Here is a list of all of the skills students learn in eighth grade! The skills are organized into categories, and you can move your mouse over any skill name to see a sample question. To start practicing, just click on any link. IXL will track your score, and the questions will even increase in difficulty as you improve!

**Number theory**

* A.1 [Factors](http://www.ixl.com/math/grade-8/factors)
* A.2 [Divisibility rules](http://www.ixl.com/math/grade-8/divisibility-rules)
* A.3 [Prime or composite](http://www.ixl.com/math/grade-8/prime-or-composite)
* A.4 [Prime factorization](http://www.ixl.com/math/grade-8/prime-factorization)
* A.5 [Greatest common factor](http://www.ixl.com/math/grade-8/greatest-common-factor)
* A.6 [Least common multiple](http://www.ixl.com/math/grade-8/least-common-multiple)
* A.7 [GCF and LCM: word problems](http://www.ixl.com/math/grade-8/gcf-and-lcm-word-problems)
* A.8 [Classify numbers](http://www.ixl.com/math/grade-8/classify-numbers)

**Integers**

* B.1 [Integers on number lines](http://www.ixl.com/math/grade-8/integers-on-number-lines)
* B.2 [Absolute value and opposite integers](http://www.ixl.com/math/grade-8/absolute-value-and-opposite-integers)
* B.3 [Compare and order integers](http://www.ixl.com/math/grade-8/compare-and-order-integers)
* B.4 [Integer inequalities with absolute values](http://www.ixl.com/math/grade-8/integer-inequalities-with-absolute-values)

**Operations with integers**

* C.1 [Integer addition and subtraction rules](http://www.ixl.com/math/grade-8/integer-addition-and-subtraction-rules)
* C.2 [Add and subtract integers using counters](http://www.ixl.com/math/grade-8/add-and-subtract-integers-using-counters)
* C.3 [Add and subtract integers](http://www.ixl.com/math/grade-8/add-and-subtract-integers)
* C.4 [Add and subtract three or more integers](http://www.ixl.com/math/grade-8/add-and-subtract-three-or-more-integers)
* C.5 [Add and subtract integers: word problems](http://www.ixl.com/math/grade-8/add-and-subtract-integers-word-problems)
* C.6 [Integer multiplication and division rules](http://www.ixl.com/math/grade-8/integer-multiplication-and-division-rules)
* C.7 [Multiply and divide integers](http://www.ixl.com/math/grade-8/multiply-and-divide-integers)
* C.8 [Simplify expressions involving integers and absolute values](http://www.ixl.com/math/grade-8/simplify-expressions-involving-integers-and-absolute-values)
* C.9 [Evaluate variable expressions with integers and absolute values](http://www.ixl.com/math/grade-8/evaluate-variable-expressions-with-integers-and-absolute-values)

**Rational numbers**

* D.1 [Identify rational and irrational numbers](http://www.ixl.com/math/grade-8/identify-rational-and-irrational-numbers)
* D.2 [Simplify fractions](http://www.ixl.com/math/grade-8/simplify-fractions)
* D.3 [Least common denominator](http://www.ixl.com/math/grade-8/least-common-denominator)
* D.4 [Round decimals and mixed numbers](http://www.ixl.com/math/grade-8/round-decimals-and-mixed-numbers)
* D.5 [Absolute value of rational numbers](http://www.ixl.com/math/grade-8/absolute-value-of-rational-numbers)
* D.6 [Convert between decimals and fractions or mixed numbers](http://www.ixl.com/math/grade-8/convert-between-decimals-and-fractions-or-mixed-numbers)
* D.7 [Compare rational numbers](http://www.ixl.com/math/grade-8/compare-rational-numbers)
* D.8 [Put rational numbers in order](http://www.ixl.com/math/grade-8/put-rational-numbers-in-order)

