



Dear Fourth Grade Families,

In Unit 6, students will work on the following fourth grade Common Core standards in the Number and Operations—Fractions (NF) domain:

4.NF.4a-c	<p>Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.</p> <p>a. Understand a fraction <math>\frac{a}{b}</math> as a multiple of <math>\frac{1}{b}</math>. <i>For example, use a visual fraction model to represent <math>\frac{5}{4}</math> as the product <math>5 \times (\frac{1}{4})</math>, recording the conclusion by the equation <math>\frac{5}{4} = 5 \times (\frac{1}{4})</math>.</i></p> <p>b. Understand a multiple of <math>\frac{a}{b}</math> as a multiple of <math>\frac{1}{b}</math>, and use this understanding to multiply a fraction by a whole number. <i>For example, use a visual fraction model to express <math>3 \times (\frac{2}{5})</math> as <math>6 \times (\frac{1}{5})</math>, recognizing this product as <math>\frac{6}{5}</math>. (In general, <math>n \times (\frac{a}{b}) = \frac{(n \times a)}{b}</math>.)</i></p> <p>c. Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. <i>For example, if each person at a party will eat <math>\frac{3}{8}</math> of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?</i></p>
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Unit 6 Concepts:

- Decompose fractions using multiplication
- Multiply fraction by whole number
- Word problems with Fractions

Unit 6 Vocabulary:

- Numerator
- Denominator
- Unit Fraction
- Decompose
- Cross Multiply
- Factor
- Whole Number
- Mixed Number

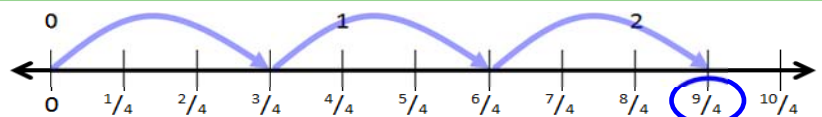
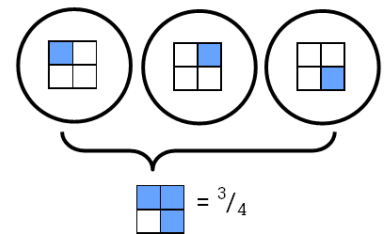
Ask questions like these to help your child become a productive mathematical thinker:

- What connection is there between repeated addition and multiplication of a fraction by a whole number?
- How do models help you understand what's happening when you multiply fractions by a whole number?
- Can you represent this fraction on a number line?

Multiply Fractions

$$3 \times \frac{1}{4}$$

We say: "three groups of  $\frac{1}{4}$ "



$$3 \times \frac{3}{4} = \frac{9}{4}$$

Need a review? Check out our lesson videos on-line!

[swunmath.com/student-videos](http://swunmath.com/student-videos)

If you don't know the class's special name, ask your child's teacher.

We encourage you to talk with your child daily about what was learned in math class.

Thank you for your support!