



Task-based Activity Cover Sheet

Task Title: Calculate Unit Price

<b>Learner Name:</b>	
<b>Date Started:</b>	<b>Date Completed:</b>
<b>Successful Completion:</b> Yes___ No___	
<b>Goal Path:</b> Employment✓ Apprenticeship___ Secondary School___ Post Secondary ___ Independence ✓	
<b>Task Description:</b> The learner will calculate the cost of each item sold in a package.	
<b>Competency:</b> C: Understand and Use Numbers	<b>Task Group(s):</b> C1: Manage Money
<b>Level Indicators:</b> C1.2: Make low-level inferences to calculate costs and expenses that may include rates such as taxes and discounts	
<b>Performance Descriptors:</b> see chart on last page <a href="#">or click here</a>	
<b>Links to skill building activities:</b> see the last page <a href="#">or click here</a>	
<b>Materials Required:</b> <ul style="list-style-type: none"><li>• Pen/pencil</li><li>• Calculator (if needed)</li></ul>	
<b>ESKARGO:</b> Calculates using numbers expressed as whole numbers, fractions, decimals, percentages, and integers <ul style="list-style-type: none"><li>• Interprets, represents, and converts amounts using whole numbers, decimals, percentages, ratios, and simple, common fractions (e.g., <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>)</li></ul> <i>Decimals</i> <ul style="list-style-type: none"><li>• Rounds decimals</li><li>• Converts fractions to decimals and vice versa</li><li>• Adds, subtracts, multiplies and divides multi-digit whole numbers and decimals</li></ul> Chooses and performs required operation(s); may make inferences to identify required operation(s) <ul style="list-style-type: none"><li>• Selects appropriate steps to reach solutions</li><li>• Solves multi-step numerical and word problems involving fractions, decimals, percents and ratios</li></ul> Represents costs and rates using monetary symbols, decimals, and percentages Uses strategies to check accuracy (e.g., estimating, using a calculator, repeating a calculation, using the reverse operation)	



**Attitudes:**

Practitioner,

We encourage you to talk with the learner about attitudes required to complete this task set. The context of the task has to be considered when identifying attitudes. With your learner, please check one of the following:

- Attitude is not important       Attitude is somewhat important       Attitude is very important



**Task Title:** Calculate Unit Price

An easy way to tell whether something is a good deal is to calculate the “per unit” cost of the items in the package.

**Learner Information and Tasks:**

**Task 1:** A childcare provider needs to track how much money they are spending per child for food. There are 30 granola bars in a box for \$10.99 plus tax.

- a) Calculate the total cost with 13% tax.
- b) Calculate the cost per granola bar based on the total cost with tax.

**Task 2:** A childcare provider needs to track how much money they are spending per child for food. There are 24 cans of soup in a flat for \$12.99 plus tax.

- a) Calculate the total cost with 13% tax.
- b) Calculate the cost per can based on the total cost with tax.

**Task 3:** One package of socks has 5 pairs in a bag for \$5.99. Another has 12 pairs for \$10.49. Which package is the better deal and by how much per pair?

**Task 4:** A package of 8 pens is normally \$3.99. They are on sale for half price (no tax). What is the cost per pen?



**Task Title:** Calculate Unit Price

**Answer Key**

**Task 1:** A childcare provider needs to track how much money they are spending per child for food. There are 30 granola bars in a box for \$10.99 plus tax.

a) Calculate the total cost with 15% tax.

$$10.99 \times 1.13 = 12.4187$$

**Total cost is \$12.42.**

b) Calculate the cost per granola bar (rounded to the nearest penny).

$$12.42 \div 30 = 0.414$$

**Each granola bar costs \$0.41 (41 cents).**

**Task 2:** A childcare provider needs to track how much money they are spending per child for food. There 24 cans of soup in a flat for \$12.99 plus tax.

a) Calculate the total cost with 15% tax.

$$12.99 \times 1.15 = 14.6787$$

**Total cost is \$14.68.**

b) Calculate the cost per can (rounded to the nearest penny).

$$14.68 \div 24 = 0.6116666\dots$$

**Each can of soup costs \$0.61 (61 cents).**

**Task 3:** One package of socks has 5 pairs in a bag for \$5.99. Another has 12 pairs for \$10.49. Which package is the better deal?

**Package 1**

$$5.99 \div 5 = 1.198$$

\$1.20 per pair.

**Package 2**

$$10.49 \div 12 = 0.8741666\dots$$

\$0.87 per pair.

