

# Grade 5 PI+ Yearlong Mathematics Map

**Resources:** Approved from Board of Education

**Assessments:** PARCC Assessments, Performance Series, District Benchmark Assessments

**Common Core State Standards – Standards for Mathematical Practice:**

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| 1. Make sense of problems and persevere in solving them.            | 2. Reason abstractly and quantitatively.                  |
| 3. Construct viable arguments and critique the reasoning of others. | 4. Model with mathematics.                                |
| 5. Use appropriate tools strategically.                             | 6. Attend to precision.                                   |
| 7. Look for and make use of structure.                              | 8. Look for and express regularity in repeated reasoning. |

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
MD	Represent and interpret data.	5.MD.2 Make a line plot to display a data set of measurements in fractions of a unit ( $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{8}$ ). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.	Data	5.MD.2 Make a line plot to display a data set of measurements in fractions of a unit ( $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{8}$ )	
MD	Represent and interpret data.	5.MD.2 Make a line plot to display a data set of measurements in fractions of a unit ( $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{8}$ ). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.	Data	5.MD.2 Perform operations on fractions for this grade to solve problems involving information presented in line plots.	
NBT	Perform operations with multi-digit whole numbers and with decimals to hundredths.	5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	Addition/Subtraction Decimals	5.NBT.7 Add and subtract decimals to hundredths place with concrete models or drawings.	

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
NBT	Perform operations with multi-digit whole numbers and with decimals to hundredths.	5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	Multiply Decimals	5.NBT.7 Multiply decimals to hundredths place with concrete models or drawings.	
NBT	Perform operations with multi-digit whole numbers and with decimals to hundredths.	5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	Divide Decimals	5.NBT.7 Divide decimals to hundredths place with concrete models or drawings.	
NBT	Perform operations with multi-digit whole numbers and with decimals to hundredths.	5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	Decimal Operations	5.NBT.7 Explain reasoning when performing operations with decimals to the hundredths place.	
NBT	Perform operations with multi-digit whole numbers and with decimals to hundredths.	5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	Add/Subtract Decimals	5.NBT.7 Solve addition and subtraction problems with decimals to the hundredths place using strategies based on place value	
NBT	Perform operations with multi-digit whole numbers and with decimals to hundredths.	5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	Divide Decimals	5.NBT.7 Solve division problems with decimals to the hundredths place using strategies based on place value	

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
NBT	Perform operations with multi-digit whole numbers and with decimals to hundredths.	5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	Multiply Decimals	5.NBT.7 Solve multiplication problems with decimals to the hundredths place using strategies based on place value	
NF	Use equivalent fractions as a strategy to add and subtract fractions.	5.NF.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$ . (In general, $\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}$ .)	Addition/Subtraction Fractions	5.NF.1 Add and subtract fractions with unlike denominators	Equivalent Fractions
NF	Use equivalent fractions as a strategy to add and subtract fractions.	5.NF.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$ . (In general, $\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}$ .)	Addition/Subtraction Mixed Number	5.NF.1 Add and subtract mixed number with unlike denominators	Equivalent Fractions
NF	Use equivalent fractions as a strategy to add and subtract fractions.	5.NF.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$ . (In general, $\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}$ .)	Addition/Subtraction Mixed Number	5.NF.2 Estimate mentally and assess the reasonbleness of the answer	Benchmarks

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NF	Use equivalent fractions as a strategy to add and subtract fractions.	5.NF.2 Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result $2/5 + 1/2 = 3/7$ , by observing that $3/7 < 1/2$ .	Add/Subtract Fractions	5.NF.2 Solve word problems involving addition and subtraction of fractions	
NF	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	5.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.	Multiplication of Fractions	5.NF.4	
NF	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	5.NF.4a Interpret the product $(a/b) \times q$ as a parts of a partition of $q$ into $b$ equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$ . For example, use a visual fraction model to show $(2/3) \times 4 = 8/3$ , and create a story context for this equation. Do the same with $(2/3) \times (4/5) = 8/15$ . (In general, $(a/b) \times (c/d) = ac/bd$ .)	Multiplication of Fractions	5.NF.4a Interpret the product $(a/b) \times q$ as a parts of a partition of $q$ into $b$ equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$ .	
NF	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	5.NF.4b Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.	Multiplication of Fractions	5.NF.4b Find the area of a rectangle using a model with fractional side lengths.	

