



| DOMAIN: Standards for Mathematical Content | |
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| OCS Code: | Strand: <i>Ratios and Proportional Relationships (RP)</i> |
| 6.SMC.RP.1 | Understand ratio concepts and use ratio reasoning to solve problems. |
| 6.SMC.RP.1.1.a | Use ratio language to describe a ratio relationship between two quantities |
| 6.SMC.RP.1.2-1.a | Compare a unit rate a/b with a ratio $a:b$ with $b \neq 0$ |
| 6.SMC.RP.1.2-2.a | Use rate language in the context of a ratio relationship |
| 6.SMC.RP.1.3-1.b | Make tables of equivalent ratios relating quantities with whole number measurements |
| 6.SMC.RP.1.3-2.b | Find missing values in a table of equivalent ratios relating quantities with whole number measurements |
| 6.SMC.RP.1.3-3.b | Plot pairs of values of equivalent ratios on the coordinate plane |
| 6.SMC.RP.1.3-4.b | Compare equivalent ratios using tables |
| 6.SMC.RP.1.3-5.c | Solve unit rate problems including those involving unit pricing and constant speed |
| 6.SMC.RP.1.3-6.b | Find a percent of a quantity as a rate per 100 |
| 6.SMC.RP.1.3-7.b | Solve problems by finding the whole, given a part and the percent |
| 6.SMC.RP.1.3-8.b | Convert measurement units using ratio reasoning |
| 6.SMC.RP.1.3-9.b | Manipulate measurement units when multiplying or dividing quantities |
| 6.SMC.RP.1.3-10.b | Transform measurement units when multiplying or dividing quantities |
| OCS Code: | Strand: <i>The Number System (NS)</i> |
| 6.SMC.NS.1 | Apply and extend previous understandings of multiplication and division to divide fractions by fractions. |
| 6.SMC.NS.1.1-1.b | Interpret quotients of fractions |
| 6.SMC.NS.1.1-2.b | Compute quotients of fractions |
| 6.SMC.NS.1.1-3.b | Solve word problems involving division of fractions by fractions |
| 6.SMC.NS.2 | Compute fluently with multi-digit numbers and find common factors and multiples. |
| 6.SMC.NS.2.2.a | Divide multi-digit numbers fluently using the standard algorithm |
| 6.SMC.NS.2.3.a | Add, subtract, multiply, and divide multi-digit decimals fluently using the standard algorithm for each operation |
| 6.SMC.NS.2.4-1.b | Find the greatest common factor of two whole numbers less than or equal to 100 |
| 6.SMC.NS.2.4-2.b | Find the least common multiple of two whole numbers less than or equal to 12 |
| 6.SMC.NS.2.4-3.b | Use the distributive property to express a sum of two whole numbers from 1 to 100 with a common factor as a multiple of a sum of two whole numbers with no common factor |
| 6.SMC.NS.3 | Apply and extend previous understandings of numbers to the system of rational numbers. |
| 6.SMC.NS.3.1-1.b | Show that positive and negative numbers are used together to describe quantities having opposite directions or values |
| 6.SMC.NS.3.1-2.b | Explain the meaning of zero when using positive and negative numbers to represent quantities in real-world contexts |
| 6.SMC.NS.3.2-1.a | Express opposite signs of numbers as indicating locations on opposite sides of 0 on the number line |
| 6.SMC.NS.3.2-2.a | Show that the opposite of the opposite of a number is the number itself |
| 6.SMC.NS.3.2-3.a | Show that 0 is its own opposite |
| 6.SMC.NS.3.2-4.b | Show that signs of numbers in ordered pairs indicate locations in quadrants of the coordinate plane |
| 6.SMC.NS.3.2-5.b | Show that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes in quadrants of the coordinate plane |
| 6.SMC.NS.3.2-6.a | Find integers and other rational numbers on a horizontal or vertical number line diagram |
| 6.SMC.NS.3.2-7.b | Position integers and other rational numbers on a horizontal or vertical number line diagram |
| 6.SMC.NS.3.2-8.a | Find pairs of integers and other rational numbers on a coordinate plane |

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| 6.SMC.NS.3.2-9.b | Position pairs of integers and other rational numbers on a coordinate plane |
| 6.SMC.NS.3.3-1.b | Use the relative position of two numbers on a number line diagram to interpret statements of inequality |
| 6.SMC.NS.3.3-2.b | Write statements of order for rational numbers using real-world context |
| 6.SMC.NS.3.3-3.b | Interpret statements of order for rational numbers using real-world contexts |
| 6.SMC.NS.3.3-4.b | Explain statements of order for rational numbers using real-world contexts |
