

Mathematics Curriculum



GRADE 6 • MODULE 4

Topic E:

Expressing Operations in Algebraic Form

6.EE.A.2a, 6.EE.A.2b

Focus Standards: 6.FF.A.2

Write, read, and evaluate expressions in which letters stand for numbers.

- a. Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation "Subtract y from 5" as 5-y.
- b. Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. For example, describe the expression 2(8 + 7) as a product of two factors; view (8 + 7) as both a single entity and a sum of two terms.

Instructional Days: 3

Lesson 15: Read Expressions in Which Letters Stand for Numbers (P)¹
Lessons 16–17: Write Expressions in Which Letters Stand for Numbers (M, P)

In Topic E, students express mathematical terms in algebraic form. They read and write expressions in which letters stand for numbers. In Lesson 15, students provide word descriptions for operations in an algebraic expression. Given the expression 4b+c, students assign the operation term "product" for multiplication and the term "sum" for addition. They verbalize the expression as "the sum of c and the product of 4 and b." However, in Lessons 16 and 17 students are given verbal expressions, and they write algebraic expressions to record operations with numbers and letters standing for numbers. Provided the verbal expression, "Devin quadrupled his money and deposited it with his mother's," students write the expression 4a+b, where a represents the amount of money Devin originally had and b represents the amount of money his mother has. Or, provided the verbal expression, "Crayons and markers were put together and distributed equally to six tables," students create the algebraic expression $\frac{a+b}{6}$, where a represents the number of crayons and b represents the number of markers. Mastery of reading and writing expressions in this topic will lead to a fluent transition in the next topic where students will read, write, and evaluate expressions.

¹ Lesson Structure Key: **P**-Problem Set Lesson, **M**-Modeling Cycle Lesson, **E**-Exploration Lesson, **S**-Socratic Lesson



Topic E: Date: Expression Operations in Algebraic Form 11/19/14