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NF	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	5.NF.5 Interpret multiplication as scaling (resizing), by:	Multiplication of Fractions	5.NF.5	
NF	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	5.NF.5a Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.	Multiplication of Fractions	5.NF.5a Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.	Benchmarks
NF	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	5.NF.5b Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying $a/b$ by 1.	Multiplication of Fractions	5.NF.5b Explain why multiplying a given number by a fraction greater than 1 results in a product greater than the given number	
NF	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	5.NF.5b Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying $a/b$ by 1.	Multiplication of Fractions	5.NF.5b Explain why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying $a/b$ by 1.	

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
NF	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	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.	Multiplication of Fractions	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.	
NF	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	5.NF.7 Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.	Division of Fractions	5.NF.7	
NF	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	5.NF.7a Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. For example, create a story context for $(1/3) \div 4$ , and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(1/3) \div 4 = 1/12$ because $(1/12) \times 4 = 1/3$ .	Division of Fractions	5.NF.7a Interpret division of a unit fraction by a non-zero whole number, and compute such quotients	
NF	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	5.NF.7b Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for $4 \div (1/5)$ , and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div (1/5) = 20$ because $20 \times (1/5) = 4$ .	Division of Fractions	5.NF.7b Interpret division of a whole number by a unit fraction, and compute such quotients.	
NF	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	5.NF.7c Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. For example, how much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $1/3$ -cup servings are in 2 cups of raisins?	Division of Fractions	5.NF.7c Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem.	

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
EE	Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.1 Write and evaluate numerical expressions involving whole-number exponents.	Expressions Exponents	6.EE.1 Write and evaluate numerical expressions involving whole-number exponents	Numerical Expression Exponent Base Power
EE	Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.2a Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation “Subtract $y$ from 5” as $5 - y$ .	Expressions	6.EE.2a Write expressions that record operations with numbers and with letters standing for numbers	Expression Variable
EE	Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.2c Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = \frac{1}{2}$ .	Expressions	6.EE.2c Evaluate expressions at specific values of their variables	
EE	Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.2c Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = \frac{1}{2}$ .	Expressions	6.EE.2c Evaluate expressions that arise from formulas used in real-world problems	

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
EE	Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.2c Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$ .	Expressions Order of Operations	6.EE.2c Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order	Order of Operations
EE	Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.3 Apply the properties of operations to generate equivalent expressions. For example, apply the distributive property to the expression $3(2 + x)$ to produce the equivalent expression $6 + 3x$ ; apply the distributive property to the expression $24x + 18y$ to produce the equivalent expression $6(4x + 3y)$ ; apply properties of operations to $y + y + y$ to produce the equivalent expression $3y$ .	Distributive Property Simplifying Expressions	6.EE.3 Apply the properties of operations to generate equivalent expressions	Order of Operations Distributive Property
EE	Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.3 Apply the properties of operations to generate equivalent expressions. For example, apply the distributive property to the expression $3(2 + x)$ to produce the equivalent expression $6 + 3x$ ; apply the distributive property to the expression $24x + 18y$ to produce the equivalent expression $6(4x + 3y)$ ; apply properties of operations to $y + y + y$ to produce the equivalent expression $3y$ .	Simplifying Expressions	6.EE.3 Apply the properties of operations to generate equivalent expressions	
EE	Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.4 Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). For example, the expressions $y + y + y$ and $3y$ are equivalent because they name the same number regardless of which number $y$ stands for. Reason about and solve one-variable equations and inequalities.	Equivalent Expressions	6.EE.4 Identify when two expressions are equivalent	



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EE	Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.4 Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). For example, the expressions $y + y + y$ and $3y$ are equivalent because they name the same number regardless of which number $y$ stands for. Reason about and solve one-variable equations and inequalities.	Equations Inequalities	6.EE.4 Solve one-variable equations and inequalities	
EE	Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.4 Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). For example, the expressions $y + y + y$ and $3y$ are equivalent because they name the same number regardless of which number $y$ stands for. Reason about and solve one-variable equations and inequalities.	Equations Inequalities Substitution	6.EE.5 Determine whether a given number in a specified set makes an equation or inequality true with substitution	
EE	Reason about and solve one-variable equations and inequalities.	6.EE.5 Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.	Equations Inequalities	6.EE.5 Solve an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true?	
EE	Reason about and solve one-variable equations and inequalities.	6.EE.6 Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.	Expressions	6.EE.6 Write variable expressions when solving a mathematical problem, recognizing that a variable can represent an unknown number or any number in a specified set	
EE	Reason about and solve one-variable equations and inequalities.	6.EE.6 Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.	Expressions	6.EE.6 Write variable expressions when solving a real-world problem, recognizing that a variable can represent an unknown number or any number in a specified set	

