

MODULE 1

Reading and Writing Real Life Numbers

Harry Potter and the Deathly Hallows Part 1 made \$960,283,305 at the box office worldwide. The Twilight Saga Eclipse made \$698,491,347 at the box office worldwide. Which movie made more money at the box office?

Canada

EMPLOYMENT
ONTARIO

Ontario



Module 1: Reading and Writing Real Life Numbers

In this module, you will be learning several skills for success. Skills for success are skills needed in everyday life to be successful at work, when learning and for life.

(Retrieved from: <https://www.canada.ca/en/services/jobs/training/initiatives/skills-success.html>)

In this module you will practice the following skills for success:

a) **Numeracy:** Numeracy skills are critical to your success in today's society. Numeracy skills are necessary at work, in everyday life and in learning environments. You require these skills to understand numbers, perform calculations, manage budgets, interpret data and make estimations.

b) **Problem Solving:** Problem solving skills help you to make decisions, solve problems and make changes. Improving your problem solving skills will help you make better decisions by teaching you to identify a problem, gather the correct information and solve the problem.

c) **Reading:** Reading is important at work and in daily life activities to keep you informed, safe and successful. Reading is also important in order to learn new skills. This module will help you practice locating information through words, symbols and pictures.

d) **Writing:** The ability to communicate with other people to share information using words, symbols or images is important for success at work, in a learning environment and everyday life. Improving your writing skills will ensure you are communicating clearly and effectively in various situations.

PART 1

Using Numbers in RealLife

We use numbers all the time. Think about today. Did you:

- Buy a cup of coffee?
- Look up the temperature for today?
- Cook something in the microwave?

All of these tasks require **number sense**, which is knowing what a number is, and how to use it.

Part 1: Using Numbers in RealLife

Practice Your Skills

Exercise 1A

Everyday Numbers

Think about the numbers you use every day. Fill out the survey. Write your answer in the answer box.

Decide how the numbers are used in the survey. In the box before the question, write the letter to show how the number is being used. The first one is done for you.

- A. Number that identifies a place or person
- B. Number that tells when
- C. Number that tells how many
- D. Numbers that tell how much
- E. Just a number

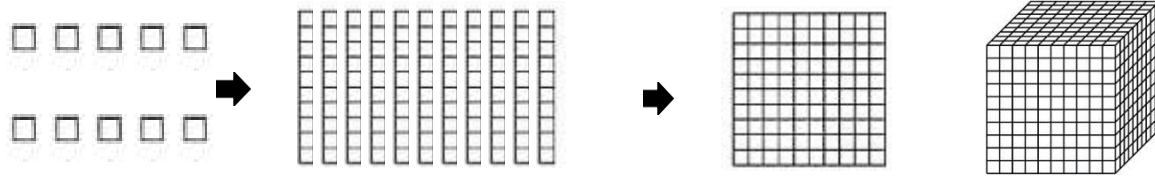
Letter	Question	Answer
B	1. What year is it?	WHEN
	2. What is your phone number?	
	3. What is your postal code?	
	4. What year were you born?	
	5. How many kilometres is it from your house to where you are right now?	
	6. How many litres of gas does your gas tank hold?	
	7. What time does your favourite television show come on?	
	8. What is the speed limit in front of your house?	
	9. What is the population of the city you live in?	
	10. What time do you usually go to bed at night?	
	11. How many hours do you usually sleep at night?	
	12. How much does a pack of gum cost?	
	13. What is your favourite number?	

PART 2

Understanding Place Value When Reading and Writing Numbers

We use the digits 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9 to write numbers. The value of each digit or numeral depends on its position or place.

You can use place value models to show numbers.