**Package 2 is the better deal by \$0.33 per pair.**

**Task 4:** A package of pens is normally \$3.99. They are on sale for half price (no tax). What is the cost per pen?

$$3.99 \div 2 = 1.995$$

$$1.995 \div 8 = 0.249375 \text{ (or } 2.00 \div 8 = 0.25)$$

**Each pen costs \$0.25 (25 cents).**



**Task Title:** Calculate Unit Price

Performance Descriptors		Needs Work	Completes task with support from practitioner	Completes task independently
C1.2	<ul style="list-style-type: none"> <li>calculates using numbers expressed as whole numbers, fractions, decimals, percentages and integers</li> </ul>			
	<ul style="list-style-type: none"> <li>calculates percentages</li> </ul>			
	<ul style="list-style-type: none"> <li>interprets and applies rates (e.g. \$/kg, \$/1)</li> </ul>			
	<ul style="list-style-type: none"> <li>chooses and performs required operation(s); may make inferences to identify required operation(s)</li> </ul>			
	<ul style="list-style-type: none"> <li>selects appropriate steps to reach solutions</li> </ul>			
	<ul style="list-style-type: none"> <li>represents costs and rates using monetary symbols, decimals and percentages</li> </ul>			
	<ul style="list-style-type: none"> <li>interprets, represents and converts amounts using whole numbers, decimals, percentages, ratios and simple, common fractions (e.g. <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>)</li> </ul>			
	<ul style="list-style-type: none"> <li>uses strategies to check accuracy (e.g. estimating, using a calculator, repeating a calculation, using the reverse operation)</li> </ul>			

**This task:** was successfully completed \_\_\_\_\_ needs to be tried again \_\_\_\_\_

<b>Learner Comments</b>

\_\_\_\_\_  
Instructor (print)

\_\_\_\_\_  
Learner Signature



## Skill Building Activities

### Links to online resources:

#### Solving Unit Rates Problems

<https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-ratios-prop-topic/cc-6th-rates/v/finding-unit-rates>

By clicking on this link, the learner is brought to a series of tutorials/exercises on finding a unit rate. There are 2 tutorials that walk through word problems and show the steps needed to calculate the unit rate. Each tutorial can be accessed by clicking on the “Solving unit rates problem” and “Solving unit price problem” tabs on the left-hand side. Once the learner has watched the tutorials, their skills can be put into practice by clicking on the “Rate problems 0.5” tab.

#### Unit Price

<http://www.mathsisfun.com/measure/unit-price.html>

This “Unit Price” webpage explains the process in finding the unit price/cost. The learner is also introduced to comparing unit prices to find out which item is the “best buy”. After reading through several example questions, the learner can access the “Unit Price Game” or the practice questions 1 – 10.

#### Math Help – How to Calculate Sales Tax and Total Cost

<https://www.youtube.com/watch?v=cQCxCzbxWnQ>

This short YouTube video introduces the learner to sales tax, rate of sales tax, and selling price. The video instructor runs through a couple of examples of how to calculate sales tax and finding the total cost.

#### Amount of Sales Tax

[http://www.aaamath.com/mny84\\_x7.htm](http://www.aaamath.com/mny84_x7.htm)

AAA Math provides the learner with a simple explanation of sales tax and how to calculate the amount of sales tax on an item. The learner has access to the “Practice: What is the sales tax?” section in which they can practice finding out the sales tax. E.g. “What is the sales tax on \$30.66 if the tax rate is 5%?”

#### Simply Math Workbook: Percents

[http://www.nwtliteracy.ca/resources/adultlit/everyday\\_math/simple\\_math\\_wrkbk.pdf](http://www.nwtliteracy.ca/resources/adultlit/everyday_math/simple_math_wrkbk.pdf)

This comprehensive math workbook by Northwest Territories Literacy Council includes working with whole numbers, basic math skills, fractions, decimals, percents, measurement, and other important math concepts. For the purpose of this task-based activity scroll to page 65, “Percents.” Of special interest: “Finding a Percent of a Number” on page 71.

### LearningHUB online courses available:

- **Math, Independent Study(assigned by practitioner after assessment):**
  - 100 Whole Numbers Assignment
  - 101 Addition, Subtraction Assignment 1 & 2
  - 201 Multiplication, Division Assignment



## Prepared for: Cementing Integration Project – QUILL Learning Network 2015

- 301 Fractions Assignment 1 & 2
- 302 Decimals Assignment
- 304 Percents and Mixed Operations Assignment 1 & 2.
  
- **Live Classes (SABA)** – Multiplication; Division; Fractions A; Fractions B; Fractions C; Decimals A; Decimals B; Math Stories; Fractions in Everyday Life Part 1 & 2; Percentages A; Percentages B.

**\*To access LearningHUB courses**, learners must register for the LearningHUB e-Channel program by completing the registration form on their website and completing the course selection (page 2 of the registration form): [https://www.learninghub.ca/get\\_registered.aspx](https://www.learninghub.ca/get_registered.aspx)

**\*To Access LearningHUB Course Catalogue:**

<http://www.learninghub.ca/Files/PDF-files/HUBcoursecatalogue,%20December%202023,%202014%20revision.pdf>