**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*** |
|  |
| **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*** |
|  |
| **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)