	3		

5. Workers at a local fish plant earn \$8.25 per hour for a 40 hour work week. The overtime pay rate for weekdays is time and a half and the overtime rate for Sundays is double time. If Mary worked 48 hours, including 5 hours on Sunday, what are her total weekly earnings? Show your work _____

6. Use this chart to answer the next two questions.

Job	Hourly Rate	Hours per Week	Overtime Rate
Nurse's Aide	\$6.80	36	1.5
Store Clerk	\$6.00	40	1.8

A. Which job would pay more for a full-time week without overtime? Show your work.

B. Which job would pay more for working a 50-hour week? Show your work.

Answer Key for Practice Exercise 3: Overtime Pay

1. $39 \times \$11.50 = \448.50
2.
 - First, find your weekly salary the same way as the previous problem.
 $\$14.20 \times 38 = \539.60
 - Then, find your overtime rate of pay by multiplying 1.5 by your regular hourly rate of \$14.20.
 $\$14.20 \times 1.5 = \21.30 which is your overtime hourly rate of pay.
 - Next, find your overtime pay by multiplying your overtime rate by the number of overtime hours worked.
 $\$21.30 \times 8 = \170.40 , which is your overtime pay.
 - Finally, add your overtime pay to your weekly salary.
 $\$539.60 + \$170.40 = \$710.00$, your total earnings for the week.
- 3.

Worker	Hourly Wage	Hours per week	Weekly Earnings	Overtime rate of pay (time and a half)	Overtime hours	Overtime Earnings	Total Earnings
Joanne	\$7.40	40	$\$7.40 \times 40 = \296.00	$\$7.40 \times 1.5 = \11.10	4	$\$11.10 \times 4 = \44.40	$\$296.00 + \$44.40 = \$340.40$
Carl	\$9.25	38	\$351.50	\$13.88	6.5	\$90.22	\$441.72
Scott	\$11.53	37.5	\$432.38	\$17.30	12	\$207.60	\$639.98
Annette	\$13.25	38.5	\$510.13	\$19.88	6	\$119.28	\$629.41
Paul	\$18.45	42	\$774.90	\$27.68	4.5	\$124.56	\$899.46

4.

Hourly Wage	Regular hours per week	Weekly salary	Overtime Rate	Overtime Hours Worked	Overtime Pay	Total Salary
\$6.85	40	\$274.00	1.5	7	\$71.93	\$345.93
\$9.50	38	\$361.00	2	5	\$95.00	\$456.00
\$14.50	37.5	\$543.75	1.5	6	\$130.50	\$674.25
\$16.00	39	\$624.00	2	3	\$96.00	\$720.00

5. $(40 \times \$8.25) + (3 \times 1.5 \times \$8.25) + (5 \times 2 \times \$8.25) = \$449.63$

6. A. Nurse's Aide, because $36 \times \$6.80 = \244.80 , which is more than $40 \times \$6.00 = \240.00 , the Store Clerk's pay.
- B. Nurse's Aide, because $(36 \times \$6.80) + (14 \times 1.5 \times \$6.80) = \$387.60$ is \$7.60 more than the Store Clerk who earns $(40 \times \$6.00) + (10 \times 1.8 \times \$6.00) = \$380.00$

Practice Exercise 4: Rounding and Estimating **Name:** _____

An expense is the cost of an item you buy, rent, or otherwise pay for. When trying to meet a budget, it is important to be able to find your average expenses. To find an average, add the amounts for a group of items. Then divide the total by the number of items. It is always a good idea to estimate the average before calculating, by rounding the amounts to a convenient number.

One method of estimating is to round each amount so that there is one non-zero digit. So, 625 rounds to 600, 8.95 rounds to 10, and 56.20 rounds to 60. If the digit to the right of the rounding place is **5 or more, round up**. If the digit to the right of the rounding place is **5 or less, round down**.

625 → 600 (2 < 5) 8.95 → 10 (9 > 5) 56.20 → 60 (6 > 5)

Tom made a chart to record his expenses.

