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**Eureka Math Tips for Parents**

Grade 6 • Module 2

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| **Arithmetic Operations Including Dividing by a Fraction**In this module, students complete their understanding of the four operations as they study division of whole numbers, division by a fraction, division of decimals and operations on multi-digit decimals. This expanded understanding serves to complete their study of the four operations with positive rational numbers, preparing students for understanding, locating, and ordering negative rational numbers and working with algebraic expressions. | **Grade Level Standards**6.NS.1, 6.NS.2, 6NS.3, 6.NS.4**Student Report Card**Divides fractions and performs all operations with multi-digit decimals |

**Key Vocabulary**

* **Greatest Common Factor** The greatest common factor of two whole numbers (not both zero) is the greatest whole number that is a factor of each number. For example, the GCF of 24 and 36 is 12 because when all of the factors of 24 and 36 are listed, the largest factor they share is 12.

* **Least Common Multiple** The least common multiple of two whole numbers is the least whole number greater than zero that is a multiple of each number. For example, the LCM of 4 and 6 is 12 because when the multiples of 4 and 6 are listed, the smallest or first multiple they share is 12.
* **Multiplicative Inverses** Two numbers whose product is 1 are multiplicative inverses of one another. In the example below, three-fourths and four-thirds are multiplicative inverses of one another because their product is 1

**How you can help at home:**

* Ask your child what they learned in school today and ask them to show you an example.
* Reinforce fast recall of multiplication and division facts by playing math games using flashcards. See how many facts your child can answer in 25 seconds. Then, see if they can answer more questions the next time by playing again!
* Challenge your child to create three different examples of multiplicative inverses using the example given in the Key Vocabulary section of this newsletter.

**Models and Representations**

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| **Area Models**Imagine that you have 2/5 of a cup of frosting to share equally among three desserts. This area model helps break a problem into smaller parts, making the problem easier to understand and solve. As seen in the example above, the rectangle was broken into fifths and 2/5 was shaded. Next, the entire model is broken into 3 equal parts. Now students can visually see that one dessert would receive 2/15 cups of frosting. |
| **Tape Diagrams** Tape diagrams are another model to help students visualize division with fractions. As seen in the example above, students first shade 8/9. They are trying to find out how many 2/9 are in 8/9. There are 4 groups of 2/9, therefore the answer is 4.  |
| **Number Lines**Similar to tape diagrams, number lines are another model to help visualize dividing fractions. In the example above, students are finding how many ¾ are in 9/4. |

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