**Operations with rational numbers**

* E.1 [Reciprocals and multiplicative inverses](http://www.ixl.com/math/grade-8/reciprocals-and-multiplicative-inverses)
* E.2 [Add and subtract rational numbers](http://www.ixl.com/math/grade-8/add-and-subtract-rational-numbers)
* E.3 [Add and subtract rational numbers: word problems](http://www.ixl.com/math/grade-8/add-and-subtract-rational-numbers-word-problems)
* E.4 [Multiply and divide rational numbers](http://www.ixl.com/math/grade-8/multiply-and-divide-rational-numbers)
* E.5 [Multiply and divide rational numbers: word problems](http://www.ixl.com/math/grade-8/multiply-and-divide-rational-numbers-word-problems)
* E.6 [Simplify expressions involving rational numbers](http://www.ixl.com/math/grade-8/simplify-expressions-involving-rational-numbers)
* E.7 [Evaluate variable expressions involving rational numbers](http://www.ixl.com/math/grade-8/evaluate-variable-expressions-involving-rational-numbers)

**Exponents and roots**

* F.1 [Understanding exponents](http://www.ixl.com/math/grade-8/understanding-exponents)
* F.2 [Evaluate exponents](http://www.ixl.com/math/grade-8/evaluate-exponents)
* F.3 [Exponents: solve for the variable](http://www.ixl.com/math/grade-8/exponents-solve-for-the-variable)
* F.4 [Exponents with negative bases](http://www.ixl.com/math/grade-8/exponents-with-negative-bases)
* F.5 [Exponents with decimal and fractional bases](http://www.ixl.com/math/grade-8/exponents-with-decimal-and-fractional-bases)
* F.6 [Understanding negative exponents](http://www.ixl.com/math/grade-8/understanding-negative-exponents)
* F.7 [Evaluate negative exponents](http://www.ixl.com/math/grade-8/evaluate-negative-exponents)
* F.8 [Multiplication with exponents](http://www.ixl.com/math/grade-8/multiplication-with-exponents)
* F.9 [Division with exponents](http://www.ixl.com/math/grade-8/division-with-exponents)
* F.10 [Multiplication and division with exponents](http://www.ixl.com/math/grade-8/multiplication-and-division-with-exponents)
* F.11 [Power rule](http://www.ixl.com/math/grade-8/power-rule)
* F.12 [Simplify expressions involving exponents](http://www.ixl.com/math/grade-8/simplify-expressions-involving-exponents)
* F.13 [Square roots of perfect squares](http://www.ixl.com/math/grade-8/square-roots-of-perfect-squares)
* F.14 [Positive and negative square roots](http://www.ixl.com/math/grade-8/positive-and-negative-square-roots)
* F.15 [Estimate positive and negative square roots](http://www.ixl.com/math/grade-8/estimate-positive-and-negative-square-roots)
* F.16 [Relationship between squares and square roots](http://www.ixl.com/math/grade-8/relationship-between-squares-and-square-roots)
* F.17 [Evaluate variable expressions involving squares and square roots](http://www.ixl.com/math/grade-8/evaluate-variable-expressions-involving-squares-and-square-roots)
* F.18 [Cube roots of perfect cubes](http://www.ixl.com/math/grade-8/cube-roots-of-perfect-cubes)
* F.19 [Estimate cube roots](http://www.ixl.com/math/grade-8/estimate-cube-roots)

**Scientific notation**

* G.1 [Convert between standard and scientific notation](http://www.ixl.com/math/grade-8/convert-between-standard-and-scientific-notation)
* G.2 [Compare numbers written in scientific notation](http://www.ixl.com/math/grade-8/compare-numbers-written-in-scientific-notation)
* G.3 [Multiply numbers written in scientific notation](http://www.ixl.com/math/grade-8/multiply-numbers-written-in-scientific-notation)
* G.4 [Divide numbers written in scientific notation](http://www.ixl.com/math/grade-8/divide-numbers-written-in-scientific-notation)