Items	January	February	March
Rent	\$625.00	\$625.00	\$625.00
Electric	\$32.70	\$34.75	\$29.80
Life Insurance	\$8.95	\$8.95	\$8.95
Groceries	\$147.26	\$112.93	\$134.52
Car Loan	\$209.75	\$209.75	\$209.75
Telephone	\$56.20	\$63.14	\$68.42

To estimate Tom’s average monthly expenses, round his monthly expenses for January. Then add the rounded amounts mentally.

January’s estimates are: $\$600 + \$30 + \$10 + \$100 + \$200 + \$60 = \$1000$

Since February and March expenses were similar, Tom used the \$1000 estimate for each of the three months.

- To compute the actual amount, add each set of monthly expenses. Then find the total for all three months, using a calculator. Divide the total by the number of months to find the actual average monthly expenses. Do the calculations and compare the estimated amount with the actual one. _____

2. The chart shows total monthly expenses for three people. Complete the chart by first estimating each person's average monthly expenses and then find the actual averages.

TOTAL EXPENSES						
					Monthly Average	
Name	April	May	June	July	Estimated	Calculated
Gene	\$1,886.00	\$260.00	\$5,234.00	\$1,089.00		
Joanne	\$974.00	\$78.00	\$674.00	\$15.00		
Suzanne	\$731.00	\$32.00	\$290.00	\$578.00		

3. Paula pays \$750.00 every month for rent and \$120.00 a month for gas. Her electric bills for December, January, and February were \$57.54, \$34.89, and \$47.00. Her phone bills were \$45.00, \$38.00, and \$42.35. She paid \$125.00 for groceries for January and February, and \$150.00 for groceries for December.

Use this information to complete the chart.

Paula's Expenses			
Items	December	January	February
Rent			
Gas			
Electric			
Phone			
Groceries			

- A. Estimate Paula's average monthly expenses. Show your work.

- B. Calculate Paula's average monthly expenses. Show your work.

Answer Key for Practice Exercise 4: Rounding and Estimating

1. Actual answer is \$3210.82 which is \$210.82 more than the estimate.

2.

TOTAL EXPENSES						
					Monthly Average	
Name	April	May	June	July	Estimated	Calculated
Gene	\$1,886.00	\$260.00	\$5,234.00	\$1,089.00	\$8,400.00	\$8,469.00
Joanne	\$974.00	\$78.00	\$674.00	\$15.00	\$1,700.00	\$1,741.00
Suzanne	\$731.00	\$32.00	\$290.00	\$578.00	\$1,700.00	\$1,631.00

3.

Paula's Expenses			
Items	December	January	February
Rent	\$750.00	\$750.00	\$750.00
Gas	\$120.00	\$120.00	\$120.00
Electric	\$57.54	\$34.89	\$47.00
Phone	\$45.00	\$38.00	\$42.35
Groceries	\$150.00	\$125.00	\$125.00

A $\$800 + \$100 + \$100 + \$150 = \$1050$

B. Total monthly expenses are $(3 \times \$750) + (3 \times \$120) + (2 \times \$125) + \$150 + \$57.54 + \$34.89 + \$47.00 + \$45.00 + \$38.00 + \$42.35 = \$3274.78$

To find the monthly average, divide the total by 3: $\$3274.78 \div 3 = \1091.60

Chapter 1, Test A
Wages, Salaries and Expenses

Name: _____

1. Define the following:

(a) gross pay: _____

(b) net pay: _____

2. List two benefits that an employee may get from an employer.

3. If you were to save 10% of your take-home pay, how much would you save if you earn \$150 a week? (52 weeks in a year).

4. Calculate Emily's gross weekly wages in each of the following cases.

Day	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.	Rate
Hours	9	8	8.5	7.5	10	6	4	\$9.50

(a) She is paid her regularly hourly rate for 40 hours a week and time and a half for all hours over 40 in that week.

(b) She is paid her regular hourly rate for an eight-hour day with time and a half paid for all hours over eight in one day. Saturday and Sunday hours are paid at double time.

5. Complete the table.

Gross weekly pay	Federal tax deduction	Provincial tax deduction	CPP	EI	Net weekly pay
\$100.00	0	0	\$1.41	\$2.25	
\$300.00	\$22.35	\$7.95	\$10.01	\$6.75	
\$600.00	\$68.10	\$25.55	\$22.91	\$13.50	

6. Fill out Jamie's time card. His shift is 8:30 am to 4:30 pm. If he misses any part of a quarter hour, he does not get credit for that quarter hour.