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
EE	Reason about and solve one-variable equations and inequalities.	6.EE.7 Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which $p$ , $q$ and $x$ are all nonnegative rational numbers.	Equations	6.EE.7 Write and solve equations of the form $x + p = q$ and $px = q$ for cases in which $p$ , $q$ and $x$ are all nonnegative rational numbers	
EE	Reason about and solve one-variable equations and inequalities.	6.EE.7 Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which $p$ , $q$ and $x$ are all nonnegative rational numbers.	Equations	6.EE.7 Write and solve real-world equations of the form $x + p = q$ and $px = q$ for cases in which $p$ , $q$ and $x$ are all nonnegative rational numbers	
EE	Reason about and solve one-variable equations and inequalities.	6.EE.8 Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.	Inequalities	6.EE.8 Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions	
EE	Reason about and solve one-variable equations and inequalities.	6.EE.8 Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.	Inequalities Number Lines	6.EE.8 Represent solutions of inequalities on number line diagrams	
EE	Reason about and solve one-variable equations and inequalities.	6.EE.8 Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.	Inequalities	6.EE.8 Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world problem	

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EE	Represent and analyze quantitative relationships between dependent and independent variables.	6.EE.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.	Equations	6.EE.9 Write an equation with variables to represent two quantities in a real-world problem that change in relation to one another	Independent and Dependent Variables
EE	Represent and analyze quantitative relationships between dependent and independent variables.	6.EE.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.	Equations Graphing	6.EE.9 Analyze the relationship between dependent and independent variables using graphs and tables, and relate these to an equation	Independent and Dependent Variables
G	Solve real-world and mathematical problems involving area, surface area, and volume.	6.G.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	Area	6.G.1 Find the area of polygons by composing into rectangles or decomposing into triangles and other shapes	

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G	Solve real-world and mathematical problems involving area, surface area, and volume.	6.G.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	Area	6.G.1 Find the area of quadrilaterals	
G	Solve real-world and mathematical problems involving area, surface area, and volume.	6.G.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	Area	6.G.1 Find the area of triangles	
G	Solve real-world and mathematical problems involving area, surface area, and volume.	6.G.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	Area	6.G.1 Find the area of triangles, quadrilaterals, and polygons in real-world problems	
G	Solve real-world and mathematical problems involving area, surface area, and volume.	6.G.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	Volume	6.G.2 Apply the formulas $V = l w h$ and $V = b h$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving mathematical problems	
G	Solve real-world and mathematical problems involving area, surface area, and volume.	6.G.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	Volume	6.G.2 Apply the formulas $V = l w h$ and $V = b h$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world problems	

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G	Solve real-world and mathematical problems involving area, surface area, and volume.	6.G.2 Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = lwh$ and $V = bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.	Volume	6.G.2 Find the volume of a right rectangular prism with fractional edge lengths	
G	Solve real-world and mathematical problems involving area, surface area, and volume.	6.G.4 Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.	Nets Surface Area	6.G.4 Find the surface area of three-dimensional figures using nets	
G	Solve real-world and mathematical problems involving area, surface area, and volume.	6.G.4 Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.	Nets Surface Area	6.G.4 Represent three-dimensional figures using nets made up of rectangles and triangles	
G	Solve real-world and mathematical problems involving area, surface area, and volume.	6.G.4 Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.	Nets Surface Area	6.G.4 Solve real-world problems involving nets and surface area of three-dimensional figures	

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NS	Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	6.NS.1 Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$ . (In general, $(a/b) \div (c/d) = ad/bc$ .) How much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $3/4$ -cup servings are in $2/3$ of a cup of yogurt? How wide is a rectangular strip of land with length $3/4$ mi and area $1/2$ square mi? Compute fluently with multi-digit numbers and find common factors and multiples.	Division of Fractions	6.NS.1 Divide fractions using fraction models and equations and solve word problems involving division of fractions	Quotient Divisor Dividend Reciprocal
NS	Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	6.NS.1 Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$ . (In general, $(a/b) \div (c/d) = ad/bc$ .) How much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $3/4$ -cup servings are in $2/3$ of a cup of yogurt? How wide is a rectangular strip of land with length $3/4$ mi and area $1/2$ square mi? Compute fluently with multi-digit numbers and find common factors and multiples.	Common Factors Common Multiples	6.NS.1 Find common factors and multiples of multi-digit numbers	Common Factors Common Multiples

