



Common Core Math Newsletter

5th Grade Advanced Math

Unit 1: Operations of Fractions

In this unit, students will learn to add, subtract, multiply and divide fractions. In addition, they will extend their understanding of comparing fractions. They will apply this knowledge to solving real world problems.

Standards

5.NF.2

- Solve word problems involving addition and subtraction of fractions referring to the same whole
- Use visual fraction models to represent and solve word problems with unlike denominators
- Use equations to represent and solve word problems with unlike denominators
- Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers (e.g. recognize an incorrect result $2/5 + 1/2 = 3/7$ by observing that $3/7 < 1/2$)

5. NF. 3.

- Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$).
- Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem.

5. NF. 6.

- Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.

6.NS.1

- Apply and extend understandings of multiplication and division to divide fractions by fractions
- Interpret and compute quotients of fractions and solve word problems involving division of fractions
- Use visual models and equations to represent problems
- Create a story context for division of fractions
- Use the relationship between multiplication and division to explain division



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Vocabulary

Improper fraction numerator is larger than the denominator

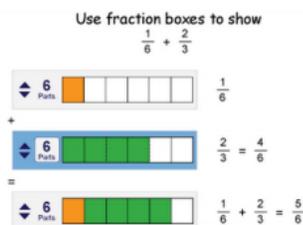
Mixed Number a whole number with a fraction

reciprocal or multiplicative inverse a pair of numbers that when multiplied together equal 1



Simplest form form in which the numerator and denominator have only 1 as a common factor

visual fraction model



Additional Resources

IXL.com Topics:

Fractions and Mixed Numbers
Add and Subtract Fractions
Multiplication of Fractions
Division of Fractions

LearnZillion.com Videos:

- <https://learnzillion.com/lessons/3042-write-equations-to-solve-wordproblems-by-determining-the-important-information>
Quick Code LZ3042
- <https://learnzillion.com/lessons/1054-use-a-number-line-to-solve-wordproblems-involving-subtraction-of-fractions-with-unlike-denominators>
Quick Code LZ1054
- <https://learnzillion.com/lessons/213-multiply-fractions-by-fractionsusing-area-models>
Quick Code LZ213

Be sure to look to the left of the video to see other lessons on the standard.