

Homework Help for Math Out of the Box

Developing Number Concepts: Values and Variables, Module A

Information about homework assignments is provided to help parents and other homework helpers with the mathematics ideas that are being developed. The homework help includes definitions of key vocabulary, questions to ask that will help students connect to the classroom investigations, problem solving examples, and other helpful explanations.

Homework 5A1 – 5A3

In Lessons 1–8, students examine properties of numbers and other numerical relationships.

Associative property: A property that states that the way three or more addends or factors are grouped before adding or multiplying does not affect the sum or the product.

Commutative property: A property that states that changing the order of the numbers being added or multiplied does not change the sum or the product.

Distributive property: A property that states that multiplying a sum by a number has the same results as multiplying each addend by the number and adding the resulting products.

Solving for Missing Numbers

There are many strategies for determining missing numbers. Counting, testing numbers, or using knowledge of fact family relationships are all possible strategies.

Homework 5B1– 5B2

In Lessons 9–14 students examine base-10 representations of whole numbers and decimals. Numbers are compared and ordered.

Expanded form: A representation of a number in which the value of the digits are expanded into an addition statement. ($243 = 200 + 40 + 3$)

Standard form: A representation of a number using the digits 0–9, with each digit having a place value. (243)

Word form: A representation of a number in words. (two hundred forty-three)

When comparing numbers the following symbols and words can be used.

< is less than

> is greater than

= is equal to



Homework 5C1– 5C2

In Lessons 15–20, addition and subtraction concepts of whole and decimal numbers are investigated. These lessons focus on using rounding as an estimation strategy to judge the reasonableness of answers.

Homework 5D1– 5D2

In Lessons 21–27, multiplication and division with whole numbers are investigated. Two common strategies for two-digit multiplication are shown below. Long division may be new to fifth graders.

Homework 5E1– 5E2

In Lessons 28–30, students investigate prime and composite numbers. These investigations build on multiplication and division to prepare students for later study of fractions. Prime numbers have two factors, 1 and the number itself. Composite numbers have three or more factors, 1, the number itself, and at least one other number. The number 1 is considered neither prime nor composite.