



2.1.2.1	Use strategies to generate addition and subtraction facts including making tens, fact families, doubles plus or minus one, counting on, counting back, and the commutative and associative properties. Use the relationship between addition and subtraction to generate basic facts.
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3.1.2.3	Represent multiplication facts by using a variety of approaches, such as repeated addition, equal-sized groups, arrays, area models, equal jumps on a number line and skip counting. Represent division facts by using a variety of approaches, such as repeated subtraction, equal sharing and forming equal groups. Recognize the relationship between multiplication and division.
3.1.2.4	Solve real-world and mathematical problems involving multiplication and division, including both "how many in each group" and "how many groups" division problems.
3.1.2.5	Use strategies and algorithms based on knowledge of place value, equality and properties of addition and multiplication to multiply a two- or three-digit number by a one-digit number. Strategies may include mental strategies, partial products, the standard algorithm, and the commutative, associative, and distributive properties.
3.2.2.2	Use multiplication and division basic facts to represent a given problem situation using a number sentence. Use number sense and multiplication and division basic facts to find values for the unknowns that make the number sentences true.

4.1.1.1	Demonstrate fluency with multiplication and division facts.
4.1.1.3	Multiply multi-digit numbers, using efficient and generalizable procedures, based on knowledge of place value, including standard algorithms.
4.1.1.4	Estimate products and quotients of multi-digit whole numbers by using rounding, benchmarks and place value to assess the reasonableness of results.
4.1.1.6	Use strategies and algorithms based on knowledge of place value, equality and properties of operations to divide multi-digit whole numbers by one- or two-digit numbers. Strategies may include mental strategies, partial quotients, the commutative, associative, and distributive properties and repeated subtraction.
4.2.2.1	Understand how to interpret number sentences involving multiplication, division and unknowns. Use real-world situations involving multiplication or division to represent number sentences.
4.2.2.2	Use multiplication, division and unknowns to represent a given problem situation using a number sentence. Use number sense, properties of multiplication, and the relationship between multiplication and division to find values for the unknowns that make the number sentences true.

5.1.1.2	Consider the context in which a problem is situated to select the most useful form of the quotient for the solution and use the context to interpret the quotient appropriately.
5.1.1.3	Estimate solutions to arithmetic problems in order to assess the reasonableness of results.

5.1.1.1	Divide multi-digit numbers, using efficient and generalizable procedures, based on knowledge of place value, including standard algorithms. Recognize that quotients can be represented in a variety of ways, including a whole number with a remainder, a fraction or mixed number, or a decimal.
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5.1.1.4	Solve real-world and mathematical problems requiring addition, subtraction, multiplication and division of multi-digit whole numbers. Use various strategies, including the inverse relationships between operations, the use of technology, and the context of the problem to assess the reasonableness of results.
5.1.2.4	Recognize and generate equivalent decimals, fractions, mixed numbers and improper fractions in various contexts.

6.1.2.1	Identify and use ratios to compare quantities; understand that comparing quantities using ratios is not the same as comparing quantities using subtraction.
6.1.3.1	Multiply and divide decimals and fractions, using efficient and generalizable procedures, including standard algorithms.
6.1.3.2	Use the meanings of fractions, multiplication, division and the inverse relationship between multiplication and division to make sense of procedures for multiplying and dividing fractions.
6.1.2.4	Use reasoning about multiplication and division to solve ratio and rate problems.

7.1.1.2	Understand that division of two integers will always result in a rational number. Use this information to interpret the decimal result of a division problem when using a calculator.
7.1.2.1	Add, subtract, multiply and divide positive and negative rational numbers that are integers, fractions and terminating decimals; use efficient and generalizable procedures, including standard algorithms; raise positive rational numbers to whole-number exponents.

8.1.1.5	Express approximations of very large and very small numbers using scientific notation; understand how calculators display numbers in scientific notation. Multiply and divide numbers expressed in scientific notation, express the answer in scientific notation, using the correct number of significant digits when physical measurements are involved.
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