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NS	Compute fluently with multi-digit numbers and find common factors and multiples.	6.NS.3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.	Addition, Subtraction, Multiplication, and Division of Decimals	6.NS.3 Compute addition, subtraction, multiplication, and division with multi-digit decimals	Sum Difference Product Divisor Dividend Quotient Factors Place value Decimals
NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.5 Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.	Integers	6.NS.5 Represent positive and negative numbers and zero in real-world contexts	Integers Positive Negative Opposite
NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.6a Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3) = 3$ , and that 0 is its own opposite.	Integers	6.NS.6a Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself	Opposite
NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.6c Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.	Integers Number Lines	6.NS.6c Find and position integers and other rational numbers on a horizontal or vertical number line diagram	Horizontal Vertical Integer Rational Numbers Coordinate Plane

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.6c Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.	Integers Coordinate Plane	6.NS.6c Find and position pairs of integers and other rational numbers on a coordinate plane	Integers Coordinate Plane Rational Numbers
NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.7 Understand ordering and absolute value of rational numbers.	Rational Numbers	6.NS.7 Order Rational Numbers and calculate absolute value	Order Absolute Value
NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.7a Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. For example, interpret $-3 > -7$ as a statement that $-3$ is located to the right of $-7$ on a number line oriented from left to right.	Inequalities	6.NS.7a Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram	Inequality Number Line
NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.7b Write, interpret, and explain statements of order for rational numbers in real-world contexts. For example, write $-3^{\circ}\text{C} > -7^{\circ}\text{C}$ to express the fact that $-3^{\circ}\text{C}$ is warmer than $-7^{\circ}\text{C}$ .	Ordering	6.NS.7b Write, interpret, and explain statements of order for rational numbers in real-world contexts	Rational Numbers Order
NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.7c Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. For example, for an account balance of $-30$ dollars, write $ -30  = 30$ to describe the size of the debt in dollars.	Absolute Value	6.NS.7c Interpret absolute value as magnitude for a positive or negative quantity in a real-world situation	Absolute Value Positive Negative



Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.7c Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. For example, for an account balance of $-30$ dollars, write $ -30  = 30$ to describe the size of the debt in dollars.	Absolute Value	6.NS.7c Recognize the absolute value of a rational number as its distance from 0 on the number line	Absolute Value Rational Number Positive Negative
NS	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.7d Distinguish comparisons of absolute value from statements about order. For example, recognize that an account balance less than $-30$ dollars represents a debt greater than 30 dollars.	Absolute Value	6.NS.7d Distinguish comparisons of absolute value from statements about order	Absolute Value Positive Negative
RP	Understand ratio concepts and use ratio reasoning to solve problems.	6.RP.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."	Ratio	6.RP.1 Describe ratio relationships using ratio language	Ratio "For every"
RP	Understand ratio concepts and use ratio reasoning to solve problems.	6.RP.2 Understand the concept of a unit rate $a/b$ associated with a ratio $a:b$ with $b \neq 0$ , and use rate language in the context of a ratio relationship. For example, "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $3/4$ cup of flour for each cup of sugar." "We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger."	Ratio Unit Rate	6.RP.2 Describe a unit rate using rate language	Ratio Rate Unit Rate

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RP	Understand ratio concepts and use ratio reasoning to solve problems.	6.RP.3 Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.	Ratio Rates	6.RP.3 Solve real world and math problems using ratio and rate	Ratio Ratio Table Rate Unit Rate Equivalent Double Number Line Percent Tape Diagram
RP	Understand ratio concepts and use ratio reasoning to solve problems.	6.RP.3a Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.	Ratio Table	6.RP.3a Make tables of equivalent ratios relating quantities with whole-number measurements, compare ratios, and find missing values in the tables	Equivalent Ratios Table
RP	Understand ratio concepts and use ratio reasoning to solve problems.	6.RP.3a Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.	Coordinate Graphing	6.RP.3a Plot pairs of values on a coordinate plane	Coordinate Plane Plot Axis Quadrant
RP	Understand ratio concepts and use ratio reasoning to solve problems.	6.RP.3b Solve unit rate problems including those involving unit pricing and constant speed. For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?	Unit Rates	6.RP.3b Solve unit rate problems including those involving unit pricing and constant speed	Unit Rate Unit Price Constant Speed
RP	Understand ratio concepts and use ratio reasoning to solve problems.	6.RP.3c Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.	Percent	6.RP.3c Find a percent of a quantity as a rate per 100	Percent Rate Ratio
RP	Understand ratio concepts and use ratio reasoning to solve problems.	6.RP.3c Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.	Percent	6.RP.3c Solve problems involving finding the whole, given a part and the percent	Percent Rate Ratio

