

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. These students will be required to broaden their skills in solving complex problems. To help prepare these students for this course, consider the following sections:	
1.1	Students in both courses may recognize and describe patterns. Expect Functions and Relations students to describe patterns with algebraic models.
1.3	This section introduces Functions and Relations students to recursive formulas. Omit this section, and all subsequent references to it, in U/C courses.
1.6, 1.7	Functions and Relations students will benefit from opportunities to develop a wide range of tools, but students will be expected to become proficient in using algebraic models.
1.8, 1.9	Students in both courses will understand the mathematics underlying many common financial situations. Functions and Relations students may move at a faster pace because they will understand the theory.
1.10	Use this section judiciously with either group of students. Drill and practise for consolidating and developing skills may vary widely in time and amount.
1.11	Encourage Functions and Relations students to recognize the common elements in various situations and to consider the validity of the steps in a solution. Functions and Relations students will explain using algebra.
Functions (University/College)	
Students in this course must be prepared to build on their experience with functions if they plan to take either the Advanced Functions and Introductory Calculus or the Mathematics for College Technology course in grade 12. Calculus students will use polynomial, rational, exponential, and logarithmic functions to model real-world problems in a range of applications. College Technology students will investigate and apply properties of polynomial, exponential, reciprocal, and logarithmic functions as well as analyze models of various functions. Students who take the Mathematics of Data Management course in grade 12 must be prepared to organize large amounts of data and extend their modelling skills to solve problems. To help prepare these students for these courses, consider the following sections:	
1.1	Give several examples, and encourage students to use diagrams, technology, words, and algebra to describe the patterns.
1.3	This section is intended for Functions and Relations students; omit it from the U/C course.
1.6, 1.7	In these sections, Functions students will have many opportunities to recognize and manipulate patterns in different contexts. Encourage them to use algebraic, technological, and other methods for describing and investigating these patterns.
1.8, 1.9	Students in both courses will understand the mathematics underlying many common financial situations. Use spreadsheets to help U/C students understand the concepts.
1.11	In this section, Functions students may rely more on technology or examples.