

Name: _____

Date: _____

Math Week 12 May 10

Shopping for the Best Price!

Answer the following questions directly in the space provided **showing all relevant work** and in full sentences where appropriate.

Part A

1. You've just received some money as a birthday present to buy a new iPod. There are three stores where you priced out the model you wish to purchase, each of which is running a store sale.

Calculate each store's sale price (without taxes) on the iPod you are thinking about purchasing. [KNOWLEDGE 6 marks]

- a. ABC Electronics is running a **$\frac{1}{3}$ off sale** on all their electronics equipment. Their regular price for the model you are looking for is \$249.99.

- b. Bobs Audio Video is running a **50% off sale** on all of last year's models and their regular price is \$319.99 for the model you are looking for.

- c. Canadian Sound is offering **\$40.00 off sale** on all purchases over \$150.00 and their regular price is \$205.99 for the model you are looking for.

2. Which store has the best deal for the iPod you are inquiring about? How much cheaper is the least expensive store compared to the most expensive store? [THINKING 2 marks]

3. Calculate the **total cost** (with taxes) you would need to pay at each store to buy the iPod.
[**KNOWLEDGE 3 marks**]

ABC Electronics

Bobs Audio Video

Canadian Sound

4. Once visiting the most expensive store, you tell them about the prices you had seen at the other stores. They tell you that they cannot lower the price; however they will include a 3-year warranty on top of the 1 year manufacture's warranty. Would this change which store you would likely buy from? Explain why or why not. [**THINKING 3 marks**]

Part B

1. When you are visiting a department store in the mall you notice that they are having a scratch and save sale on all jewellery. You could save 10%, 25%, or even 40% depending on the game piece you scratch at the counter.

If you were interested in buying a watch worth \$109.99, how much could you save given the three potential discounts? [**APPLICATION 3 marks**]

10% scratch card

25% scratch card

40% scratch card

2. Which discount do you think a customer would most likely receive when purchasing the watch? Explain why? [**THINKING 2 marks**]

3. Calculate the different **total prices (with taxes)** you could pay when purchasing the watch in the department store. [APPLICATION 3 marks]

10% scratch card

25% scratch card

40% scratch card

4. While visiting another store in the mall you find the same watch for 1/5 off of \$105.99. Which store would you buy the watch from? Why? [APPLICATION 3 marks]

KNOWLEDGE: _____ /9

THINKING: _____ /7

APPLICATION: _____ /9

TOTAL: 25**COMMUNICATION**

Criteria	Level 1 50% - 59%	Level 2 60% - 69%	Level 3 70% - 79%	Level 4 80% - 100%
Communication of all requested information <ul style="list-style-type: none"> - all questions are complete - all work is shown - full sentences are provided, where applicable 	Limited clarity of information	Fair clarity of information	Good clarity of information	Thorough explanation of all responses

Name _____

Chapter 4 Test

Page 1

For the situations in questions 1 to 3, answer the following.

- a) What change does the cash register calculate?
- b) What bills and coins should the customer receive based on using the fewest coins possible?

1. a \$10 bill offered for a purchase of \$7.29

2. a \$5 bill, 2 quarters, and 3 pennies offered for a purchase of \$4.78

3. a \$10 bill, four \$2 coins, a quarter, and 2 pennies offered for a purchase of \$17.17

4. Eleanor purchased some candy. Her total bill was \$16.42. She had a \$20 bill, 3 quarters, 3 dimes, and 3 pennies. What should she offer the cashier to get back the fewest coins in change?

Name _____

Chapter 4 Test

Page 2

5. Estimate the total cost after taxes of a jacket with a selling price of \$119.

6. Complete the table. When estimating, round to numbers that are easy to multiply.

	Item	Regular Price	Discount Rate	Estimate of Sale Price	Actual Sale Price	Final Cost With H.
a)	CD	\$19.79	20%			
b)	DVD	\$47.89	$\frac{1}{3}$			
c)	CD rack	\$77.77	15%			

7. Calculate the total cost after taxes of a microwave oven that is on sale for 10% off \$239.

Buying DECISIONS: What Do I Know Already?