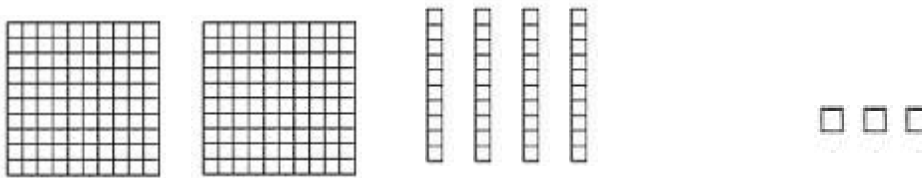


10 ones = 1 ten

10 tens = 1 hundred

10 hundreds = 1 thousand

Example: Look at the place value models. What number is shown?



2 hundreds

4 tens

3 ones

The standard form is 243

You read 243 as two hundred forty-three.

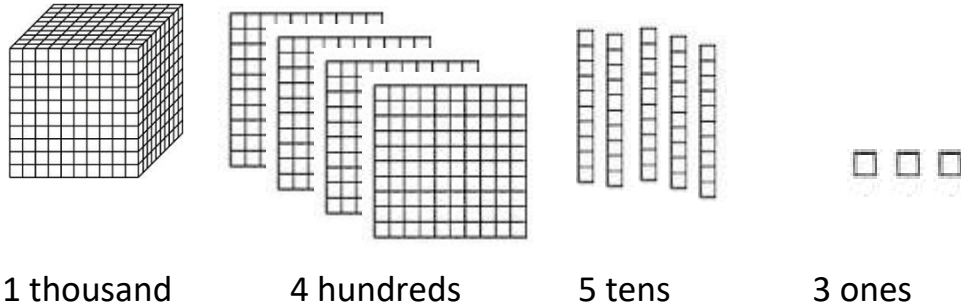
The value of the digit 2 is 200. The value of the 4 is 40. The value of the 3 is 3.

The expanded form is:

$$200 + 40 + 3 = 243$$

Commas are used in numbers with 4 or more digits to make them easier to read. To place commas in large numbers, start from the right side and move 3 spaces to the left.

Example: Look at the place value models. What number is shown?



Standard form: 1,453

It is read: one thousand, four hundred fifty three

The word AND is not used when you read numbers.

The value of the digit 1 is 1000. The value of the 4 is 400. The value of the 5 is 50. The value of the 3 is 3.

The expanded form is:

$$1,000 + 400 + 50 + 3 = 1,453$$

Example: Write the word names for the following numbers.

a. 7 b. 20 c. 65 d. 1,024

a. seven b. twenty c. sixty-five d. one thousand, twenty four

In the number 1,024, a zero is used as a placeholder in the standard form of the number to show no hundreds. However, the zero is implied, but never written, in the word name.

Part 2: Understanding Place Value When Reading and Writing Numbers

Practice Your Skills

Exercise 2A

Write the standard form for each number.

1. thirtyseven _____
2. fiftytwo _____
3. seventy _____
4. two hundred eleven _____
5. six hundred ninetythree _____
6. three hundred two _____
7. eight hundred twentyfour _____
8. one thousand, two hundred thirtynine _____
9. four thousand, nine hundred eight _____
10. seven thousand, fiftyfive _____
11. $400 + 30$ _____
12. $500 + 30 + 1$ _____
13. $300 + 40 + 1$ _____
14. $1,000 + 200 + 30 + 4$ _____
15. $4,000 + 400 + 20 + 2$ _____

Exercise 2B

Write the expanded form for each number.

16. 38 _____

17. 25 _____

18. 54 _____

19. 629 _____

20. 582 _____

21. 1,562 _____

22. 3,894 _____

Exercise 2C

Write the word name for each number.

23. 94 _____

24. 12 _____

25. 101 _____

26. 399 _____

27. 4,893 _____

28. 1,105 _____

29. 5,011 _____

PART 3

Understanding Place Value to Billions

The movie **Jurassic World** made one billion, six hundred seventy-two million US dollars at the box office. How would you write this amount in standard form?

