

What do students already know about the work of this chapter?

In grade 9, students have

- used a graphing calculator to create a table and a graph from data
- used a CBR/L to gather data, create graphs, change the parameters, and then analyze the results
- entered data and formulas and created charts in a spreadsheet

In grade 10, students have

- practised and extended the grade 9 skills mentioned above
- solved two equations in two variables algebraically and using the graphing calculator

In Chapter 1, students have

- identified sequences as arithmetic, geometric, or neither
- calculated the general terms of an arithmetic, a geometric, and a recursive sequence
- established the relation between simple interest, an arithmetic sequence, and linear growth
- established the relation between compound interest, a geometric sequence, and exponential growth
- calculated compound interest for one deposit
- used a time line, a spreadsheet, and a graphing calculator to calculate the present value or a future value of an investment

Using this Chapter with the Functions and Relations Course and the Functions Course

Functions and Relations (University)

Students in this course must be prepared for the abstract mathematical concepts of the Geometry and Discrete Mathematics course. To help prepare students for this course, consider the following sections:

2.1, 2.3, 2.7, and 2.8 Discuss the notion of formal proof and develop the formulas algebraically.

2.5 In this section, students are encouraged to generate alternative solutions to the same problem.

2.7 and 2.8 Students should become equally adept at using either sum formula. They should recognize the similarities and differences between the two formulas.

2.12 Students will solve a complex problem and should present the solution clearly, and justify their reasoning, to a group.

Functions (University/College)

To help prepare students for this course, consider the following sections:

2.2, 2.5, 2.6, 2.9, and 2.11 Students will follow instructions as they would if they were reading a manual, a skill needed in the dynamic environment of technology studies.

2.12 Students may practise their presentation skills—both oral and written. Throughout the chapter, students will use spreadsheets extensively. These skills are essential for students pursuing business studies.

2.10, 2.12, and Challenge 1 Students will have the opportunity to use the Internet effectively.