| 6.SMC.NS.3.3-5.c | Use the distance from 0 on the number line to identify the absolute value of a rational number |
| 6.SMC.NS.3.3-6.c | Use the distance from 0 on the number line to interpret the absolute value as magnitude for a positive or negative quantity in a real-world situation |
| 6.SMC.NS.3.3-7.c | Distinguish comparisons of absolute value from statements about order |
| 6.SMC.NS.3.4.c | Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane |
| OCS Code: | Strand: <i>Expressions and Equations (EE)</i> |
| 6.SMC.EE.1 | Apply and extend previous understandings of arithmetic to algebraic expressions. |
| 6.SMC.EE.1.1-1.a | Write numerical expressions involving whole-number exponents |
| 6.SMC.EE.1.1-2.a | Evaluate numerical expressions involving whole-number exponents |
| 6.SMC.EE.1.2-1.a | Write expressions that record operations with numbers and with letters standing for numbers |
| 6.SMC.EE.1.2-2.b | Identify parts of an expression using mathematical terminology |
| 6.SMC.EE.1.2-3.b | Describe one or more parts of an expression as a single entity |
| 6.SMC.EE.1.2-4.b | Evaluate expressions at specific values of their variables |
| 6.SMC.EE.1.2-5.b | Use Order of Operations to perform arithmetic operations in the conventional order when there are no parentheses to specify a particular order |
| 6.SMC.EE.1.3.c | Apply the properties of operations to generate equivalent expressions |
| 6.SMC.EE.1.4.b | Determine the equivalency of two expressions |
| 6.SMC.EE.2 | Reason about and solve one-variable equations and inequalities. |
| 6.SMC.EE.2.1-1.b | Determine the set of values that make an equation or inequality true |
| 6.SMC.EE.2.1-2.b | Use substitution to determine whether a given number in a specified set makes an equation or inequality true |
| 6.SMC.EE.2.2-1.b | Solve a real world or mathematical problem by writing expressions with variables representing numbers |
| 6.SMC.EE.2.2-2.b | Show that a variable represents an unknown number or any number in a specified set |
| 6.SMC.EE.2.3-1.c | Solve real-world and mathematical problems by using equations of the form $x + p = q$ for cases in which p , q and x are all nonnegative rational numbers |
| 6.SMC.EE.2.3-2.c | Solve real-world and mathematical problems by using equations of the form $px = q$ for cases in which p , x and q are all nonnegative rational numbers |
| 6.SMC.EE.2.4-1.c | Write an inequality of the form $x > c$ or $x < c$ to represent a real world or mathematical constraint or condition |
| 6.SMC.EE.2.4-2.b | Show that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions |
| 6.SMC.EE.2.4-3.b | Represent solutions of inequalities of the form $x > c$ or $x < c$ on number line diagrams |
| 6.SMC.EE.3 | Represent and analyze quantitative relationships between dependent and independent variables. |
| 6.SMC.EE.3.1-1.c | Solve a real world problem that uses variables to represent two quantities that change in relationship to one another |
| 6.SMC.EE.3.1-2.c | Write an equation that expresses one quantity as the independent variable and the second quantity as the dependent variable |
| 6.SMC.EE.3.1-3.c | Analyze the relationship between the dependent and independent variables using graphs and tables |

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| 6.SMC.EE.3.1-4.c | Relate graphs and tables to a written equation that expresses one quantity as the independent variable and the second quantity as the dependent variable |
| OCS Code: | Strand: <i>Geometry (G)</i> |
| 6.SMC.G.1 | Solve real-world and mathematical problems involving area, surface area, and volume. |
| 6.SMC.G.1.1-1.a | Find the area of right triangles, non-right triangles, special quadrilaterals, and polygons by composing into rectangles |
| 6.SMC.G.1.1-2.a | Find the area of right triangles, non-right triangles, special quadrilaterals, and polygons by decomposing into triangles and other shapes |
| 6.SMC.G.1.1-3.a | Solve real world problems by finding the area of right triangles, non-right triangles, special quadrilaterals, and polygons by composing into rectangles |
| 6.SMC.G.1.1-4.a | Solve real world problems by finding the area of right triangles, non-right triangles, special quadrilaterals, and polygons by decomposing into triangles and other shapes |
| 6.SMC.G.1.2-1.a | 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 |
