**2014c Course 2**

**Khan Academy Video Correlations  
By SpringBoard Activity**

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| **SB Activity** | **Video(s)** |
| **Unit 1: Number Systems** | |
| **Activity 1**  *Operations on Positive Rational Numbers*  1-1 Learning Targets:   * Solve problems with decimals, using addition and subtraction. * Justify solutions with decimals, using addition and subtraction. * Estimate decimal sums and differences.   1-2 Learning Targets:   * Estimate decimal products and quotients. * Solve problems involving multiplication and division of decimals.   1-3 Learning Targets:   * Solve problems with fractions using addition, subtraction, multiplication, and division. * Estimate with fractions.   1-4 Learning Targets:   * Convert a fraction to a decimal. * Understand the difference between terminating and repeating decimals. | ***Multiplying and Dividing Decimals*** |
| [**Multiplying decimals example**](https://www.khanacademy.org/math/pre-algebra/decimals-pre-alg/multiplying-decimals-pre-alg/v/multiplying-decimals)  [**Multiplying challenging decimals**](https://www.khanacademy.org/math/pre-algebra/decimals-pre-alg/multiplying-decimals-pre-alg/v/more-involved-multiplying-decimals-example)  [**Dividing by a multi-digit decimal**](https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-arithmetic-operations/cc-6th-div-decimals/v/dividing-decimals)  [**Dividing a whole number by a decimal**](https://www.khanacademy.org/math/cc-fifth-grade-math/cc-5th-arith-operations/cc-5th-dividing-decimals/v/dividing-a-whole-number-by-a-decimal)  [**Dividing a decimal by a whole number**](https://www.khanacademy.org/math/cc-fifth-grade-math/cc-5th-arith-operations/cc-5th-dividing-decimals/v/dividing-a-decimal-by-a-whole-number) |
| ***Fractions*** |
| [**Adding, subtracting fractions**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-fractions-decimals/cc-7th-add-sub-rational-numbers/v/adding-and-subtracting-three-fractions)  [**Multiplying negative and positive fractions**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-fractions-decimals/cc-7th-mult-div-frac/v/multiplying-negative-and-positive-fractions)  [**Dividing negative fractions**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-fractions-decimals/cc-7th-mult-div-frac/v/examples-of-dividing-negative-fractions) |
| ***Numbers in Different Forms*** |
| [**Adding, subtracting numbers in different formats**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-fractions-decimals/cc-7th-add-sub-rational-numbers/v/adding-and-subtracting-a-decimal-percentage-and-fraction)  [**Adding, subtracting fractions, decimals, percentages**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-fractions-decimals/cc-7th-add-sub-rational-numbers/v/adding-fractions-decimals-and-percentages)  [**Fraction to decimal**](https://www.khanacademy.org/math/pre-algebra/decimals-pre-alg/decimal-to-fraction-pre-alg/v/converting-fractions-to-decimals-example)  [**Converting fractions to decimals**](https://www.khanacademy.org/math/pre-algebra/decimals-pre-alg/decimal-to-fraction-pre-alg/v/converting-fractions-to-decimals) |
| **Activity 2**  *Addition and Subtraction of Integers*  2-1 Learning Targets:   * Add two or more integers. * Identify and combine opposites. * Solve real-world problems by adding integers.   2-2 Learning Targets:   * Subtract integers. * Find distances using absolute value | ***Adding and Subtracting Integers*** |
| [**Learn how to add and subtract negative numbers**](https://www.khanacademy.org/math/pre-algebra/negatives-absolute-value-pre-alg/add-subtract-negatives-pre-alg/v/adding-and-subtracting-negative-number-examples)  [**Adding negative numbers**](https://www.khanacademy.org/math/pre-algebra/negatives-absolute-value-pre-alg/add-subtract-negatives-pre-alg/v/adding-negative-numbers)  [**Adding numbers with different signs**](https://www.khanacademy.org/math/pre-algebra/negatives-absolute-value-pre-alg/add-subtract-negatives-pre-alg/v/adding-integers-with-different-signs)  [**Subtracting a negative = adding a positive**](https://www.khanacademy.org/math/pre-algebra/negatives-absolute-value-pre-alg/add-subtract-negatives-pre-alg/v/why-subtracting-a-negative-equivalent-to-adding-a-positive)  [**Inverse property of addition**](https://www.khanacademy.org/math/pre-algebra/order-of-operations/arithmetic_properties/v/inverse-property-of-addition) |
| ***Absolute Value*** |