Name _____

TOTAL ____/14

	TRUE	FALSE
1/ Going " Bankrupt " only happens in <i>Monopoly</i> , not real life	_____	_____
2/ <u>All credit card companies</u> charge the same interest .	_____	_____
3/ A bad " Credit Rating " can prevent you from <u>getting an apartment</u>	_____	_____
4/ A bad " Credit Rating " prevents you from getting a <u>Driver's License</u> .	_____	_____
5/ Credit Cards are <u>always</u> a bad idea.	_____	_____
6/ " Lay-Away " is a sales promotion at " <u>Sleep Country</u> " bed & mattress store	_____	_____
7/ " Installment Plans " are a way to <u>save money at your bank</u> .	_____	_____
8/ The Canadian/US <u>currency exchange rate</u> only affects us when we travel to the US .	_____	_____
9/ eBay, Craigslist, Kijiji are always a <u>terrible places</u> to buy & sell items.	_____	_____
10/ Calculating " Unit Price " is a <u>great way to make a smart purchase</u>	_____	_____
11/ The largest size is <u>ALWAYS</u> is the best deal	_____	_____
12/ A " Critical Thinker " means somebody who ONLY finds what's <u>WRONG</u> with something.	_____	_____

The following are worth ONE mark each:

13/ Cory is buying a car. He has developed a **Criteria List**. Which ONE of the following items should be **LEAST** important in his selection?

Price _____ Condition _____ Kilometres _____ Radio _____ Insurance Cost _____

14/ Alicia is buying a dog. She has developed a **Criteria List**. Which of the following items should be **LEAST** important in her selection?

Hyper Allergenic (doesn't shed) _____ Friendly _____ Has a pretty collar _____

Has received all medical shots _____ Very Healthy _____ Wags its tail a lot _____

Important: Complete the following note by copying the overhead in class. If you were away for this class, refer to pages 82 and 83 in the textbook and complete it.

5.1 THE BEST BUY

Unit Price – _____

Most grocery store shelves have stickers that state the unit prices of the items. The prices are in dollars or cents. The unit varies, for example, _____, etc.

Example 1:

A package of 2 AA batteries sells for \$3.99. A package of 8 AA batteries sells for \$9.99. Which package has the lower unit price

✓

✓

Example 2:

Paper towels are sold in a 2-roll package for \$2.49 and a 12-roll package for \$12.99. Which package has the lower unit price?

✓

✓

Example 3:

Lays potato chips are sold in three sizes: 515 g for \$3.99, 270 g for \$2.49, 410 g for \$3.49. Which package has the lower unit price?

✓

✓

✓

5.1 THE BEST BUY

Unit Price – the cost of an item expressed per unit, such as per item, per 100 g or per L. Most grocery store shelves have stickers that state the unit prices of the items. The prices are in dollars or cents. The unit varies, for example, kilogram, litre, package, gram, millilitre, etc.

Example 1:

A package of 2 AA batteries sells for \$3.99. A package of 8 AA batteries sells for \$9.99. Which package has the lower unit price

✓ $\$3.99 / 2 = \$1.995 \dots \$2.00$ per battery

✓ $\$9.99 / 8 = \$1.248 \dots \$1.25$ per battery

Example 2:

Paper towels are sold in a 2-roll package for \$2.49 and a 12-roll package for \$12.99. Which package has the lower unit price?

✓ $\$2.49 / 2 = \$1.245 \dots \$1.25$ per roll

✓ $\$12.99 / 12 = \$1.0825 \dots \$1.08$ per roll

Example 3:

Lays potato chips are sold in three sizes: 515 g for \$3.99, 270 g for \$2.49, 410 g for \$3.49. Which package has the lower unit price?

✓ $(\$3.99 / 515) \times 100 = 0.77475 \dots$ the unit price is \$0.77 / 100 g for a 515 g bag

✓ $(\$2.49 / 270) \times 100 = 0.92222 \dots$ the unit price is \$0.92 / 100 g for a 270 g bag

✓ $(\$3.49 / 410) \times 100 = 0.85121 \dots$ the unit price is \$0.85 / 100 g for a 410 g bag

5.1 The Best Buy

Name: _____

Practise: Show your work for each question.

