# Foundations of Mathematics 12
# Investing Money

**Introduction:**

Much of your future will depend on an understanding of how investing money can work to your advantage. The principles of compounding can lead to a financially secure future when it comes to RRSP's, TFSA's, and other investment opportunities. This guide will introduce you to the concepts of simple and compound interest. The Unit Project on investing will provide a more in depth experience in investing.

**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:**

term, interest, fixed interest rate, principle, simple interest, maturity, future value, rate of return, compound interest, compounded annually, compounding period, Rule of 72, present value, portfolio

**Expectations:**

1) Using specific examples compare the advantages and disadvantages of **Simple Interest** versus **Compound Interest**.
   - Complete the Investigate/Explore the Math activities on page 6 & 18
   - Read and take notes on pages 6→13, 18 & 19, and 20→29
   - Complete **only** Check/Further Your Understanding problems on pages 14, 19, 30

2) Create a brochure that can explain to a financial novice how the **Compound Interest** formula can be rearranged in order to determine the **Principle, Interest, Compounding Period**, or **Number of Years** for the investment.
   - Complete the Investigate the Math activities on page 34-35
   - Read and take notes on pages 34→39
   - Complete **only** the Check Your Understanding problems on page 40

3) Different investing techniques can produce drastically different results. Using two techniques discussed in this section, describe the advantages and disadvantages of these two techniques.
   - Complete the Investigate the Math activities on pages 46-47, & 58-59
   - Read and take notes on pages 46→54, 58→64
   - Complete the Check Your Understanding problems on pages 55, 64-65

4) 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)
   - #4, 5, 7, 8, 10, 11, 12, and 14 on pages 15→17
   - #3, 4, 7, 8, 10, 11, 12, 13, and 14 on pages 30→32
   - # 5, 7, 8, 9, 10, 12, 14, and 16 on pages 40→42
   - #5, 6, 7, 9, 12, 14, 16 and 19 on pages 55→57
   - #3, 4, 6, 7, 8, and 11 on pages 65→67

**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.