

Grade 5, Module 2: Multiplying and Dividing Whole Numbers and Decimals



What is this module about? In this module, we will be building up our knowledge of first multiplication and then division. We will start with whole numbers and then move to decimals as we practice different ways to model these operations.



What came before this module? We worked very hard to understand the values of numbers on the place value chart.



What comes after this module? We will begin work with the base-10 place value system.

How can you help at home?

- Become familiar with the area model, a different method of multiplying than you may have learned.
- Continue to review the place value system with your student.
- Discuss mathematical patterns, such as 5×9 , 50×90 , 50×900 , etc.

Sample area model of multiplication for 64×73 :

	70	+ 3
4	280	12
+		
60	4200	180

Thinking mathematically is hard but important work!



Key Words and Ideas in this Module

- **Decimal:** a fraction whose denominator is a power of ten
- **Decimal fraction:** a proper fraction whose denominator is a power of ten
- **Equation:** a statement that the values of two expressions are equal
- **Estimate:** approximation of the value of a quantity or number
- **Product:** the result of multiplication
- **Quotient:** the result of dividing one quantity by another
- **Remainder:** the number left over when one integer is divided by another

Key Standards in this Module

- Write and interpret numerical expressions
- Perform operations with multi-digit whole numbers and with decimals to the hundredths
- Convert like measurement units within a given measurement system



Spotlight on Math Models

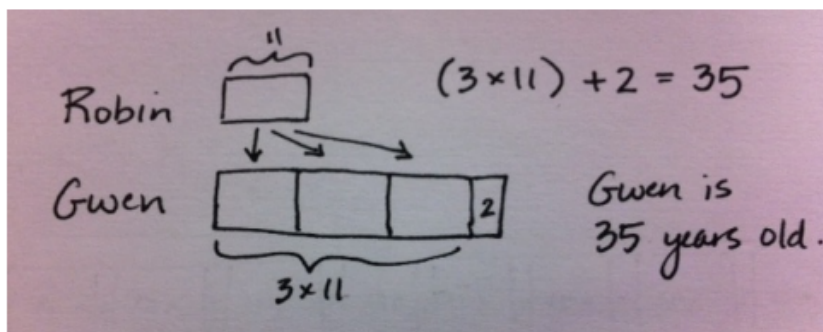
Tape Diagram

The tape diagram is a powerful model that students can use to solve various kinds of problems. In second grade, you will often see this model as an aid to addition and subtraction problems. Tape diagrams are also called “bar models” and consist of a simple bar drawing that students make and adjust to fit a word problem. They then use the drawing to discuss and solve the problem. As students move through the grades, tape diagrams provide an essential bridge to algebra. Below is a sample word problem from Module 2 solved using a tape diagram to show the parts of the problem.



Sample problem from Module 2 (Lesson 3)

Robin is 11 years old. Her mother, Gwen, is 2 years more than 3 times Robin's age. How old is Gwen?



Adapted from Eureka Math Tips for Parents, Prepared by Erin Schweng, Math Coach