**Ratios and proportions**

* H.1 [Understanding ratios](http://www.ixl.com/math/grade-8/understanding-ratios)
* H.2 [Equivalent ratios](http://www.ixl.com/math/grade-8/equivalent-ratios)
* H.3 [Equivalent ratios: word problems](http://www.ixl.com/math/grade-8/equivalent-ratios-word-problems)
* H.4 [Compare ratios: word problems](http://www.ixl.com/math/grade-8/compare-ratios-word-problems)
* H.5 [Unit rates](http://www.ixl.com/math/grade-8/unit-rates)
* H.6 [Do the ratios form a proportion?](http://www.ixl.com/math/grade-8/do-the-ratios-form-a-proportion)
* H.7 [Do the ratios form a proportion: word problems](http://www.ixl.com/math/grade-8/do-the-ratios-form-a-proportion-word-problems)
* H.8 [Solve proportions](http://www.ixl.com/math/grade-8/solve-proportions)
* H.9 [Solve proportions: word problems](http://www.ixl.com/math/grade-8/solve-proportions-word-problems)
* H.10 [Estimate population size using proportions](http://www.ixl.com/math/grade-8/estimate-population-size-using-proportions)
* H.11 [Rate of change](http://www.ixl.com/math/grade-8/rate-of-change)
* H.12 [Constant rate of change](http://www.ixl.com/math/grade-8/constant-rate-of-change)
* H.13 [Scale drawings and scale factors](http://www.ixl.com/math/grade-8/scale-drawings-and-scale-factors)

**Proportional relationships**

* I.1 [Identify proportional relationships](http://www.ixl.com/math/grade-8/identify-proportional-relationships)
* I.2 [Find the constant of variation: graphs](http://www.ixl.com/math/grade-8/find-the-constant-of-variation-graphs)
* I.3 [Find the constant of variation: word problems](http://www.ixl.com/math/grade-8/find-the-constant-of-variation-word-problems)
* I.4 [Graph a proportional relationship](http://www.ixl.com/math/grade-8/graph-a-proportional-relationship)
* I.5 [Write an equation for a proportional relationship](http://www.ixl.com/math/grade-8/write-an-equation-for-a-proportional-relationship)
* I.6 [Proportional relationships: word problems](http://www.ixl.com/math/grade-8/proportional-relationships-word-problems)

**Percents**

* J.1 [Convert between percents, fractions, and decimals](http://www.ixl.com/math/grade-8/convert-between-percents-fractions-and-decimals)
* J.2 [Compare percents to fractions and decimals](http://www.ixl.com/math/grade-8/compare-percents-to-fractions-and-decimals)
* J.3 [Find what percent one number is of another](http://www.ixl.com/math/grade-8/find-what-percent-one-number-is-of-another)
* J.4 [Find what percent one number is of another: word problems](http://www.ixl.com/math/grade-8/find-what-percent-one-number-is-of-another-word-problems)
* J.5 [Estimate percents of numbers](http://www.ixl.com/math/grade-8/estimate-percents-of-numbers)
* J.6 [Percents of numbers and money amounts](http://www.ixl.com/math/grade-8/percents-of-numbers-and-money-amounts)
* J.7 [Percents of numbers: word problems](http://www.ixl.com/math/grade-8/percents-of-numbers-word-problems)
* J.8 [Compare percents of numbers](http://www.ixl.com/math/grade-8/compare-percents-of-numbers)
* J.9 [Solve percent equations](http://www.ixl.com/math/grade-8/solve-percent-equations)
* J.10 [Percent of change](http://www.ixl.com/math/grade-8/percent-of-change)
* J.11 [Percent of change: word problems](http://www.ixl.com/math/grade-8/percent-of-change-word-problems)