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RP	Understand ratio concepts and use ratio reasoning to solve problems.	6.RP.3d Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.	Measurement	6.RP.3d Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities	Ratio Measurement Units
SP	Develop understanding of statistical variability.	6.SP.1 Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. For example, “How old am I?” is not a statistical question, but “How old are the students in my school?” is a statistical question because one anticipates variability in students’ ages.	Statistics	6.SP.1 Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers	
SP	Develop understanding of statistical variability.	6.SP.2 Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.	Statistics	6.SP.2 Recognize that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape	
SP	Develop understanding of statistical variability.	6.SP.3 Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.	Statistics	6.SP.3 Recognize that a measure of center for a numerical data set summarizes all of its values with a single number	
SP	Develop understanding of statistical variability.	6.SP.3 Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.	Statistics	6.SP.3 Recognize that a measure of variation describes how its values vary with a single number	
SP	Summarize and describe distributions.	6.SP.4 Display numerical data in plots on a number line, including dot plots, histograms, and box plots.	Statistics Graphing	6.SP.4 Display numerical data in plots on a number line, including dot plots, histograms, and box plots	
SP	Summarize and describe distributions.	6.SP.5 Summarize numerical data sets in relation to their context, such as by:	Statistics	6.SP.5 Summarize numerical data sets in relation to their context	
SP	Summarize and describe distributions.	6.SP.5a Reporting the number of observations.	Statistics	6.SP.5a Summarize numerical data sets by reporting the number of observations	

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
SP	Summarize and describe distributions.	6.SP.5b Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.	Statistics	6.SP.5b Summarize numerical data sets by describing the nature of the attribute under investigation, including how it was measured and its units of measurement	
SP	Summarize and describe distributions.	6.SP.5c Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.	Statistics	6.SP.5c Summarize numerical data sets by describing any overall pattern and any outliers from the overall pattern	
SP	Summarize and describe distributions.	6.SP.5c Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.	Statistics	6.SP.5c Summarize numerical data sets by giving quantitative measures of center, such as median and/or mean	
SP	Summarize and describe distributions.	6.SP.5c Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.	Statistics	6.SP.5c Summarize numerical data sets by giving variability, such as interquartile range and/or mean absolute deviation	
SP	Summarize and describe distributions.	6.SP.5d Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.	Statistics	6.SP.5d Summarize numerical data sets by relating the choice of measures of center and variability to the shape of the data distribution	
G	Draw construct, and describe geometrical figures and describe the relationships between them.	7.G.1 Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	Proportional Relationships	7.G.1 Compute actual lengths and areas from a scale drawing.	

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
G	Draw construct, and describe geometrical figures and describe the relationships between them.	7.G.1 Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	Proportional Relationships	7.G.1 Reproduce a scale drawing at a different scale.	
G	Draw construct, and describe geometrical figures and describe the relationships between them.	7.G.1 Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	Proportional Relationships	7.G.1 Solve problems involving scale drawings of geometric figures.	
G	Draw construct, and describe geometrical figures and describe the relationships between them.	7.G.3 Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.	Two dimensional shapes	7.G.3 Identify and describe the two-dimensional figures that result from slicing three-dimensional figures	Two dimensional shapes Three dimensional shapes
	Draw construct, and describe geometrical figures and describe the relationships between them.	7.G.3 Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.	Three dimensional shapes	7.G.3 Identify and describe three-dimensional figures.	Three dimensional shapes
	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	7.G.4 Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.	Two dimensional shapes	7.G.4 Apply the formulas for the area and circumference of a circle and use them to solve problems.	Circumference Area
G	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	7.G.4 Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.	Two dimensional shapes	7.G.4 Identify the formulas for the area and circumference of a circle.	Circumference Area

