

Translated by Theresa Greene, BMC, Eastern Townships School Board



Les Petites Frimousses Daycare is a non profit daycare center. It needs to have its roof repaired, a patio door changed and new fencing around the backyard of the building. The costs are estimated at \$ 7500 payable in four monthly instalments of \$ 1875.

This daycare gets an annual subsidy of \$ 1500 and receives \$ 300 per year from sponsors. The annual revenue is \$ 125 000 per year.

The daycare pays \$ 1500 per month in rent, \$ 335 per month for electricity and heating. It also pays \$ 750 weekly to the 2 full time employees that it has. Insurance fees are \$ 2025 per year. Food expenses are \$ 250 per week. It must also put 15% of its revenue aside for emergency expenses.

According to its monthly budget, can this daycare center afford to carry out all of these renovations?

February 25, 2018

Les Petites Frimousses Daycare

Task 1 : For each expense, establish the monthly amount and express it in the form of an arithmetic expression.

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Task 2 : Complete the table below :

Budget	Monthly Amount
Revenus	
Total revenue	
Expenses	
Total expenses (before the calculation of the emergency expenses):	
Additional amount for the emergency expenses :	
Total expenses:	
Summary :	
Total revenues	
Total expenses	
Surplus or deficit	

Will the Les Petites Frimousses Daycare be able to afford to do the renovations ? _____

Task 3 :

You must complete the form on the next page to show the gross salary, deductions and net salary of an employee of the daycare.

Here is the information that you will need:

- ❖ **Françoise Bambin is a daycare technician;**

- ❖ **His salary was paid on July 15, 2010, and this for the period from July 5, 2010 to July 11, 2010.**

- ❖ **You must deduct the following amounts :**
 - **17% of his gross salary for federal income tax;**
 - **16,2 % of his gross salary for provincial income tax;**
 - **0,5 % of his gross salary for Quebec Parental Insurance Plan;**
 - **1,4%of his gross salary for Employment Insurance;**
 - **4,5%of his gross salary for Quebec Pension Plan;**
 - **4 \$ of his gross salary for health insurance;**
 - **The tax on health insurance is 8,75 % on the amount of health insurance.**

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Task 3 Calculations:

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IDENTIFICATION											
Employee's surname <input type="text"/>	Employee's given name <input type="text"/>										
Employee's position <input type="text"/>	Employer's name <input type="text"/>										
Date of payment <input type="text"/>											
Work period corresponding to the payment from <input type="text"/> to <input type="text"/>											
WAGES											
Hours remunerated at the regular rate	<input type="text"/> × <input type="text"/> = <input type="text"/> \$ <small>hourly rate number of hours</small>										
Gross wage (wages + indemnities)	= <input type="text"/> \$										
DEDUCTIONS											
Federal income tax	<input type="text"/> \$										
Provincial income tax	<input type="text"/> \$										
Québec Pension Plan (RRQ)	<input type="text"/> \$										
Employment Insurance	<input type="text"/> \$										
Québec Parental Insurance Plan (RQAP)	<input type="text"/> \$										
Registered Retirement Savings Plan (RRSP)	<input type="text"/> \$										
<table border="1"> <thead> <tr> <th colspan="2">Group insurance plan</th> </tr> </thead> <tbody> <tr> <td>- health insurance</td> <td><input type="text"/> \$</td> </tr> <tr> <td>- short-term and long-term disability insurance</td> <td><input type="text"/> \$</td> </tr> <tr> <td>- life insurance</td> <td><input type="text"/> \$</td> </tr> <tr> <td>- tax on insurance</td> <td><input type="text"/> \$</td> </tr> </tbody> </table>		Group insurance plan		- health insurance	<input type="text"/> \$	- short-term and long-term disability insurance	<input type="text"/> \$	- life insurance	<input type="text"/> \$	- tax on insurance	<input type="text"/> \$
Group insurance plan											
- health insurance	<input type="text"/> \$										
- short-term and long-term disability insurance	<input type="text"/> \$										
- life insurance	<input type="text"/> \$										
- tax on insurance	<input type="text"/> \$										
Charitable donations	<input type="text"/> \$										
Other deductions (specify _____)	<input type="text"/> \$										
Total deductions	= <input type="text"/> \$										
Net wages (gross wages - deductions)	= <input type="text"/> \$										

Task 4 :

The budget calculation shows that the daycare center can afford the estimated cost of the renovations (\$ 7500). Now a supplier must be selected for the purchase of the patio door, the fencing and the roof repair.

To make the most economical choice, you must look at the information from different suppliers and calculate the cost for each, showing all the steps involved.

The fencing :

***Machinchouette clôture inc.* : the cost is \$ 1 130 plus tax. They offer a 25% discount on the cost and there is a 300 \$ installation fee which is not taxable.**

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Chez *Clôture Brin d'amour enr.* : the cost is 1 050 \$ plus tax, installation is included.

The patio door :

***Les vitres Claire inc.* : the cost is \$ 1 599 plus tax, installation included.**

***Les vitres Claire inc.* offers a 15% discount.**

***Les fenêtres de l'avenir enr.* : the cost is \$ 965,99 plus tax, plus a \$ 400**

Repairing the roof :

***Les toits modernes* : The cost is \$ 4 700, everything included and there is an additional 10% discount.**

***Toiture aubaine inc.* : The cost is \$ 4 599, installation is included and the company will pay the QST.**

Complete the table below. Make sure that you make the best choice.

The best choice for the fencing	The best choice for the patio door	The best choice for the roof repair
Company name	Company name	Company name
Total Cost	Total Cost	Total Cost
Total Cost for all the work to be done :		

Task 5 : A Visit to the ZOO

When an outing is organised, government regulations require that there is 1 adult for every 8 children. Knowing that there are 72 children enrolled

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for the visit to the zoo and that the cost is \$ 4.75 per child and \$ 5.50 per adult, answer the questions below.

- a) **Calculate the number of adults needed to accompany this group of children using the fundamental law of proportions.**
- b) **Calculate the total cost of the visit to the zoo using the fundamental law of proportions.**
- c) **For the visit to the zoo, the daycare needs to rent a bus. Each bus has 2 rows of double seats. Each bus has 11 rows of seats. Calculate how many buses will be needed to take the children and the adult supervisors to the zoo using the fundamental property of proportions.**

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