

The Common Denominator
A Family Math Newsletter
Mathematics 6 GT Unit 2: Using Variables

Unit at a Glance:

Suggested Length of Unit: 13 days (45 minutes), 6.5 days (90 minutes)

- Describing Patterns with Variables
- Translating Words into Algebraic Expressions
- Evaluating Algebraic Expressions
- Expressions and Formulas
- The Pythagorean Theorem
- Formulas in Spreadsheets
- Open Sentences
- Graphing Inequalities

Resources

- Textbook Resource: Viktora, Steven S, et al. Transition Mathematics. Wright Group/McGraw-Hill, 2008, pp. 68-129.
- Homework Help/Online book (teacher-provided code needed): [Online Textbook Portal](#)

Exploring Chapter 2

Algebra is generally thought of as using letters to represent numbers. In this sense, the study of algebra begins here.

This chapter discusses four of the main uses of variables. In Lesson 2-1, variables are introduced as *pattern generalizers*.

Lessons 2-2 and 2-3 continue this theme by working on the translation of patterns described in English to their algebraic counterparts.

In Lessons 2-4 and 2-5, variables are *shorthand for quantities in formulas and algebraic expressions*, a use that in later courses becomes the use of variables as arguments and values of functions.

In Lesson 2-6, variables are *placeholders for locations*. This use is very common today in spreadsheets and computer programs.

The last two lessons, 2-7 and 2-8, variables are unknowns.

Although this chapter introduces many new concepts, these ideas are dealt with again in succeeding chapters. Students will have a great deal of practice with formulas; they will solve many equations and inequalities, and they will have extended work with finding patterns and translating from English to mathematical sentences and vice versa.

Quote

“Without mathematics, there’s nothing you can do. Everything around you is mathematics. Everything around you is numbers.” Shakuntala Devi