| [**Absolute value and number lines**](https://www.khanacademy.org/math/pre-algebra/negatives-absolute-value-pre-alg/abs-value-pre-alg/v/absolute-value-and-number-lines)  [**Absolute value of integers**](https://www.khanacademy.org/math/pre-algebra/negatives-absolute-value-pre-alg/abs-value-pre-alg/v/absolute-value-of-integers)  [**Absolute value word problems**](https://www.khanacademy.org/math/pre-algebra/negatives-absolute-value-pre-alg/abs-value-pre-alg/v/absolute-value-word-problems-exercise)  [**Constructing and interpreting absolute value**](https://www.khanacademy.org/math/pre-algebra/negatives-absolute-value-pre-alg/abs-value-pre-alg/v/constructing-and-interpreting-absolute-value) |
| **Activity 3**  *Multiplication and Division of Integers*  3-1 Learning Targets:   * Multiply two or more integers. * Apply properties of operations to multiply integers. * Solve real-world problems by multiplying, adding, and subtracting integers.   3-2 Learning Targets:   * Divide integers. * Solve real-world problems by dividing integers and possibly adding, subtracting, or multiplying integers as well. | ***Understanding Multiplication with Negative Numbers*** |
| [**Why a negative times a negative is a positive**](https://www.khanacademy.org/math/pre-algebra/negatives-absolute-value-pre-alg/mult-div-negatives-pre-alg/v/why-a-negative-times-a-negative-is-a-positive)  [**Why a negative times a negative makes intuitive sense**](https://www.khanacademy.org/math/pre-algebra/negatives-absolute-value-pre-alg/mult-div-negatives-pre-alg/v/why-a-negative-times-a-negative-makes-intuitive-sense) |
| ***Multiplying Integers*** |
| [**Multiplying positive and negative numbers**](https://www.khanacademy.org/math/pre-algebra/negatives-absolute-value-pre-alg/mult-div-negatives-pre-alg/v/multiplying-positive-and-negative-numbers)  [**Multiplying numbers with different signs**](https://www.khanacademy.org/math/pre-algebra/negatives-absolute-value-pre-alg/mult-div-negatives-pre-alg/v/multiplying-negative-real-numbers) |
| ***Dividing Integers*** |
| [**Dividing positive and negative numbers**](https://www.khanacademy.org/math/pre-algebra/negatives-absolute-value-pre-alg/mult-div-negatives-pre-alg/v/dividing-positive-and-negative-numbers) |
| **Activity 4**  *Operations on Rational Numbers*  4-1 Learning Targets:   * Given a rational number, determine whether the number is a whole number, an integer, or a rational number that is not an integer. * Describe relationships between sets of rational numbers.   4-2 Learning Targets:   * Add two or more rational numbers. * Use properties of addition to add rational numbers. * Solve real-world problems by adding two or more rational numbers.   4-3 Learning Targets:   * Subtract rational numbers. * Apply the fact that for all rational numbers a and b, a − b = a + (−b), to add and subtract rational numbers. * Solve real-world problems by subtracting rational numbers and possibly by adding rational numbers as well.   4-4 Learning Targets:   * Multiply and divide rational numbers. * Apply properties of operations to multiply and divide rational numbers. * Solve real-world problems involving the four operations with rational numbers. | ***Sets of Numbers*** |
| [**Number sets**](https://www.khanacademy.org/math/pre-algebra/fractions-pre-alg/number-sets-pre-alg) |
| ***Adding and Subtracting Rational Numbers*** |
| [**Adding, subtracting fractions**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-fractions-decimals/cc-7th-add-sub-rational-numbers/v/adding-and-subtracting-three-fractions) |
| ***Multiplying and Dividing Rational Numbers*** |
| [**Multiplying negative and positive fractions**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-fractions-decimals/cc-7th-mult-div-frac/v/multiplying-negative-and-positive-fractions)  [**Dividing negative fractions**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-fractions-decimals/cc-7th-mult-div-frac/v/examples-of-dividing-negative-fractions) |
| **Unit 2: Expressions and Equations** | |
| **Activity 5**  *Properties of Operations*  5-1 Learning Targets:   * Identify properties of operations. * Apply properties of operations to simplify linear expressions.   5-2 Learning Targets:   * Apply properties to factor and expand linear expressions. * Rewrite expressions to see how the problem and quantities are related. | ***Arithmetic Properties*** |