**Consumer math**

* K.1 [Price lists](http://www.ixl.com/math/grade-8/price-lists)
* K.2 [Unit prices](http://www.ixl.com/math/grade-8/unit-prices)
* K.3 [Unit prices with unit conversions](http://www.ixl.com/math/grade-8/unit-prices-with-unit-conversions)
* K.4 [Unit prices: find the total price](http://www.ixl.com/math/grade-8/unit-prices-find-the-total-price)
* K.5 [Percent of a number: tax, discount, and more](http://www.ixl.com/math/grade-8/percent-of-a-number-tax-discount-and-more)
* K.6 [Find the percent: tax, discount, and more](http://www.ixl.com/math/grade-8/find-the-percent-tax-discount-and-more)
* K.7 [Sale prices: find the original price](http://www.ixl.com/math/grade-8/sale-prices-find-the-original-price)
* K.8 [Multi-step problems with percents](http://www.ixl.com/math/grade-8/multi-step-problems-with-percents)
* K.9 [Estimate tips](http://www.ixl.com/math/grade-8/estimate-tips)
* K.10 [Simple interest](http://www.ixl.com/math/grade-8/simple-interest)
* K.11 [Compound interest](http://www.ixl.com/math/grade-8/compound-interest)

**Measurement**

* L.1 [Convert rates and measurements: customary units](http://www.ixl.com/math/grade-8/convert-rates-and-measurements-customary-units)
* L.2 [Convert rates and measurements: metric units](http://www.ixl.com/math/grade-8/convert-rates-and-measurements-metric-units)
* L.3 [Mixed customary units](http://www.ixl.com/math/grade-8/mixed-customary-units)
* L.4 [Convert between customary and metric systems](http://www.ixl.com/math/grade-8/convert-between-customary-and-metric-systems)
* L.5 [Precision](http://www.ixl.com/math/grade-8/precision)
* L.6 [Convert between Celsius and Fahrenheit](http://www.ixl.com/math/grade-8/convert-between-celsius-and-fahrenheit)

**Problem solving**

* M.1 [Multi-step word problems](http://www.ixl.com/math/grade-8/multi-step-word-problems)
* M.2 [Guess-and-check word problems](http://www.ixl.com/math/grade-8/guess-and-check-word-problems)
* M.3 [Use Venn diagrams to solve problems](http://www.ixl.com/math/grade-8/use-venn-diagrams-to-solve-problems)
* M.4 [Elapsed time word problems](http://www.ixl.com/math/grade-8/elapsed-time-word-problems)

**Charts and graphs**

* N.1 [Interpret tables](http://www.ixl.com/math/grade-8/interpret-tables)
* N.2 [Interpret bar graphs](http://www.ixl.com/math/grade-8/interpret-bar-graphs)
* N.3 [Create bar graphs](http://www.ixl.com/math/grade-8/create-bar-graphs)
* N.4 [Interpret line graphs](http://www.ixl.com/math/grade-8/interpret-line-graphs)
* N.5 [Create line graphs](http://www.ixl.com/math/grade-8/create-line-graphs)
* N.6 [Interpret line plots](http://www.ixl.com/math/grade-8/interpret-line-plots)
* N.7 [Create line plots](http://www.ixl.com/math/grade-8/create-line-plots)
* N.8 [Interpret stem-and-leaf plots](http://www.ixl.com/math/grade-8/interpret-stem-and-leaf-plots)
* N.9 [Interpret histograms](http://www.ixl.com/math/grade-8/interpret-histograms)
* N.10 [Create histograms](http://www.ixl.com/math/grade-8/create-histograms)
* N.11 [Create frequency charts](http://www.ixl.com/math/grade-8/create-frequency-charts)
* N.12 [Interpret box-and-whisker plots](http://www.ixl.com/math/grade-8/interpret-box-and-whisker-plots)
* N.13 [Scatter plots](http://www.ixl.com/math/grade-8/scatter-plots)
* N.14 [Interpret circle graphs](http://www.ixl.com/math/grade-8/interpret-circle-graphs)
* N.15 [Circle graphs and central angles](http://www.ixl.com/math/grade-8/circle-graphs-and-central-angles)
* N.16 [Choose the best type of graph](http://www.ixl.com/math/grade-8/choose-the-best-type-of-graph)

