*Keeping It Real Assessments* have been designed to be as close to real life as possible to show the relationships between math and everyday life. They allow you to apply your learning of course content in unique ways. You can ask your teacher for clarification or to verify your thought processes. Ultimately, however, the work should be your own.

This course has four Keeping It Real Assessments, from which you must choose two.

**Unit A – Budgeting for Fun** 

Unit B – Mathtracker

**Unit C – Burger Shack** 

Unit D - Dream Room

You will be assessed on each concept, rather than on each individual question. Work related to each concept will be graded on a scale from 0 to 4, according to the criteria listed below. In addition, a maximum of **2 marks** will be awarded for the use of **proper units** throughout the entire assessment.

Concept Criteria		
1	No score is awarded because there is insufficient evidence of student performance based on the requirements of the task.	
2	First step only was completed, or correct formula was written, but not used correctly, or a diagram was drawn, but no further work was appropriate, or an incorrect method/process was used.	
3	Half of a solution is present, with a correct initial method/process, or major algebraic mistakes were made, or the incorrect information was used, or information was transferred incorrectly, or one part was correct, but another part was incorrect.	
4	Most of the solution is correct, with the entire method/process being correct, but a calculation error, an algebraic error, or a calculator error was made.	
5	Correct answers obtained with correct methods/processes.	

**Unit A: Money Math** 

# Keeping It Real Assessment Unit A Budgeting for Fun

#### **Background**

You have just finished your technical training to become a drafter. You are now starting your career, and you need to make a few choices along the way.



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Complete the following tasks, as described below:

- 1. Choose a job
- 2. Calculate annual deductions
- 3. Calculate net monthly income
- 4. Prepare for a holiday
- 5. Take your holiday

## Task 1: Choose a job

You have been offered a job at a local company, and they have offered to pay you \$57 400/year plus benefits. You also know that another option would be to work for yourself, doing contract work. You estimate that you could do 12 drafting jobs a year, making about \$5 250/job.

- a. In one year, how much money would you make doing contract work?
- b. Fill in the table below, stating the positives and negatives of each job.

	Salary Job	Working for Yourself (Contract work)
Gross income per year	\$57 400	\$63 000
Positives about job		
Negatives about job		

c. Choose to accept one of the jobs listed above, and give two reasons why you made the decision you did.

**Unit A: Money Math** 

Task 2: Calculate annual deductions

Federal and Provincial Income Tax Table						
Bracket Tax Rate		Income Level				
1	25%	the first \$43 561 of income				
2	32%	income over \$43 561 but under \$87 123				
3	36%	income over \$87 123 but under \$135 054				
4	39%	income over \$135 054				

EI: The rate is 1.88% and the maximum contribution is \$913.68.

CPP: The rate is 4.95% and the maximum contribution is \$2 425.50, where the first \$3 500.00 of income is exempt.

Take the job you chose in Task A, and calculate the following mandatory deductions that will come off your cheque.

a. Calculate the mandatory Employment Insurance (EI) deduction that will come off your cheque.

Hint: Maximum EI contributions are \$913.68/year.

b. Calculate the mandatory Canadian Pension Plan (CPP) deduction that will come off your cheque.

**Hint**: The first \$3 500.00 is exempt from CPP, and there is a maximum contribution of \$2 425.50/yr.

c. Calculate the mandatory Income Tax that will come off your cheque.

## Task 3: Calculate monthly net income

You will be paid once a month at your new job. What will be your income on each paycheque?

a. Fill in the blanks below.

b. Calculate your annual net income.

**Hint**: net income = gross income -EI - CPP - Income Tax

c. Calculate your monthly net income.

**Note:** If you chose the contract job, this would be an approximate income that you could expect per month.

#### Task 4: Prepare for a holiday

After saving for a year, you decide to go on a one week holiday to Mexico with a friend.



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1. a. To plan for the trip, you do a little research into pre-packaged vacations.

At a travel agency, a current promotion offers buy one vacation and get one half off. The regular cost is \$2 200/person for a trip to Mexico.

There is also an online company that is giving a last minute deal of 25% off any vacation package purchased. The regular price for a trip to Mexico is \$2 150/person.

Which is the better deal, before GST is applied?

Travel Agency: Buy one get one half off

Online Company: 25% off the regular price

- b. What are some other considerations that you should make when choosing what company to go with for your holiday?
- 2. You have done some research on one day excursions offered in Mexico, and you have found the following adventures. However, all of the prices you found are in Pesos. Estimate how much money, in Canadian dollars, each excursion would cost.

**Hint**: To convert Pesos to Canadian dollars, using estimation, divide the price in Pesos by 10, and then take off another 10%.



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a. Parasailing in Mexico costs 655 Pesos. **Estimate** the cost in Canadian dollars.

b. Swimming with the dolphins in Mexico costs 1824 Pesos. **Estimate** the cost in Canadian dollars.

3. a. Before leaving on your holiday, you head to the bank to convert \$500 CAD into pesos. If the current exchange rate is \$1.00 CAN = \$11.47 Pesos, how many Pesos will the bank give you?

b. At the airport, you realize you forgot your sunglasses. You find a pair of sunglasses with a sticker price of \$32.00. When you get to the till, the cashier says that all sunglasses are 15% off. What is the total cost of the sunglasses, including GST?

Hint: Remember that GST is 5%.

#### Task 5: Take your holiday

a. While in Mexico, you decide to go to the local market to buy a few souvenirs for your friends back home. After bartering with the local vendor, you both agree on prices for the following items. Fill in the table below.



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**Hint**: Unit price = Price ÷ Number of items

**Hint**: To convert Pesos to Canadian dollars, using estimation, divide the price in Pesos by 10, and then take off another 10%.

	Sombreros	Mini Guitars	Bracelets
Price of Items, in Pesos	\$204 Pesos	\$460 Pesos	\$519 Pesos
Number of Items	4	5	3
Unit Price, in Pesos	\$51 Pesos/sombrero	\$92 Pesos/guitar	\$173 Pesos/bracelet
Estimated unit Price, in Canadian Dollars			

b. You return safely back to Canada, and you bring your unused Pesos to the bank to exchange them back into Canadian dollars. You have 1264 Pesos left from your trip. How much money, in Canadian dollars, will the bank give you?

**Hint**: \$1.00 CAN = \$11.45 Pesos when you return from your trip

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## **Keeping It Real A**

Concept	0-4 rating	comments
Calculating Income	l	Comments
Choosing between pay types		
Calculating CPP		
Calculating EI		
Calculating Income Tax		
<b>Calculating Net Income</b>		
<b>Calculating Percent Increase/Decrease</b>		
Deciding which is the better deal		
<b>Calculating Unit Price</b>		
<b>Calculating Currency Exchange</b>		
<b>Estimating Currency Exchange</b>		
<b>Use of Proper Units</b>	/2	
Total Marks	/46	

**Unit A: Money Math**