Day	Hours worked	Time
Monday	8:20 - 4:32	8
Tuesday	8:30 - 4:20	
Wednesday	8:40 - 4:40	
Thursday	8:17 - 4:31	
Friday	8:45 - 4:03	
Total	---	

7. If Susan works 7 hours and 15 minutes, express this as a decimal.

8. If Bob works 6.4 hours, express this in hours and minutes.

9. Carla makes \$8.00 an hour and gets a raise to \$9.00 an hour. Dave makes \$10.00 an hour and gets a raise to \$11.10 an hour.

(a) Calculate each increase in hourly rate. _____

(b) Calculate the percent increase of each raise. _____

10. You have a choice. Your employer asks you to choose between a 25% raise and a \$2.00 an hour increase. Which option do you choose for the following situations:

(a) your hourly rate is \$6.00 an hour _____

(b) your hourly rate is \$10.00 an hour _____

Chapter 1, Test B
Wages, Salaries and Expenses

Name: _____

1. Arthur Smith earns \$7.50 an hour. If he works a total of fifteen hours one week, what is his gross pay? _____

2. Helen Jones works at a mill on Saturdays doing clean-up. Her pay rate is \$17.00 an hour for the first 8 hours and then time and a half for any overtime hours. If she works a 13 hour shift not including lunch hour, what is her gross pay? _____

3. Sandy Knowles filled out a time card that showed she was at work from 08:00 to 16:30.
 - a) How many hours did she work if there is a half-hour lunch break?

 - b) How much money would she earn if her pay rate is \$10.55 an hour?

4. Sally Forth works at a gas station earning \$9.40 an hour. If she gets a 10% raise, what is her new wage? _____

6. Sharon Ricky earns \$13.00 an hour and works a 35 hour week.
 - a) What is Sharon's weekly gross pay?

 - b) If she saves 10 percent of gross pay, how much will she save in one year?

7. Bruce Marion works at a grocery store. He worked a 40 hour week at \$11.50 an hour and then worked an extra 8 hour shift at time and a half.
 - a) Find Bruce's gross earnings.

 - b) What would his annual gross earning be if he worked these hours all year?

8. Stanley Furber is a footwear manager in a department store. His regular hours are from 8:00 a.m. to 5:00 p.m. Monday through Friday. If he works any hours beyond this time, he is paid time and a half, with hours on Sunday paid at double time. His lunch hour is from 12:00 noon to 1:00 p.m., and he is not paid for that time. He is docked a quarter of an hour's pay for every quarter of an hour or part thereof that he arrives late or leaves early. Complete the time card for Stanley.

Time Card									
Employee Number: 109335							Signature: _____		
Name: Stanley Furber									
Week Ending: April 15									
Date	Morning		Afternoon		Overtime		Hours		Total
	IN	OUT	IN	OUT	IN	OUT	REG	OT	HOURS
M	8:00	12:06	12:56	4:42					
T	7:59	12:02	12:55	5:02	5:30	6:30			
W	7:58	11:05	12:59	4:35	6:00	9:30			
TH	8:00	11:46	12:55	5:05					
F	8:10	12:00	1:09	4:10					
S									
S									
Total									
HOURS			RATE			AMOUNT			
REGULAR			\$16.00						
OVERTIME									

Practice Exercise 5: Deposit Slip and Cheque **Name:** _____

Vocabulary:

Deposit - to put money into a chequing account or a savings account.

Withdrawal - amount of money taken out of an account.

Automated Teller Machine (ATM) - a self-service banking machine which lets you do banking transactions. Sometimes called an (ABM), or Automated Banking Machine.

Account Balance - amount available in an account.

Transaction - any activity in an account (money added to or taken from) that changes the balance.

Bank Card - a plastic card with a magnetic strip that allows you to access bank services or make a direct payment.

