

## Foundations of Mathematics 12

### Borrowing Money

#### Introduction:

Life is expensive. Throughout your future years you will need to borrow some money from time to time for a car, house, or buying some items using credit cards. Options around renting, getting a loan or leasing are ways in which you can get what you want without using your own money; however, it may cost you more in the long run. Making the right decision for you is what this guide is all about. The Unit Project on buying a car will provide a more in depth experience in borrowing.

#### Note Taking:

Note taking is an important skill in any math course. When taking notes you want to focus on important terms, normally in **Bold** or in the margin of this textbook, formulas which are treated the same way, at least one of the examples shown with the your turn section completed, and the In Summary box at the end of the sections. Notes are made for your benefit not mine, so make sure you can understand what you have written. You will be able to use these notes if you choose to do an interview.

#### Resources Needed:

Foundations of Mathematics 12 text or Internet text access

#### Key Terms:

collateral, amortization table, mortgage, loan, credit card, line of credit, Bank of Canada prime interest rate, lease, equity, asset, appreciation, depreciation, disposable income

#### Expectations:

- 1) Using **amortization tables**, explain different methods in which an individual can reduce the total cost of a **loan**.
  - Complete the Investigate the Math activities on page 80
  - Read and take notes on pages 80→91
  - Complete Check Your Understanding problems 1&4 on page 92
  
- 2) Describe the advantages and disadvantages behind using a **credit card** to make purchases.
  - Complete the Explore the Math activities on page 98-99
  - Read and take notes on pages 98→99
  - Watch and discuss a video on credit over use
  - Complete the Further Your Understanding problems on page 100

- 3) Create a four question quiz with answers that can be used to demonstrate your understanding of how to solve credit problems.
  - Complete the Investigate the Math activities on page 104
  - Read and take notes on pages 104→114
  - Complete Check Your Understanding problems 1&3 on pages 114-115
  
- 4) Using a PowerPoint/slideshow presentation that includes ideas around **appreciation** and **depreciation**, outline the advantages and disadvantages of **buying, renting, or leasing** when it comes to a major purchase.
  - Complete the Learn About the Math activities on pages 120-122
  - Read and take notes on pages 120→129
  - Complete the Check Your Understanding problems on pages 129-130
  
- 5) Solve the Practising problems listed below: (you need to choose the questions that will best demonstrate your understanding of the expectations. The questions listed below are only a suggestion)
  - # 5, 7, 9, 10, 12, 13, 16, and 19 on pages 92→96
  - #5, 6, 7, 8, 11, 13, 15, and 17 on pages 115→118
  - # 5, 6, 7, 8, 9, 10, 12, and 15 on pages 130→133

**Evaluation:**

At the end of each learning guide, you have an option of how you would like to be evaluated. The only exception is the Unit Tests which are mandatory. You can choose to demonstrate your knowledge of the expectations with an interview, PowerPoint presentation, poster, video, brochure, ... etc. The other option is a quiz. It is up to you how the evaluation will take place and be warned some methods take more time than others.