**Pythagorean theorem**

* O.1 [Pythagorean theorem: find the length of the hypotenuse](http://www.ixl.com/math/grade-8/pythagorean-theorem-find-the-length-of-the-hypotenuse)
* O.2 [Pythagorean theorem: find the missing leg length](http://www.ixl.com/math/grade-8/pythagorean-theorem-find-the-missing-leg-length)
* O.3 [Pythagorem theorem: find the perimeter](http://www.ixl.com/math/grade-8/pythagorem-theorem-find-the-perimeter)
* O.4 [Pythagorean theorem: word problems](http://www.ixl.com/math/grade-8/pythagorean-theorem-word-problems)
* O.5 [Converse of the Pythagorean theorem: is it a right triangle?](http://www.ixl.com/math/grade-8/converse-of-the-pythagorean-theorem-is-it-a-right-triangle)

**Coordinate graphs**

* P.1 [Points on coordinate graphs](http://www.ixl.com/math/grade-8/points-on-coordinate-graphs)
* P.2 [Quadrants and axes](http://www.ixl.com/math/grade-8/quadrants-and-axes)
* P.3 [Coordinate graphs as maps](http://www.ixl.com/math/grade-8/coordinate-graphs-as-maps)
* P.4 [Distance between two points](http://www.ixl.com/math/grade-8/distance-between-two-points)

**Geometry**

* Q.1 [Identify complementary, supplementary, vertical, adjacent, and congruent angles](http://www.ixl.com/math/grade-8/identify-complementary-supplementary-vertical-adjacent-and-congruent-angles)
* Q.2 [Find measures of complementary, supplementary, vertical, and adjacent angles](http://www.ixl.com/math/grade-8/find-measures-of-complementary-supplementary-vertical-and-adjacent-angles)
* Q.3 [Transversal of parallel lines](http://www.ixl.com/math/grade-8/transversal-of-parallel-lines)
* Q.4 [Classify triangles](http://www.ixl.com/math/grade-8/classify-triangles)
* Q.5 [Classify quadrilaterals](http://www.ixl.com/math/grade-8/classify-quadrilaterals)
* Q.6 [Find missing angles in triangles and quadrilaterals](http://www.ixl.com/math/grade-8/find-missing-angles-in-triangles-and-quadrilaterals)
* Q.7 [Identify and classify polygons](http://www.ixl.com/math/grade-8/identify-and-classify-polygons)
* Q.8 [Interior angles of polygons](http://www.ixl.com/math/grade-8/interior-angles-of-polygons)
* Q.9 [Similar and congruent figures](http://www.ixl.com/math/grade-8/similar-and-congruent-figures)
* Q.10 [Similar figures: side lengths and angle measures](http://www.ixl.com/math/grade-8/similar-figures-side-lengths-and-angle-measures)
* Q.11 [Congruent figures: side lengths and angle measures](http://www.ixl.com/math/grade-8/congruent-figures-side-lengths-and-angle-measures)
* Q.12 [Congruence statements and corresponding parts](http://www.ixl.com/math/grade-8/congruence-statements-and-corresponding-parts)
* Q.13 [Congruent triangles: SSS, SAS, and ASA](http://www.ixl.com/math/grade-8/congruent-triangles-sss-sas-and-asa)
* Q.14 [Perimeter](http://www.ixl.com/math/grade-8/perimeter)
* Q.15 [Area](http://www.ixl.com/math/grade-8/area)
* Q.16 [Area and perimeter: word problems](http://www.ixl.com/math/grade-8/area-and-perimeter-word-problems)
* Q.17 [Parts of a circle](http://www.ixl.com/math/grade-8/parts-of-a-circle)
* Q.18 [Circles: calculate area, circumference, radius, and diameter](http://www.ixl.com/math/grade-8/circles-calculate-area-circumference-radius-and-diameter)
* Q.19 [Circles: word problems](http://www.ixl.com/math/grade-8/circles-word-problems)
* Q.20 [Find lengths and measures of bisected lines and angles](http://www.ixl.com/math/grade-8/find-lengths-and-measures-of-bisected-lines-and-angles)
* Q.21 [Front, side, and top view](http://www.ixl.com/math/grade-8/front-side-and-top-view)
* Q.22 [Base plans](http://www.ixl.com/math/grade-8/base-plans)
* Q.23 [Names and parts of 3-dimensional figures](http://www.ixl.com/math/grade-8/names-and-parts-of-3-dimensional-figures)
* Q.24 [Nets of 3-dimensional figures](http://www.ixl.com/math/grade-8/nets-of-3-dimensional-figures)
* Q.25 [Surface area of prisms and cylinders](http://www.ixl.com/math/grade-8/surface-area-of-prisms-and-cylinders)
* Q.26 [Surface area of pyramids and cones](http://www.ixl.com/math/grade-8/surface-area-of-pyramids-and-cones)
* Q.27 [Volume of prisms and cylinders](http://www.ixl.com/math/grade-8/volume-of-prisms-and-cylinders)
* Q.28 [Volume of pyramids and cones](http://www.ixl.com/math/grade-8/volume-of-pyramids-and-cones)
* Q.29 [Volume and surface area of spheres](http://www.ixl.com/math/grade-8/volume-and-surface-area-of-spheres)
* Q.30 [Similar solids](http://www.ixl.com/math/grade-8/similar-solids)
* Q.31 [Volume and surface area of similar solids](http://www.ixl.com/math/grade-8/volume-and-surface-area-of-similar-solids)
* Q.32 [Perimeter, area, and volume: changes in scale](http://www.ixl.com/math/grade-8/perimeter-area-and-volume-changes-in-scale)