- Greg has \$45.75 in his account, \$25 in cash, and a cheque for \$92.50 to deposit. He must pay his insurance bill of \$95.50 to Fender Insurance Company. Complete his Deposit Slip and write a Cheque for his insurance for today's date:

<p>BANK ABC</p> <p>Deposit Slip</p> <p>Name: _____</p> <p>Account No. _____</p> <p>Date: _____</p>	<p>Dollars/Cents</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">Cash</td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> <tr> <td style="width: 50%; text-align: center;">Cheques</td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> <tr> <td style="width: 50%; text-align: center;">Total from other side</td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> <tr> <td style="width: 50%; text-align: center;">TOTAL</td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> </table>	Cash						Cheques						Total from other side						TOTAL		
Cash																						
Cheques																						
Total from other side																						
TOTAL																						

<p>Greg Johnson</p> <p>121 Prince Street</p> <p>Summerside</p> <p>PEI, C1N 3J4</p>	<p>102</p> <p>_____, 20__</p>
<p>PAY TO THE ORDER OF _____ \$ _____</p>	
<p>The Sum of _____/100 dollars</p>	
<p>BANK ABC Account # 7121469</p>	
<p>Memo _____</p>	<p>Signature _____</p>

2. Would it make a difference if Greg had written his cheque first, and then made the deposit? Why or why not?

3. How did Greg determine the total on his Deposit Slip?

4. If Greg writes cheques for \$36.20 and \$41.17 tomorrow, what will be his new balance?

5. He expects a cheque from his Grandmother for \$50.00 and his Uncle for \$25.00 on his birthday next week. What will his account balance be after he deposits the two cheques? Show your work.

Answer Key to Practice Exercise 5: Deposit Slip and Cheque

1.

BANK ABC	Dollars/Cents	
Deposit Slip		
Name: <u>Greg Johnson</u>	Cash	\$25
Account No. <u>7124169</u>	Cheques	\$92 50
Date: <u>Today's date</u>	Total from other side	
	TOTAL	\$117 50

Greg Johnson 121 Prince Street Summerside PEI, C1N 3J4	102 <u>Today's Date</u> , 20__
PAY TO THE ORDER OF <u>Fender Insurance Company</u> \$ <u>\$95.50</u>	
The Sum of <u>Ninety five -----50</u> /100 dollars	
BANK ABC Account # 7121469	
Memo <u>Insurance bill</u>	Signature <u>Greg's signature</u>

2. Yes, because there wasn't enough money in his account to cover the cheque until after he deposited the \$92.50.
3. He added the \$25 cash to the \$92.50 cheque to get \$117.50.
4. His balance before he writes the two cheques is $\$45.75 + \$117.50 - \$95.50$ (insurance) = $\$67.75$. His new balance will be $\$67.75 - (\$36.20 + \$41.17) = -\9.62 .
Be careful, if Greg writes both cheques, his account will go into *overdraft* (not enough money in the account to support both cheques). This will cause the bank to charge Greg for writing a cheque with *NSF* (non-sufficient funds); he will be charged a fee for doing so. He should wait to write one of the cheques until he has enough money in his account to *cover* (more money in an account than the total amount of cheques written) his cheque.
5. Greg should have waited to write one of his cheques in number 4 until after he received his gifts. Assuming he did, his new balance would be $-\$9.62 + \$50.00 + \$25.00 = \65.38

Practice Exercise 6: Transaction Record and Bank Statement

Name: _____

An up-to-date transaction record book is an important part of keeping records of your bank account. All deposits, withdrawals, and transfers (money moved from one account to another) should be recorded so that you can avoid overdrawing your account.

- Complete a transaction for Brandon MacPhee. His opening balance on March 5 was \$419.95. He wrote cheques for the following amounts: March 7, cheque # 704, Sears, \$37.99; March 12, cheque # 705, Canadian Tire, \$119.99; March 13, cheque # 706, Staples, \$12.89; March 13, cheque # 707, More Gas Bar, \$25.00; March 17, cheque # 708, Sobeys, \$37.24. He also made the following deposits: March 8, \$25.00; March 12, \$110.45; March 25, \$56.85. On March 20, Brandon withdrew \$40.00 in cash. Complete a transaction record below and find his closing balance.

Transaction Record						
Cheque #	Date dd/mm/yy	Description	Payment/Debit	✓	Deposit/Credit	Balance \$419.95

A bank statement shows all the transactions for one month.