| [**Commutative property for addition**](http://www.khanacademy.org/math/pre-algebra/order-of-operations/arithmetic_properties/v/commutative-property-for-addition)  [**Commutative law of addition**](http://www.khanacademy.org/math/pre-algebra/order-of-operations/arithmetic_properties/v/commutative-law-of-addition)  [**Commutative law of multiplication**](http://www.khanacademy.org/math/pre-algebra/order-of-operations/arithmetic_properties/v/commutative-law-of-multiplication)  [**Associative law of addition**](http://www.khanacademy.org/math/pre-algebra/order-of-operations/arithmetic_properties/v/associative-law-of-addition)  [**Associative law of multiplication**](http://www.khanacademy.org/math/pre-algebra/order-of-operations/arithmetic_properties/v/associative-law-of-multiplication)  [**Properties of numbers 1**](http://www.khanacademy.org/math/pre-algebra/order-of-operations/arithmetic_properties/v/properties-of-numbers-1)  [**Number properties terminology 1**](http://www.khanacademy.org/math/pre-algebra/order-of-operations/arithmetic_properties/v/number-properties-terminology-1)  [**Identity property of 1**](http://www.khanacademy.org/math/pre-algebra/order-of-operations/arithmetic_properties/v/identity-property-of-1)  [**Identity property of 1 (second example)**](http://www.khanacademy.org/math/pre-algebra/order-of-operations/arithmetic_properties/v/identity-property-of-1-second-example)  [**Identity property of 0**](http://www.khanacademy.org/math/pre-algebra/order-of-operations/arithmetic_properties/v/identity-property-of-0)  [**Inverse property of addition**](http://www.khanacademy.org/math/pre-algebra/order-of-operations/arithmetic_properties/v/inverse-property-of-addition)  [**Inverse property of multiplication**](http://www.khanacademy.org/math/pre-algebra/order-of-operations/arithmetic_properties/v/inverse-property-of-multiplication)  [**Properties of numbers 2**](http://www.khanacademy.org/math/pre-algebra/order-of-operations/arithmetic_properties/v/properties-of-numbers-2) |
| **Activity 6**  *Writing and Solving Equations*  6-1 Learning Targets:   * Use variables to represent quantities in real-world problems. * Model and write two-step equations to represent real-world problems.   6-2 Learning Targets:   * Solve two-step equations. * Solve real-world problems by writing an equation of the form px+ q =r. | ***Understanding Terminology*** |
| [**What is a variable?**](https://www.khanacademy.org/math/algebra-basics/core-algebra-expressions/core-algebra-variables-and-expressions/v/what-is-a-variable)  [**Expression terms, factors and coefficients**](https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-expressions-and-variables/cc-6th-writing-expressions/v/expression-terms-factors-and-coefficients) |
| ***Solving Two-Step Equations*** |
| [**Why we do the same thing to both sides: Simple equations**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-variables-expressions/cc-7th-2-step-equations/v/why-we-do-the-same-thing-to-both-sides-simple-equations)  [**Solving two-step equations**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-variables-expressions/cc-7th-2-step-equations/v/why-we-do-the-same-thing-to-both-sides-two-step-equations)  [**Solving a more complicated equation**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-variables-expressions/cc-7th-2-step-equations/v/equations-2) |
| **Activity 7**  *Solving and Graphing Inequalities*  7-1 Learning Targets:   * Represent quantities in a real-world problem. * Construct two-step inequalities to solve problems.   7-2 Learning Targets:   * Solve two-step inequalities. * Construct two-step inequalities to solve problems. | ***Solving Two-Step Inequalities*** |
| [**Solving a two-step inequality**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-variables-expressions/cc-7th-inequalities/v/solving-inequalities)  [**Constructing and solving a two-step inequality**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-variables-expressions/cc-7th-inequalities/v/interpreting-inequalities)  [**Constructing, solving two-step inequality example**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-variables-expressions/cc-7th-inequalities/v/writing-and-using-inequalities-3) |
| **Unit 3: Ratio and Proportion** | |