You can use a place value chart to help you read and write large numbers.

	millions			thousands			Ones		
billions	Hundred millions	Ten millions	millions	Hundred thousands	Ten thousands	thousands	hundreds	tens	ones
1	6	7	2	0	0	0	0	0	0

Standard form: \$ 1,672,000,000

It is read one billion, six hundred seventy two million dollars.

The short word name is 1 billion 672 million

Example: The movie, **Need for Speed**, made \$30,680,250 at the box office. What is the place and value of the 8 in the amount?

The 8 is in the ten thousands place.

The value of the 8 is \$80,000

It is read thirty million, six hundred eighty thousand, two hundred fifty.

The short word name is 30 million, 680 thousand, 250.

Part 3: Understanding Place Value to Billions
Practice Your Skills

Exercise 3A

1. In the number 56,491, which digit is in the:

ones place? _____

tens place? _____

hundreds place? _____

thousands place? _____

ten thousands place? _____

2. In the number 3,549,366, which digit is in the:

ones place? _____

tens place? _____

hundreds place? _____

thousands place? _____

ten thousands place? _____

hundred thousands place? _____

millions place? _____

Exercise 3B

Write the standard form for these short word names.

3. 306 thousand _____

4. 45 thousand _____

5. 741 thousand, 87 _____

6. 928 million, 406 thousand, 104 _____

7. 418 million, 100 thousand, 895 _____

8. 803 million, 986 thousand _____

9. 288 million, 206 _____

Exercise 3C

In which place is the digit 7 in each number (e.g. tens, hundreds)?

10. 4,675 _____

11. 5,731 _____

12. 7,618 _____

13. 8,007 _____

14. 9,074 _____

15. 3,714 _____

Tell the value of each underlined digit (e.g. 10, 100).

16. 32 _____

17. 53 _____

18. 389 _____

19. 721 _____

20. 3,152 _____

21. 92, 145 _____

22. 87, 145 _____ 23. 130,763 _____ 24. 489,364 _____

25. 507,309 _____ 26. 2,307,415 _____ 27. 5,211,312 _____

28. 345,073,140 _____ 29. 739,164,000 _____

RealLife Math

Sometimes we have to read to locate numerical information. Strong reading skills will ensure you are successful at work, school, or in the community.

Read the email below and answer the questions that follow.

To: All Staff
Subject: Inventory Updates

Body: Please be advised that all employees must attend a mandatory inventory shift on Saturday, January 14, 2023 from 8:00am until 5:00pm. You will be paid \$16.00 per hour and will receive a 30 minute lunch break and two 15 minute breaks to be taken at your discretion.

There are eighty-eight aisles of product in the warehouse. Each aisle has twenty-four sections. I expect each employee to complete two sections per hour. There are over three million, five hundred thousand items in this warehouse. We have a lot to count and I appreciate you all coming in on the weekend to help get the job done.

If you have any questions or concerns, please contact the management team at 226-983-8475.

Regards,

Warehouse Manager

Use standard form to answer the following questions:

- I. How many aisles of product are in the warehouse? _____
- II. If you have any questions, what number do you call? _____
- III. How long is the inventory shift on January 14, 2023? _____
- IV. How many items are there to count in the warehouse? _____
- V. How much money will the staff make per hour? _____

PART 4

Comparing and Ordering Numbers

Members of Netflix in Ontario watched 4,317 movies online last week and 4,639 movies online this week. Which number is greater?

Example: Compare 4,317 and 4,639.

Step 1: Begin with the greatest place.
Compare the thousands.

Ask: Are the thousands the same?

thousands	hundreds	tens	ones
4	3	1	7
4	6	3	9

Step 2: Now compare the hundreds.

Ask: Are the hundreds the same?

thousands	hundreds	tens	ones
4	3	1	7
4	6	3	9

Think: 3 hundreds are less than 6 hundreds so 4,317 is less than 4,639.

When comparing numbers, you can use the symbols $<$, $>$, or $=$.

