



FOURTH GRADE MATHEMATICS

Represent and Understand Multiplication and Division

- Understand multiplication as comparison
- Use strategies based on place value and the properties of operations to multiply a whole number of up to four digits by a one-digit whole number, and multiply two, two-digit numbers
- Use strategies based on place value, the properties of operations, and the relationship between multiplication and division to divide up to four-digit dividends and one-digit divisors

Develop Understanding of Fractions

- Develop an understanding of fractions as numbers with denominators to include 5, 10, 12, and 100
- Understand equivalence by reasoning about the number and size of the parts
- Compare two fractions with different numerators and different denominators
- Understand fractions as sums of unit fractions
- Add and subtract fractions and mixed numbers with like denominators
- Multiply a fraction by a whole number
- Understand decimal notation to the hundredths and compare decimal fractions with denominators of 10 and 100

Generalize and Use Place Value Understanding

- Extend understanding of place value to 1,000,000 understanding the relative sizes of numbers in each place
- Fluently add and subtract multi-digit whole numbers using the standard algorithm

Mathematical Practices

- Make sense of problems and persevere in solving them
- Reason abstractly and quantitatively
- Construct viable arguments and critique the reasoning of others
- Model with mathematics
- Use appropriate tools strategically
- Attend to precision
- Look for and make use of structure
- Look for and express regularity in repeated reasoning