| **Activity 8**  *Ratio and Unit Rates*  8-1 Learning Targets:   * Express relationships using ratios. * Find unit rates.   8-2 Learning Targets:   * Determine whether quantities are in a proportional relationship. * Solve problems involving proportional relationships.   1. Learning Targets: * Convert between measurement. Use unit rates and proportions for conversions. | ***Ratios and Unit Rates*** |
| [**Solving unit rates problem**](https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-ratios-prop-topic/cc-6th-rates/v/finding-unit-rates) |
| ***Identifying and Solving Proportions*** |
| [**Writing proportions**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-ratio-proportion/cc-7th-constructing-proportions/v/writing-proportions)  [**Solve a proportion with an unknown variable**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-ratio-proportion/cc-7th-constructing-proportions/v/find-an-unknown-in-a-proportion)  [**Solve a proportion with unknown variable word problem**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-ratio-proportion/cc-7th-constructing-proportions/v/find-an-unknown-in-a-proportion-2)  [**Analyzing proportional relationships from a table**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-ratio-proportion/cc-7th-proportional-rel/v/analyzing-and-identifying-proportional-relationships-ex3) |
| **Activity 9**  *Proportional Reasoning*  9-1 Learning Targets:   * Given representations of proportional relationships, represent constant rates of change with equations of the form y = kx. * Determine the meaning of points on a graph of a proportional relationship. * Solve problems involving proportional relationships.   1. Learning Targets: * Determine the constant of proportionality from a table, graph, equation, or verbal description of a proportional relationship. | ***Analyzing Proportional Relationships*** |
| [**Analyzing proportional relationships from a table**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-ratio-proportion/cc-7th-proportional-rel/v/analyzing-and-identifying-proportional-relationships-ex3) |
| ***Constructing and Solving Proportional Relationships*** |
| [**Constructing an equation for a proportional relationship**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-ratio-proportion/cc-7th-proportional-rel/v/constructing-an-equation-for-a-proportional-relationship)  [**Solve a proportion with an unknown variable**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-ratio-proportion/cc-7th-constructing-proportions/v/find-an-unknown-in-a-proportion) |
| **Activity 10**  *Proportional Relationships and Scale*  10-1 Learning Targets:   * Represent proportional relationships by equations. * Determine the constant of proportionality from a table, graph, equation, or verbal description of a proportional relationship. * Solve problems using scale drawings.   10-2 Learning Targets:   * Given the scale of a map and a distance on a map, find the actual distance. * Convert scale factors with units to scale factors without units.   10-3 Learning Targets:   * Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing. * Reproduce a scale drawing at a different scale. | ***Constructing and Solving Proportional Relationships*** |
| [**Constructing an equation for a proportional relationship**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-ratio-proportion/cc-7th-proportional-rel/v/constructing-an-equation-for-a-proportional-relationship)  [**Construction proportions to solve application problems**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-ratio-proportion/cc-7th-constructing-proportions/e/constructing-proportions-to-solve-application-problems)  [**Solve a proportion with an unknown variable**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-ratio-proportion/cc-7th-constructing-proportions/v/find-an-unknown-in-a-proportion) |
| ***Using Scale Drawings*** |
| [**How to make a scale drawing**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-geometry/cc-7th-scale-drawings/v/constructing-scale-drawings)  [**Interpreting a scale drawing**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-geometry/cc-7th-scale-drawings/v/scale-drawings-example)  [**Solve a scale drawing word problem**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-geometry/cc-7th-scale-drawings/v/scale-drawing-example-2) |
| **Activity 11**  *Percent Problems*  11-1 Learning Targets:   * Find a percent of a number. * Find the percent that one number is of another. * Given the percent and the whole, find the part.   1. Learning Targets: * Solve problems about sales tax, tips, and commissions. | ***Finding Percent*** |