The *opening balance* is the amount in an account at the beginning date of a bank statement.

The *closing balance* is the amount in an account at the end date of a bank statement.

An *overdrawn account* is an account in which a cheque is written for more money than there is in the account when the cheque reaches the bank for payment.

To *reconcile an account* means to match the information in the bank statement with the transaction record.

2. From her statement, Penny can see which cheques have been cashed. She also can see that the \$114.75 deposit was made on November 5. The cheque numbers are listed in the order in which the bank receives them.

Penny Pincher 111 Market Street Your Town , NL, A1N 3B4		FIREMAN'S BANK		Statement Period 11-01 to 11-30 Opening Balance: \$456.80	
Statement of Account					
<u>DATE</u>	<u>CHEQUE #</u>	<u>WITHDRAWAL (-)</u>	<u>DEPOSIT (+)</u>	<u>FEE (-)</u>	<u>BALANCE</u>
11/03	428	\$ 10.00			\$ 446.80
11/05	431	112.80			334.00
11/05			\$114.75		448.75
11/10	430	94.00			354.75
11/27	429	105.90			248.85
11/30				\$5.50	<u>243.35</u>
				Closing Balance	\$ 243.35

- a) Which amount is greater, the opening balance or the closing balance? How much greater? _____

- b) How many cheques were deducted from Penny's account for this month? _____
- c) What is the total amount recorded this month for withdrawals? Show how you got your answer. _____

Answer Key for Practice Exercise 6: Transaction Record and Bank Statement

1.

Transaction Record						
Cheque #	Date	Description	Payment/Debit	✓	Deposit/Credit	Balance
						\$419.95
704	7/03/06	Sears	\$37.99			\$381.96
	08/03/06				\$25.00	\$406.96
705	12/03/06	Canadian Tire	\$119.99			\$286.97
	12/03/06				\$110.45	\$397.42
706	13/03/06	Staples	\$12.89			\$384.53
707	13/03/06	Gas	\$25.00			\$359.53
708	17/03/06	Sobey's	\$37.24			\$322.29
	20/03/06	Cash	\$40.00			\$282.29
	25/03/06				\$56.85	\$339.14

2 a) The opening balance is greater by $\$456.80 - \$243.35 = \$213.45$

b) Four

c) $\$10.00 + \$112.80 + \$94.00 + \$105.90 = \$322.70$

Chapter 2 Test
Personal Banking

Name: _____

1. Define the following:
 - (a) overdraw _____
 - (b) reconcile _____

2. List three ways to do a “self-serve transaction”.
 - (a) _____
 - (b) _____
 - (c) _____

3. You made a deposit of \$74.25 into your chequing account (#0011234567) on Oct. 31, 2005.
 - (a) Fill out a deposit slip for this transaction.

 - (b) You withdrew \$40.00 from the same account on Nov. 7, 2005. Fill out a withdrawal slip for this transaction.

 - (c) You wrote a cheque for \$18.76 payable to Hal’s Hardware on Dec. 1, 2005. Write a cheque for this payment.

4. Tom Morris had a balance of \$725.62 in his chequing account. He made five transactions as follows:
 - Cheque #57 for \$205.21 to D & B Supply on Jan. 10
 - Deposit of \$65.70 on Jan. 13
 - Deposit of \$106.31 on Jan. 20
 - Cheque #58 for \$27.50 to GI Joe’s on Jan. 21
 - Deposit of \$35.92 on Jan. 25

Update Tom’s transaction record.

5. Why is it a good idea to keep your ATM receipts?

6. Why is it foolish to discard ATM receipts? (different than #5)

7. List one advantage and one disadvantage of using an ATM.

Advantage _____

Disadvantage _____

8. A bank offers two types of accounts. One account has a service charge of \$5.00 per month with unlimited ATM transactions. The other account has no monthly service charge but does charge \$0.50 for each withdrawal on the ATM. As a student, which account do you choose? Why?

9. Ben transferred \$100.00 from his savings account to his chequing account using Internet banking. His savings account had \$320.57 and his chequing account had \$15.40 before he made the transfer. Show the transaction records for both accounts.

10. Why should you record confirmation numbers when you make a telephone banking transaction?