1. a) _____
b) _____
c) _____
d) _____
e) _____

2. a) 4 L for \$3.49

2 L for \$2.89

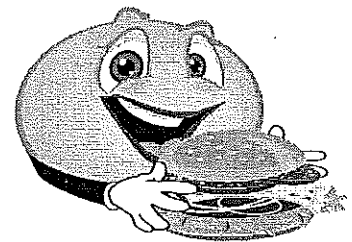
1 L for \$1.79



- b) _____
c) _____

3. a) \$10.22 for 1.950 kg

\$3.40 for 0.620 kg



- b) _____
c) _____

4. omit

5. _____

6. _____

5.1 The Best Buy

Practise

1. Calculate the unit price for the following in
 - a) dollars per kilogram: 2 kg of carrots for \$2.59
 - b) dollars per gram: 425 g box of cereal for \$3.49
 - c) dollars per 100 g: 425 g box of cereal for \$3.49
 - d) dollars per bag: 12 bags of popcorn for \$5.99
 - e) dollars per can: 24 cans of pop for \$6.49
2. Consider these three ways of selling milk:
4 L for \$3.49 2 L for \$2.89 1 L for \$1.79
 - a) Calculate the unit price per litre for each size.
 - b) Which has the lowest unit price?
 - c) What else should you consider before selecting the best size to buy?
3. Lalena examined the prices of two packages of lean ground beef:
\$10.22 for 1.950 kg \$3.40 for 0.620 kg
 - a) Calculate the unit price per kilogram for each package of lean ground beef.
 - b) Why are the unit prices for the same cut of beef not the same?
 - c) How might the number of people you plan to feed affect your purchase decision?
4. Consider these two ways of selling apple juice:
package of eight 200 mL boxes for \$2.59 1.36 L can for \$1.29
 - a) How many litres are in a package of eight 200 mL boxes?
 - b) What is the unit price per litre for each way?
 - c) Which is the lower unit price?
 - d) What other than unit price would affect your purchase decision?
5. A large amusement park has adult season passes for \$92.95. An adult day pass is \$44.99. How many times would you have to visit the amusement park to benefit from the savings offered by a season pass? Explain your answer by showing your work.
6. A zoo has annual memberships for \$70. Of that, \$45 is for admission and \$25 is for parking. A single admission price is \$15 and parking is \$6. How many times would you have to go to the zoo to realize the savings offered by a membership?



Skills Check

Percent of a Number

Determine the total cost, including 8% PST and 7% GST, of each item.

- | | |
|------------------------|--------------------------------|
| a) a shirt for \$25.75 | b) a pair of shoes for \$69.99 |
| c) a CD for \$20.95 | d) a jacket for \$87.49 |
| e) a car for \$27 500 | f) a radio for \$39.97 |

5.2 INCENTIVES TO BUY

(NOTE)

Discount Coupon: An ad of a sale price, distributed by the store or manufacturer, where the ad must be handed in to get the sale price.

List 3 ways coupons distributed: _____

List 3 examples of products that will offer discount coupons: _____

Store Money: Money that is issued by a store for making purchases there.

Name 2 stores that use store money as an incentive: _____

Points Cards (Points Program): Points are accumulated with each purchase and later redeemed for merchandise or discounts off of future purchases.

Name 2 stores that use points cards as an incentive: _____

Rebates: A deduction from an amount to be paid or a return of part of an amount given in payment.

Other Incentive Plans:

1. Credit Cards with Points Programs

2. Buy One Get One Free (or ½ price)

3. Free Shipping

4. Memberships (Costco)

5.

Important: Complete the following note by copying the overhead in class. If you were away for this class, refer to page 85 in the textbook and complete it.

5.2 INCENTIVES TO BUY

Discount Coupon: an ad of a sale price, distributed by a store or mfg., where the ad must be handed in to get the sale price.

List 3 ways coupons distributed: _____

flyers in mail, door to door, magazines, on line

List 3 examples of products that will offer discount coupons: _____

Store Money: money that can be used towards future purchases @ its store.

Name 2 stores that use store money as an incentive: _____

Cdn Tire, Pioneer, Georgina Gardens

Points Cards (Points Program): an incentive plan where points are accumulated with each purchase & later redeemed for merchandise or discounts off of future purchases

Name 2 stores that use points cards as an incentive: _____

Shoppers, Scene Pts, Ricki's, American Eagle

Rebates: \$ back on a purchase if you mail in bar code of product + receipt.

Other Incentive Plans:

1. Stamp Card - Country Style.
2. Credit Card - turn in for rewards / travel
3. Air Miles.
- 4.
- 5.

Incentive to Buy Practice:

- 1) Some businesses distribute **discount coupons**, or ads of sale prices where the coupons must be handed in to get the sale prices. Manufacturers also distribute discount coupons for particular items that can be redeemed at a variety of stores.
 - List 3 ways that coupons are distributed to the public.

- 2) A large hardware chain offers **store money**, or money that can be used towards future purchases at its stores. For a minimum purchase of \$2.50 and payment in cash or by debit card, you get store money.
 - The amount is 2.5% of the total cost before taxes. Store money is always rounded to the nearest 5 cents.
 - (ex. 2.5% of \$35 = \$0.875 = \$0.90 in store money)

➤ Calculate the amount of store money you would receive if you paid cash for each of the items below.

 - a) a halogen headlight at \$15.97
 - b) a 12V cordless drill at \$199.00
 - c) a lacrosse stick at \$59.00

- 3) Some department stores issue **points cards**. If you present your points card when paying for items, you earn 50 base points for every before-taxes dollar spent.

➤ How many points would you earn on each item listed below?

 - a) a \$20 shirt
 - b) a \$150 bicycle
 - c) a \$400 stereo

- 4) At 50 base points for every before-taxes dollar spent, what value of merchandise would you need to purchase to earn 10 000 points?