| [**Finding a percentage**](https://www.khanacademy.org/math/pre-algebra/decimals-pre-alg/percent-intro-pre-alg/v/finding-percentages-example) |
| ***Percent Problems*** |
| [**Solving percent problems**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-fractions-decimals/cc-7th-percent-word-problems/v/solving-percent-problems)  [**Percent word problem example 1**](https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-ratios-prop-topic/percent_word_problems/v/another-percent-word-problem)  [**Percent word problem example 2**](https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-ratios-prop-topic/percent_word_problems/v/percent-word-problems)  [**Percent word problem example 3**](https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-ratios-prop-topic/percent_word_problems/v/percent-word-problems-1-example-2)  [**Percent word problem example 4**](https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-ratios-prop-topic/percent_word_problems/v/solving-percent-problems-2)  [**Percent word problem example 5**](https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-ratios-prop-topic/percent_word_problems/v/solving-percent-problems-3) |
| ***Percent and Decimals*** |
| [**Converting percents to decimals**](https://www.khanacademy.org/math/pre-algebra/decimals-pre-alg/percent-intro-pre-alg/v/converting-percents-to-decimals-ex-1)  [**Converting percents to decimals example 2**](https://www.khanacademy.org/math/pre-algebra/decimals-pre-alg/percent-intro-pre-alg/v/converting-percents-to-decimals-ex-2)  [**Converting percent to decimal and fraction**](https://www.khanacademy.org/math/pre-algebra/decimals-pre-alg/percent-intro-pre-alg/v/representing-a-number-as-a-decimal-percent-and-fraction)  [**Converting decimals to percents**](https://www.khanacademy.org/math/pre-algebra/decimals-pre-alg/percent-intro-pre-alg/v/converting-decimals-to-percents-ex-1)  [**Converting decimals to percents example 2**](https://www.khanacademy.org/math/pre-algebra/decimals-pre-alg/percent-intro-pre-alg/v/converting-decimals-to-percents-ex-2) |
| **Activity 12**  *More Percent Problems*  12-1 Learning Targets:   * Solve problems about percent increase, percent decrease, markups, and discounts.   12-2 Learning Targets:   * Solve problems about percent increase, percent decrease, markups, and discounts.   12-3 Learning Targets:   * Solve problems about interest.   12-4 Learning Targets:   * Solve problems about percent error. | ***Percent Problems*** |
| [**Growing by a percentage**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-fractions-decimals/cc-7th-percent-word-problems/v/growing-by-a-percentage)  [**Solving percent problems**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-fractions-decimals/cc-7th-percent-word-problems/v/solving-percent-problems) |

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| **Unit 4: Geometry** | |
| **Activity 13**  *Angle Pairs*  13-1 Learning Targets:   * Use facts about complementary, supplementary, and adjacent angles to write equations. * Solve simple equations for an unknown angle in a figure.   13-2 Learning Targets:   * Write and solve equations using geometry concepts. * Solve problems involving the sum of the measures of the angles in a triangle. * Solve equations involving angle relationships. | ***Measures of Angles*** |
| [**Complementary and supplementary angles**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-geometry/cc-7th-angles/v/complementary-and-supplementary-angles)  [**Find measure of complementary angles**](https://www.khanacademy.org/math/geometry/parallel-and-perpendicular-lines/complementary-supplementary-angl/v/example-using-algebra-to-find-measure-of-complementary-angles)  [**Find measure of supplementary angles**](https://www.khanacademy.org/math/geometry/parallel-and-perpendicular-lines/complementary-supplementary-angl/v/example-using-algebra-to-find-measure-of-supplementary-angles)  [**Introduction to vertical angles**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-geometry/cc-7th-angles/v/angles-at-the-intersection-of-two-lines)  [**Find measure of vertical angles**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-geometry/cc-7th-angles/v/solving-for-unknown-angles)  [**Find measure of angles in a word problem**](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-geometry/cc-7th-angles/v/pie-splitting)  [**Solving for an angle**](https://www.khanacademy.org/math/basic-geo/basic-geo-angles/basic-geo-interpreting%20angles/v/decomposing-angles) |