$<$ means “less than”

$>$ means “greater than”

$=$ means “equal to”

$$4,317 < 4,639$$

$$4,639 > 4,317$$

4,317 is less than 4,639

4,639 is greater than 4,317

Example: Order these numbers from greatest to least:

357

386

289

Compare. Which is the greatest number? 386

386

357

289

Part 4: Comparing and Ordering Numbers

Practice Your Skills

Exercise 4A

Compare. Write $<$, $>$, or $=$.

1. 38 ____ 43

2. 62 ____ 32

3. 220 ____ 217

4. 893 ____ 910

5. 681 ____ 861

6. 507 ____ 570

7. 3,462 ____ 3,649

8. 3,001 ____ 3,001

9. 7,073 ____ 7,037

10. 6,385 ____ 4,427

11. 9,107 ____ 6,253

12. 53,460 ____ 53,604

13. 893,623 ____ 4,367,824

14. 412,826 ____ 412,826

15. 225,809 ____ 232,908

16. 328,987 ____ 238,876

17. 4,387,983 ____ 4,367,824

18. 33,897,483 ____ 39,898,402

19. 899,467,983 ____ 489,999,879

20. 422,801,908 ____ 422,108,907

Exercise 4B

Write the numbers in order from greatest to least.

21. 899 427 876 _____

22. 8,009 8,024 8,402 _____

23. 4,873 4,820 8,204 _____

24. 56.893 54,839 56,712 _____

25. 893,407 938,704 892,609 _____

RealLife Math

26. The online bookstore receives 59 new orders on Tuesday and 68 new orders on Wednesday. On which day did it receive more orders?

27. John and Edna are running for president of the provincial adult learner council. John receives 1,547 votes and Edna receives 1,774 votes. Who loses?

PART 5

Rounding Numbers

When you are rounding a number to the nearest 10, you are trying to find out which multiple of 10 the number is closest to. The rule is that if a number is exactly halfway between two multiples of 10, you always round up.

Look at the ones digit:

- If it is less than 5 then round the number down by changing the ones digit to zero.
- If it is 5 or more then round the number up by adding one to the tens digit and changing the ones digit to zero.
 - 38 rounds up to 40 because the ones digit is 8.
 - 64 rounds down to 60 because the ones digit is 4.
 - 135 rounds up to 140 because the ones digit is a 5.

Example:

There are exactly 58 songs on your Spotify playlist. If you do not need to know the exact number of songs, you can round 58 to the nearest ten.

You can use a number line to help you.



58 is between 50 and 60.

58 is closer to 60.

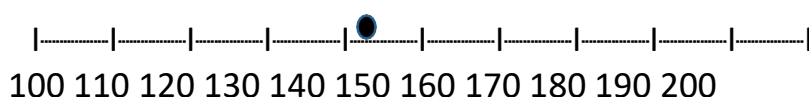
There are about 60 songs on your playlist.

When you are rounding a number to the nearest 100, you are trying to find out which multiple of 100 your number is closest to.

Look at the tens digit:

- If it is less than 5 round the number down by changing the tens digit and ones digit to zero.
- If it is 5 or more then round the number up by adding one to the hundreds digit and changing the tens digit to zero.

Example: Round 142 to the nearest hundred.



142 is between 100 and 200.

140 is closer to 100.

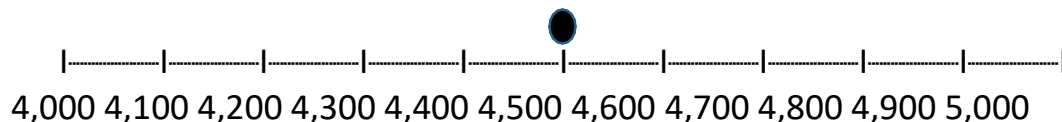
142 rounded to the nearest hundred is 100.

