

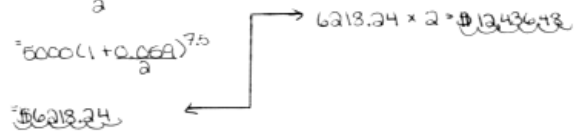
**A Financial Report HIGH LEVEL 2**

**A**

A Financial Report - Winters Family

The home you want to purchase is \$150,000.00. You have two savings bonds worth \$6213.24. Together they equal \$12,436.48

Saving bonds  $\Rightarrow A = P(1 + \frac{I}{100})^n$



Your gross family income is \$63,000.00 yearly. For your monthly gross income it is \$5250.00. For your net income it is \$50,000.00, so monthly it is \$4166.67

Gross	$\frac{63,000.00}{12}$	Net	$\frac{50,000.00}{12}$
	= \$5250.00		= \$4166.67

Your monthly housing costs are \$1630.00. (gross monthly income  $\times$  32%)

$5250.00 \times 0.32 = \$1680.00$

Your monthly expenses, including property taxes, utilities, and the car payment are \$621.83. (All three are added together)

Expenses  $\Rightarrow 203.33 + 230.00 + 188.00 = \$621.33$

The maximum monthly mortgage is \$1058.17, (maximum housing costs - expenses)

$\rightarrow 1680.00 - 621.83 = \$1058.17$

The down payment is 6% of the purchase price.

**B**

$150,000.00 \times 0.05 = \$7500.00$

Your mortgage amount is the purchase price - the down payment.

$\rightarrow 150,000.00 - 7500.00 = \$142,500.00$

Your closing cost is 2% of your mortgage amount.

$\rightarrow 142,500.00 \times 0.02 = \$2850.00$

You will need to be insured through the Canada Mortgage and Housing Corporation (CMHC). Your lending ratio is 95%.

$\rightarrow \frac{142,500.00}{150,000.00}$

= 95%  $\rightarrow$  This makes your premium 3.75%

Lending Ratio	Premium
0 - 65%	0.50%
65.1 - 75%	0.75%
75.1 - 80%	1.25%
80.1 - 85%	2.00%
85.1 - 90%	2.50%
90.1 - 95%	3.75%

Your mortgage loan will be \$124,436.48. You need to divide the mortgage amount by the purchase price.

$\rightarrow$  just above  $\uparrow$  You need to multiply mortgage amount by the premium.

$\rightarrow 142,500.00 \times 3.75\% = \$5343.75$   $\rightarrow$  Now add mortgage amount with the total.

$\rightarrow 142,500.00 + 5343.75 = \$147,843.75$

The bank chosen for the Winters family is Bank of \_\_\_\_\_ . The closed terms are 1 year = 5.40%, 3 years = 6.75%, 5 years = 7.45%.

C

The actual monthly expenses including food is \$771.33. You add the total expenses with the food bill.

$$\rightarrow 621.33 + 150.00 = 771.33$$

With all of these calculations the two savings bonds haven't been touched. They may choose to cash them and put it into a different bond or cash out.

For your family the best amortization is 20 years and with a one term of 5.40%. Your monthly payment would be \$999.35. If you cash 1 bond you will have extra money for clothing and furniture, etc. You will be able to take advantage of current low mortgage rates which may go even lower.

#### Bibliography

The Toronto Sun  
[www.canadamortgage.com/RateSnow/SnowRates.cfm](http://www.canadamortgage.com/RateSnow/SnowRates.cfm)  
[www.city.kingston.ca/residents/budget/taxbills.caop](http://www.city.kingston.ca/residents/budget/taxbills.caop)

D

Amortization	Term	Monthly Payment	Interest rate %
10 years	1	\$1585.91	5.40 %
10 years	3	\$1683.24	6.75 %
10 years	5	\$1734.82	7.45 %

Amortization	Term	Monthly Payment	Interest rate %
15 years	1	\$1190.32	5.40 %
15 years	3	\$1295.03	6.75 %
15 years	5	\$1350.98	7.45 %

Amortization	Term	Monthly Payment	Interest rate %
20 years	1	\$999.35	5.40 %
20 years	3	\$1111.15	6.75 %
20 years	5	\$1171.22	7.45 %

Amortization	Term	Monthly Payment	Interest rate %
25 years	1	\$889.96	5.40 %
25 years	3	\$1008.41	6.75 %
25 years	5	\$1072.25	7.45 %

Payments	Interest	Principal	Balance Owing
1	655.08	344.27	146858.23
2	653.55	345.20	146512.42
3	652.01	347.34	146165.08
4	650.46	348.29	145816.20
5	648.91	350.44	145465.76
6	647.35	351.10	145113.76
7	645.78	353.07	144760.19
8	644.21	355.14	144405.05
9	642.63	356.72	144048.33
10	641.04	358.31	143690.03
11	639.45	359.90	143330.12
12	637.85	361.50	142968.62

## HIGH LEVEL 2

**Teacher's Notes****Knowledge/Understanding**

- The student generates calculations with some accuracy. The bond calculations are included and are accurate. However, the mortgage payment is inaccurate, and the calculations are not included.

**Thinking/Inquiry/Problem Solving**

- The student provides an analysis of the client's financial situation with some detail. The student considers the money available and the value of the bonds, and includes a budget.
- The student recommends a down payment and justifies it with some effectiveness. Only the minimum of 5% is considered, and because the down payment is so low, Canada Mortgage and Housing Corporation (CMHC) insurance is necessary.
- The student analyses various mortgage options with considerable accuracy. The student calculates payments for various terms and amortization periods. The balance owing after the down payment has been determined is also considered.

**Communication**

- The student integrates narrative and mathematical forms with considerable effectiveness. An explanation is given with each equation. However, the budget is somewhat difficult to read.
- The student communicates information in mathematical language with considerable effectiveness. Dollar signs are usually included.

**Application**

- The student recommends a mortgage and justifies it with some clarity and effectiveness. The background is supplied, and the student justifies the one-year mortgage term by encouraging the client to take advantage of low interest rates. However, the student mistakenly includes car payments among housing costs, so the amount available for the mortgage is not accurate.

**Comments**

This work is representative of a high level-2 performance. The student demonstrates some degree of achievement of the expectations in the Knowledge/Understanding and Application categories of knowledge and skills. The student also demonstrates some degree of achievement with respect to two of the criteria in the Thinking/Inquiry/Problem Solving category. However, in the Communication category and in one of the criteria in the Thinking/Inquiry/Problem Solving category, the student demonstrates a considerable degree of achievement – i.e., achievement that is more characteristic of level 3.

**Next Steps**

In order to improve his or her performance, the student needs to:

- show all necessary calculations;
- include dollar signs on monetary values;
- organize the budget in an easy-to-read format;
- justify recommendations more fully;
- distinguish more clearly between housing costs and other living costs (e.g., car payments).