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	7.G.4 Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.	Two dimensional shapes	7.G.4 Interpret the relationship between the circumference and area of a circle.	Circumference Area
NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.1 Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.	Addition Rational numbers	7.NS.1 Add rational numbers on a horizontal or vertical number line.	Rational numbers Vertical number line Horizontal number line
NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.1 Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.	Subtraction Rational numbers	7.NS.1 Subtract rational numbers on a horizontal or vertical number line.	Rational numbers Vertical number line Horizontal number line
NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.1a Describe situations in which opposite quantities combine to make 0. For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.	Rational Numbers	7.NS.1a Describe situations in which opposite quantities combine to make 0.	Property of Opposites

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.1b Understand $p + q$ as the number located a distance $ q $ from $p$ , in the positive or negative direction depending on whether $q$ is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.	Rational Numbers	7.NS.1b Interpret sums of rational numbers by describing real-world contexts.	Combine
NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.1b Understand $p + q$ as the number located a distance $ q $ from $p$ , in the positive or negative direction depending on whether $q$ is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.	Rational Numbers	7.NS.1b Show that a number and its opposite have a sum of 0 (are additive inverses).	Combine
NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.1b Understand $p + q$ as the number located a distance $ q $ from $p$ , in the positive or negative direction depending on whether $q$ is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.	Rational Numbers	7.NS.1b Explain $p + q$ as the number located a distance $ q $ from $p$ , in the positive or negative direction depending on whether $q$ is positive or negative.	Combine
NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.1c Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$ . Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.	Subtraction Rational numbers	7.NS.1c Explain subtraction of rational numbers as adding the additive inverse	Additive Inverses Absolute Value

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.1c Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$ . Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.	Subtraction Rational numbers	7.NS.1c Prove that the distance between two rational numbers on the number line is the absolute value of their difference.	Absolute Value Number line
NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.1d Apply properties of operations as strategies to add and subtract rational numbers.	Properties of Operations	7.NS.1d Apply properties of operations as strategies to add and subtract rational numbers.	Associative Commutative Additive Identity Property of Opposites
NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.2 Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.	Division Rational Numbers	7.NS.2 Divide rational numbers.	Fraction Rational numbers
NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.2 Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.	Multiplication Rational Numbers	7.NS.2 Multiply rational numbers.	Fraction Rational numbers



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NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.2a Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.	Multiplication Rational Numbers	7.NS.2a Apply the properties of multiplication and rules for multiplying signed numbers to rational numbers.	Distributive Property Multiplicative Identify Fraction
NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.2a Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.	Multiplication Rational Numbers	7.NS.2a Interpret products of rational numbers by describing real-world contexts.	Product Distributive Property
NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.2b Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If $p$ and $q$ are integers, then $-(p/q) = (-p)/q = p/(-q)$ . Interpret quotients of rational numbers by describing real-world contexts.	Divide rational numbers	7.NS.2b Explain that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number.	Rational numbers divisors quotients Undefined quotient
NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.2b Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If $p$ and $q$ are integers, then $-(p/q) = (-p)/q = p/(-q)$ . Interpret quotients of rational numbers by describing real-world contexts.	Divide rational numbers	7.NS.2b Interpret quotients of rational numbers by describing real-world contexts.	Rational numbers divisors quotients Undefined quotient

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.2c Apply properties of operations as strategies to multiply and divide rational numbers.	divide rational numbers	7.NS.2c Apply properties of operations as strategies to divide rational numbers.	properties of operations rational numbers
NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.2c Apply properties of operations as strategies to multiply and divide rational numbers.	Multiplication Rational Numbers	7.NS.2c Apply properties of operations as strategies to multiply rational numbers.	Associative Commutative Multiplicative Identity
NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.2d Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.	rational numbers	7.NS.2d Convert a rational number to a decimal using long division	long division decimal place value
NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.2d Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.	rational numbers	7.NS.2d Identify that the decimal form of a rational number terminates in 0s or eventually repeats.	terminating decimal repeating decimal

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NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.3 Solve real-world and mathematical problems involving the four operations with rational numbers.	rational numbers	7.NS.3 Extend the rules for manipulating fractions to complex fractions	Complex fraction
NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	7.NS.3 Solve real-world and mathematical problems involving the four operations with rational numbers.	rational numbers	7.NS.3 Solve real-world and mathematical problems involving the four operations with rational numbers.	