| **Activity 14**  *Triangle Measurements*  14-1 Learning Targets:   * Decide if three side lengths determine a triangle. * Draw a triangle given measures of sides.   14-2 Learning Targets:   * Draw a triangle given measures of angles and/or sides. * Recognize when given conditions determine a unique triangle, more than one triangle, or no triangle. | ***Constructing Triangles*** |
| [***Construct a triangle with constraints***](https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-geometry/cc-7th-constructing-slicing-geometric-shapes/v/constructing-triangles-with-constraints) |
| **Activity 15**  *Similar Figures*  15-1 Learning Targets:   * Identify whether or not polygons are similar. * Find a common ratio for corresponding side lengths of similar polygons.   15-2 Learning Targets:   * Apply properties of similar figures to determine missing lengths. * Solve problems using similar figures. | ***Similar Triangles*** |
| [**Similar triangle basics**](https://www.khanacademy.org/math/algebra-basics/core-algebra-geometry/copy-of-triangle_similarlity/v/similar-triangle-basics)  [**Similar triangles**](https://www.khanacademy.org/math/geometry/similarity/old_school_similarity/v/similar-triangles)  [**Similar triangles (part 2)**](https://www.khanacademy.org/math/geometry/similarity/old_school_similarity/v/similar-triangles-part-2) |
| **Activity 16**  *Circles: Circumference and Area*  16-1 Learning Targets:   * Investigate the ratio of the circumference of a circle to its diameter. * Apply the formula to find the circumference of a circle.   16-2 Learning Targets:   * Approximate the area of a circle. * Apply the formula to find the area of a circle. | ***Circle Basics*** |
| [**Circles: radius, diameter, circumference and Pi**](http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-geometry/cc-7th-area-circumference/v/circles-radius-diameter-and-circumference)  [**Labeling parts of a circle**](http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-geometry/cc-7th-area-circumference/v/parts-of-a-circle) |
| ***Circumference of a Circle*** |
| [**Circumference of a circle**](http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-geometry/cc-7th-area-circumference/v/circumference-from-area) |
| ***Area of a Circle*** |
| [**Area of a circle**](http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-geometry/cc-7th-area-circumference/v/area-of-a-circle) |
| **Activity 17**  *Composite Area*  17-1 Learning Targets:   * Determine the area of geometric figures. * Determine the area of composite figures.   17-2 Learning Targets:   * Determine the area of composite figures. * Solve problems involving area. | ***Area of Polygons*** |
| [**Perimeter and area: the basics**](http://www.khanacademy.org/math/basic-geo/basic-geo-area-perimeter/basic-geo-area-perimeter-polygon/v/perimeter-and-area-basics)  [**Area of a parallelogram**](http://www.khanacademy.org/math/basic-geo/basic-geo-area-perimeter/basic-geo-area-perimeter-polygon/v/area-of-a-parallelogram)  [**Area of a trapezoid**](http://www.khanacademy.org/math/basic-geo/basic-geo-area-perimeter/basic-geo-area-perimeter-polygon/v/area-of-a-trapezoid-1)  [**Area of a kite**](http://www.khanacademy.org/math/basic-geo/basic-geo-area-perimeter/basic-geo-area-perimeter-polygon/v/area-of-a-kite)  [**Finding area by breaking up the shape**](http://www.khanacademy.org/math/basic-geo/basic-geo-area-perimeter/basic-geo-area-perimeter-polygon/v/area-breaking-up-shape)  [**Finding area by rearranging parts**](http://www.khanacademy.org/math/basic-geo/basic-geo-area-perimeter/basic-geo-area-perimeter-polygon/v/area-comparisons)  [**Area of strange quadrilateral**](http://www.khanacademy.org/math/basic-geo/basic-geo-area-perimeter/basic-geo-area-perimeter-polygon/v/area-of-strange-quadrilateral) |
| **Activity 18**  *Sketching Solids*  18-1 Learning Targets:   * Draw different views of three-dimensional solids. * Identify cross sections and other views of pyramids and prisms.   18-2 Learning Targets:   * Calculate the lateral and total surface area of prisms.   1. Learning Targets: * Calculate the lateral and total surface area of pyramids. | ***Nets of Three-dimensional Figures*** |