When you are rounding to the nearest 1000, you are trying to find out which multiple of 1000 your number is closest to.

Look at the hundreds digit:

- If it is less than 5 then round the number down by changing the hundreds, tens and ones digits to zero;
- If it is 5 or more then round the number up by adding one to the thousands digit and changing the hundreds, tens and ones digits to zero.

Example: Round 4,500 to the nearest thousand.



4,500 is halfway between 4,000 and 5,000.

Rule: When a number is halfway between two numbers, round up.

4,500 rounded to the nearest thousand is 5,000

Part 5: Rounding Numbers
Practice Your Skills

Exercise 5A

Round to the nearest ten.

- | | | | |
|-------------|--------------|--------------|--------------|
| 1. 32 _____ | 2. 48 _____ | 3. 61 _____ | 4. 89 _____ |
| 5. 25 _____ | 6. 19 _____ | 7. 8 _____ | 8. 43 _____ |
| 9. 59 _____ | 10. 38 _____ | 11. 12 _____ | 12. 73 _____ |

Exercise 5B

Round to the nearest hundred.

- | | | | |
|---------------|---------------|---------------|---------------|
| 13. 374 _____ | 14. 289 _____ | 15. 602 _____ | 16. 592 _____ |
| 17. 479 _____ | 18. 153 _____ | 19. 408 _____ | 20. 664 _____ |
| 21. 122 _____ | 22. 313 _____ | 23. 861 _____ | 24. 905 _____ |

Exercise 5C

Round to the nearest thousand.

- | | | | |
|-----------------|-----------------|-----------------|-----------------|
| 25. 2,893 _____ | 26. 1,075 _____ | 27. 3,809 _____ | 28. 6,489 _____ |
| 29. 4,072 _____ | 30. 8,940 _____ | 31. 5,562 _____ | 32. 7,190 _____ |
| 33. 6,145 _____ | 34. 2,307 _____ | 35. 1,887 _____ | 36. 8,094 _____ |

RealLife Math

Name three situations when we might estimate by rounding in real life. For example, how much will my hydro bill be each month?

37. _____

38. _____

39. _____

PART 6

Problem Solving

Problem solving is a skill that will ensure you will be successful every day using information to make decisions, solve problems and take action.

On Sunday, 48,274 people attended the soccer game. There were 49,072 seats. Were there enough seats for all the people?

Follow the four-step plan to help you solve problems.

THE FOUR STEP PLAN

1. Identify the problem – gather the information
2. Make a plan to solve the problem.
3. Solve.
4. Check your answer to see if it is reasonable.

Here's how you would use the four-step plan to solve the problem above.

1. What information is given? What do you need to find?	48,274 people attended the game; 49,072 seats Were there enough seats?
2. How can you solve the problem?	Compare the number of people to the number of seats.
3. Solve.	$48,274 < 49,072$
4. Check. Does your answer make sense?	Since $48,274 < 49,072$ there were enough seats.

Part 6: Problem Solving
Practice Your Skills

RealLife Math
Exercise 6 A

Read the problem. Tell what information is given and what you need to find.

1. Anya rode her exercise bicycle 76 kilometres last week. She rode 62 kilometres this week. Did she ride more kilometres last week or this week?

What is given? _____

What do you need to find out?

How can you solve the problem?

2. The movie Grease made \$96,300,000 at the box office. The Godfather made \$86,275,000. Which movie made more money?

What is given? _____

What do you need to find out?

How can you solve the problem?

3. You are hosting a party and 383 guests have shown up. There are 325 chairs. Do you need more chairs?

What is given? _____

What do you need to find out?

How can you solve the problem?

PART 7

Money

Money amounts can be written in two ways. You can use a cent sign or a dollar sign and a decimal point.

				
nickel	dime	quarter	dollar or “loonie”	two dollars or “toonie”
5¢ or \$0.05	10¢ or \$0.10	25¢ or \$0.25	100¢ or \$1.00	200¢ or \$2.00

Example: Jane buys a box of candy at the dollar store. She gives the clerk 1 toonie, 2 loonies, 3 quarters, 1 dime, and 1 nickel. What is the price of the candy?