| 6.SMC.G.1.2-2.a | Compare the volume of a right rectangular prism with fractional edge lengths found by packing it with unit cubes of unit fraction edge lengths to the volume of a right rectangular prism found by multiplying edge lengths of the prism |
| 6.SMC.G.1.2-3.a | Solve real world and mathematical problems by applying the formula $V = l w h$ to find volumes of right rectangular prisms with fractional edge lengths |
| 6.SMC.G.1.2-4.a | Solve real world and mathematical problems by applying the formula $V = b h$ to find volumes of right rectangular prisms with fractional edge lengths |
| 6.SMC.G.1.3-1.b | Draw polygons in the coordinate plane given coordinates for the vertices |
| 6.SMC.G.1.3-2.b | Use coordinates in the coordinate plane to find the length of a side joining points with the same first or the same second coordinate |
| G.SMC.G.1.3-3.b | Solve real world problems by drawing polygons in the coordinate plane and finding the length of a side joining points with the same first or the same second coordinate |
| 6.SMC.G.1.4-1.c | Represent three-dimensional figures using nets made up of rectangles and triangles |
| 6.SMC.G.1.4-2.c | Use nets made up of rectangles and triangles representing three-dimensional figures to find the surface area of these figures |
| 6.SMC.G.1.4-3.c | Solve real world and mathematical problems by representing three-dimensional figures by using nets made up of rectangles and triangles |
| OCS Code: | Strand: <i>Statistics and Probability (SP)</i> |
| 6.SMC.SP.1 | Develop understanding of statistical variability. |
| 6.SMC.SP.1.1.a | Identify a statistical question |
| 6.SMC.SP.1.2.b | Identify the characteristics of a statistical distribution of a set of data |
| 6.SMC.SP.1.3-1.b | Locate a measure of center for a numerical data set |
| 6.SMC.SP.1.3-2.b | Locate a measure of variation for a numerical data set |
| 6.SMC.SP.2 | Summarize and describe distributions. |
| 6.SMC.SP.2.1.a | Display numerical data in plots on a number line |
| 6.SMC.SP.2.2-1.b | Summarize numerical data sets in relation to their context by reporting the number of observations |
| 6.SMC.SP.2.2-2.b | Summarize numerical data sets in relation to their context by describing how it was measured and its units of measurement |
| 6.SMC.SP.2.2-3.c | Summarize numerical data sets in relation to their context by using quantitative measures of center |
| 6.SMC.SP.2.2-4.c | Summarize numerical data sets in relation to their context by using quantitative measures of variability |
| 6.SMC.SP.2.2-5.c | Summarize numerical data sets by describing overall patterns and deviations from the overall patterns with reference to the context in which the data were gathered |
| 6.SMC.SP.2.2-6.c | Summarize numerical data sets by relating measures of center and variability to the shape of the data distribution in the context in which the data were gathered |



| DOMAIN: Standards for Mathematical Practices | |
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| OCS Code: | Strand: <i>Solve Problems (MP1)</i> |
| 6.SMP.1 | 1. Make sense of problems and persevere in solving them. |
| 6.SMP.1.c | Make sense of problems and persevere in solving them |
| OCS Code: | Strand: <i>Reason (MP2)</i> |
| 6.SMP.2 | 2. Reason abstractly and quantitatively. |
| 6.SMP.2.c | Reason abstractly and quantitatively |
| OCS Code: | Strand: <i>Construct Arguments (MP3)</i> |
| 6.SMP.3 | 3. Construct viable arguments and critique the reasoning of others. |
| 6.SMP.3.c | Construct viable arguments and critique the reasoning of others |
| OCS Code: | Strand: <i>Model (MP4)</i> |
| 6.SMP.4 | 4. Model with mathematics. |
| 6.SMP.4.c | Model with mathematics |
| OCS Code: | Strand: <i>Use Tools (MP5)</i> |
| 6.SMP.5 | 5. Use appropriate tools strategically. |
| 6.SMP.5.c | Use appropriate tools strategically |
| OCS Code: | Strand: <i>Attend to Precision (MP6)</i> |
| 6.SMP.6 | 6. Attend to precision. |
| 6.SMP.6.c | Attend to precision |
| OCS Code: | Strand: <i>Use Structure (MP7)</i> |
| 6.SMP.7 | 7. Look for and make use of structure. |
| 6.SMP.7.c | Look for and make use of structure |
| OCS Code: | Strand: <i>Express Regularity (MP8)</i> |
| 6.SMP.8 | 8. Look for and express regularity in repeated reasoning. |
| 6.SMP.8.c | Look for and express regularity in repeated reasoning |