| [**Nets of polyhedra**](http://www.khanacademy.org/math/basic-geo/basic-geo-volume-surface-area/basic-geo-surface-area/v/nets-of-polyhedra)  [**Finding surface area: nets of polyhedra**](http://www.khanacademy.org/math/basic-geo/basic-geo-volume-surface-area/basic-geo-surface-area/v/surface-area-from-net) |
| **Activity 19**  *Volume*  19-1 Learning Targets:   * Calculate the volume of prisms.   19-2 Learning Targets:   * Calculate the volume of pyramids. * Calculate the volume of complex solids. * Understand the relationship between the volume of a prism and the volume of a pyramid. | ***Volume of Three-dimensional Figures*** |
| [**Volume of a rectangular prism: fractional dimensions**](http://www.khanacademy.org/math/basic-geo/basic-geo-volume-surface-area/basic-geo-volume/v/volume-of-a-rectangular-prism-with-fractional-dimensions)  [**Volume of a rectangular prism: fractional cubes**](http://www.khanacademy.org/math/basic-geo/basic-geo-volume-surface-area/basic-geo-volume/v/volume-of-a-rectangular-prism-with-fractional-cubes)  [**Volume of a rectangular prism: word problem**](http://www.khanacademy.org/math/basic-geo/basic-geo-volume-surface-area/basic-geo-volume/v/marbles-in-tank-volume)  [**Find the volume of a triangular prism and cube**](http://www.khanacademy.org/math/basic-geo/basic-geo-volume-surface-area/basic-geo-volume/v/solid-geometry-volume) |
| **Unit 5: Probability** | |
| **Activity 20**  *Exploring Probability*  20-1 Learning Targets:   * Reason about the likelihood of winning a game based on a probability experiment. * Provide support for winning strategies of a game based on a probability experiment.   20-2 Learning Targets:   * Collect data about chance processes in frequency tables or lists. * Determine probabilities for outcomes in a probability experiment. * Describe the results of an investigation and support the conclusions.   20-3 Learning Targets:   * Interpret a probability as the fraction of the number of times that an outcome occurs when a probability experiment is repeated many times. * Estimate probabilities of outcomes in probability experiments.   20-4 Learning Targets:   * Make decisions based on probabilities. * Expect variation in results from chance processes. * Write about chance processes and justify conclusions based on probability experiments. | ***Basic Probability*** |
| [**Probability explained**](http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-probability-statistics/cc-7th-basic-prob/v/basic-probability)  [**Determining probability**](http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-probability-statistics/cc-7th-basic-prob/v/probability-space-exercise-example)  [**Finding probability example**](http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-probability-statistics/cc-7th-basic-prob/v/simple-probability)  [**Finding probability example 2**](http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-probability-statistics/cc-7th-basic-prob/v/probability-1-module-examples)  [**Finding probability example 3**](http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-probability-statistics/cc-7th-basic-prob/v/events-and-outcomes-1) |
| **Activity 21**  *Probability*  21-1 Learning Targets:   * Recognize when a probability experiment has outcomes that are equally likely. * Calculate probabilities for a probability experiment with equally likely outcomes. * Know what “selected at random” means.   21-2 Learning Targets:   * Calculate theoretical probabilities for a probability experiment. * Estimate probabilities by observing outcomes of a probability experiment.   21-3 Learning Targets:   * Compare theoretical probabilities and estimated probabilities. | ***Comparing Probabilities*** |
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| **Activity 22**  *Games and Probability*  22-1 Learning Targets:   * Use observed outcomes to estimate probabilities. * Use tables to represent the possible outcomes of a probability experiment.   22-2 Learning Targets:   * Use tables to represent the possible outcomes of a probability experiment. * Assign probabilities to outcomes in a sample space. * Use probabilities assigned to outcomes in a sample space to compute event probabilities.   22-3 Learning Targets:   * Use observed outcomes to estimate probabilities. * Use tables and tree diagrams to represent the possible outcomes of a probability experiment. * Calculate the probabilities of events for a probability experiment with equally likely outcomes.   22-4 Learning Targets:   * Use observed outcomes to estimate probabilities. * Use tables and tree diagrams to represent the possible outcomes of a probability experiment. | ***Constructing Probability Models*** |