Start with the money amount that has the greatest value.

$$\$2.00 + \$1.00 + \$1.00 + \$0.25 + \$0.25 + \$0.25 + \$0.10 + \$0.05$$

Then count on.

$$\$2.00 \rightarrow \$3.00 \rightarrow \$4.00 \rightarrow \$4.25 \rightarrow \$4.50 \rightarrow \$4.75 \rightarrow \$4.85 \rightarrow \$4.90$$

The price of the box of candy is four dollars, ninety cents or \$4.90.

Part 7: Money

Exercise 7A

Write the value using a dollar sign and a decimal point.

1. 1 dime, 1 nickel _____

2. 1 quarter, 1 nickel _____

3. 65¢ _____

4. 180¢ _____

5. 1 loonie, 2 dimes _____

6. 1 dollar, 1 nickel _____

7. 5 dollars, 2 quarters _____

8. 900¢ _____

9. 2 loonies, one toonie _____

10. 2 quarters _____

11. 6 nickels _____

12. 10 dollars, 5 toonies _____

14. 2 quarters, one dime _____

15. 3 dollars, 2 quarters, 1 nickel _____

16. 10 dollars 1 nickel _____

17. 5 dollars, 6 dimes 4 nickels _____

18. 5 loonies, 1 toonies, 2 quarters _____

19. 9 dollars, 5 dimes _____

20. 2 dollars, 8 dimes, 1 nickel _____

Exercise 7B

RealLife Math

21. Sandra and Mark spend 675¢ for a drink at the movies. Write this value using a dollar sign and a decimal point. _____

22. Jim buys a loaf of bread and a carton of eggs. He gives the clerk 3 toonies, 3 quarters, and 2 dimes. What is the price of his grocery bill? _____

RealLife Math

Interpret a table to compare populations of Canadian cities.

Population of Canadian Cities – 2021	
Toronto, Ontario	2,794, 356
Calgary, Alberta	1,306,780
Vancouver, British Columbia	662,248
Montreal, Quebec	4,247,000
Halifax, Nova Scotia	460,232

Use the table to answer the questions.

1. Which city has the largest population? _____

2. Which cities have fewer than one million people?

3. Which cities have more than two million people?

4. Which city has fewer than one half million people?

5. Write the name of each city. Then round each population to the nearest hundred and the nearest thousand.

City	Population	Nearest Hundred	Nearest Thousand

Module 1: Reading and Writing RealLife Numbers Review

Write the numbers in standard form.

1. thirteen _____

2. sixty five _____

3. ninety _____

4. one thousand six hundred fifty two _____

Write the word name.

5. 84 _____

6. 104 _____

7. 6,893 _____

8. 14,029 _____

What is the value of each underlined digit.

9. 893 _____

10. 5,894 _____

11. 83,107 _____

12. 607,894 _____

13. 9,847,389 _____

14. 6,812,419 _____

Compare. Write <, >, or =.

15. 6,489 _____ 6,849

16. 389,463 _____ 468,912

17. 8,507,382 _____ 8,705,238

18. 142,104,324 _____ 142,104,324

Round to the greatest place.

19. 123 _____

20. 607 _____

21. 887 _____

22. 8,425 _____

23. 3,809 _____

24. 6,507 _____

Write the value using a dollar sign and a decimal point.

25. 605¢ _____

26. two toonies and 3 dimes _____

27. thirteen dollars, 2 quarters and 3 nickles _____

28. 45¢ _____

29. 4 loonies, 3 toonies, 6 dimes, 1 nickle _____

30. Use the grocery list and flyer below to estimate how much money you will need to buy everything on your grocery list.