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| **Activity 23**  *Probability*  23-1 Learning Targets:   * Use artificial processes to simulate outcomes. * Assign random digits to outcomes. * Carry out a simulation using random digits.   23-2 Learning Targets:   * Design and carry out a simulation. * Use a simulation to estimate a probability.   23-3 Learning Targets:   * Design and carry out the simulation of a compound event. * Use a simulation to estimate the probability of a compound event.   23-4 Learning Targets:   * Design and carry out the simulation of a compound event. * Use a simulation to estimate the probability of a compound event. |  |
| **Unit 6: Statistics** | |
| **Activity 24**  *Statistics*  24-1 Learning Targets:   * Determine from what population data have been collected. * Determine if a data collection is a census. * Distinguish between a population and a sample.   24-2 Learning Targets:   * Understand that the way a sample is selected is important. * Understand that random sampling is a fair method for selecting a sample. * Use the random-number digit table to select a random sample. | **Sampling** |
| [**Reasonable samples**](http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-probability-statistics/cc-7th-population-sampling/v/reasonable-samples)  [**Inferring population mean from sample mean**](http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-probability-statistics/cc-7th-population-sampling/v/statistics-sample-vs-population-mean) |
| **Activity 25**  *Exploring Sampling Variability*  25-1 Learning Targets:   * Understand the difference between variability in a population and sampling variability. * Know that increasing the sample size decreases sampling variability.   25-2 Learning Targets:   * Use data from a random sample to estimate a population characteristic. * Understand the implications of sampling variability when estimating a population characteristic. * Use data from a random sample to draw a conclusion about a population. | ***Sampling*** |
| [**Reasonable samples**](http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-probability-statistics/cc-7th-population-sampling/v/reasonable-samples)  [**Inferring population mean from sample mean**](http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-probability-statistics/cc-7th-population-sampling/v/statistics-sample-vs-population-mean) |
| **Activity 26**  *Comparative Statistics*  26-1 Learning Targets:   * Compare the means of two numerical samples. * Understand that a *meaningful* difference between two sample means is one that is greater than would have been expected due to sampling variability alone. * Use data from random samples to compare populations   1. Learning Targets: * Compare population means for populations with approximately the same amount of variability. * Express the difference in the sample means in terms of mean absolute deviation (MAD). * Draw differences based on sample size and the difference in sample means relative to the MAD   26-3 Learning Targets:   * Calculate the mean absolute deviation (MAD) * Use two random samples to compare population means. * Draw conclusions about populations with similar amounts of variability based on the difference of two sample means | ***Comparative Statistics*** |
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| **.Unit 7: Personal Financial Literacy** | |
| **Activity 27**  *Budgeting and Money Management* | **N/A** |

[**Probability explained**](http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-probability-statistics/cc-7th-basic-prob/v/basic-probability)

[**Determining probability**](http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-probability-statistics/cc-7th-basic-prob/v/probability-space-exercise-example)

[**Finding probability example**](http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-probability-statistics/cc-7th-basic-prob/v/simple-probability)

[**Finding probability example 2**](http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-probability-statistics/cc-7th-basic-prob/v/probability-1-module-examples)

[**Finding probability example 3**](http://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-probability-statistics/cc-7th-basic-prob/v/events-and-outcomes-1)