1.97^{LB}
4.34/KG
SAVE UP TO 1.40/LB
CHICKEN DRUMSTICKS or **THIGHS, REGULAR** or **SUFRA® HALAL**
fresh
pâtes ou hauts de cuisse
2510710001

.97^{LB}
2.14/KG
RED SEEDLESS GRAPES
product of U.S.A. or Peru, no. 1 grade
raisins rouges sans pépins
2510710001

1.97^{LB}
4.34/KG
PORK LOIN THIRDS
rolled in cornmeal
longe de porc
2510710001

3.97
ARMSTRONG or **PC®**
SHREDDED CHEESE 320 g or **ARMSTRONG**
CHEESE BARS 400 g
selected varieties
fromage
2510710001

3.77
SAVE 1.30
KRAFT PEANUT BUTTER 750 g/1 kg or
HAZELNUT SPREAD 725 g or
SIMPLY ORANGE JUICE 2.63 L
LEMONADE - GOLD PEAK
ICED TEA BEVERAGE 2.63 L
selected varieties
beurre d'arachide ou torréfié
de noisettes ou jus d'orange
ou limonade ou boisson de thé glacé
2510710001

3.97
HERSHEY'S POT OF GOLD
selected varieties
250 g
chocolat
2510710001

7.97
SAVE 5.00
SUNLIGHT LIQUID 4.43 L or
POWDER 4.42 kg
PERSIL LIQUID 2.21 L or
DISCS 40% LAUNDRY
DETERGENT, SNUGGLE
FABRIC SOFTENER
2.95-3.41 L or **SHEETS** 200's
selected varieties
détergent ou assouplissant
2510710001

1.25
SAVE .52
REAL CANADIAN
NATURAL SPRING WATER
24x500 mL
eau de source
2510710001

HAULER OFFERS

1.77
CASABURY FAMILY BARS
selected varieties, 55-110 g
barres de chocolat
2510710001

1.87
1. optimum
Members Pricing
2510710001

2/\$3
ORGANIC
6 OZ CLAMSHELL
ORGANIC BLUEBERRIES
product of Peru, Argentina
or Chile, no. 1 grade
2510710001

24 DAYS OF HOLIDAY YAYS!
2510710001

\$10
SAVE 2.40
BONELESS SKINLESS CHICKEN BREAST
pkg of 4
poitrine de poulet sans peau désossée
2510710001

.99^{LB/EA}
2.18/KG
PC® WHOLE WHITE MUSHROOMS
each, product of Ontario
BEEFSTEAK TOMATOES
2.18/kg, product of Ontario,
Canada no. 1 grade or
BROCCOLI CROWNS
each, product of U.S.A.
champignons ou tomates ou brocoli
2510710001

2.99
SAVE 1.00
RISTORANTE or **CASA DI MAMA PIZZA**
selected varieties, frozen
320-410 g
pizzo
2510710001

4.44
SAVE 1.45
NEILSON TRUTASTE
1%, 2%, SKIM or
CHOCOLATE 4 L or
LACTOSE FREE 1% MILK
selected varieties
lait ou lait au chocolat
2510710001

\$2
SAVE .80
OLD DUTCH POTATO CHIPS
selected varieties
180 g
croustilles
2510710001

.27
SAVE UP TO 1.72
HEREFORD CORNED BEEF or **MARIO'S COOKED HAM** 340 g
OCEAN'S WHITE TUNA 170 g
GOLD SEAL PINK SALMON 213 g or
SKINLESS BONELESS PINK SALMON 120 g
selected varieties
beef ou jambon cuit ou
thon blanc ou saumon rose
2510710001

2.89
SAVE 1.60
COCA-COLA or PEPSI
SOFT DRINKS
selected varieties, 6x710 mL
boissons gazeuses
2510710001

Grocery List

Milk

Juice

Fruit

Vegetables

Water

Chicken

Snacks

Cheese

Total: _____