**Transformations**

* R.1 [Identify reflections, rotations, and translations](http://www.ixl.com/math/grade-8/identify-reflections-rotations-and-translations)
* R.2 [Translations: graph the image](http://www.ixl.com/math/grade-8/translations-graph-the-image)
* R.3 [Translations: find the coordinates](http://www.ixl.com/math/grade-8/translations-find-the-coordinates)
* R.4 [Reflections: graph the image](http://www.ixl.com/math/grade-8/reflections-graph-the-image)
* R.5 [Reflections: find the coordinates](http://www.ixl.com/math/grade-8/reflections-find-the-coordinates)
* R.6 [Rotations: graph the image](http://www.ixl.com/math/grade-8/rotations-graph-the-image)
* R.7 [Rotations: find the coordinates](http://www.ixl.com/math/grade-8/rotations-find-the-coordinates)
* R.8 [Dilations: graph the image](http://www.ixl.com/math/grade-8/dilations-graph-the-image)
* R.9 [Dilations: find the coordinates](http://www.ixl.com/math/grade-8/dilations-find-the-coordinates)
* R.10 [Dilations: scale factor and classification](http://www.ixl.com/math/grade-8/dilations-scale-factor-and-classification)
* R.11 [Symmetry](http://www.ixl.com/math/grade-8/symmetry)

**Number sequences**

* S.1 [Identify arithmetic and geometric sequences](http://www.ixl.com/math/grade-8/identify-arithmetic-and-geometric-sequences)
* S.2 [Arithmetic sequences](http://www.ixl.com/math/grade-8/arithmetic-sequences)
* S.3 [Geometric sequences](http://www.ixl.com/math/grade-8/geometric-sequences)
* S.4 [Number sequences: mixed review](http://www.ixl.com/math/grade-8/number-sequences-mixed-review)
* S.5 [Number sequences: word problems](http://www.ixl.com/math/grade-8/number-sequences-word-problems)
* S.6 [Evaluate variable expressions for number sequences](http://www.ixl.com/math/grade-8/evaluate-variable-expressions-for-number-sequences)
* S.7 [Write variable expressions for arithmetic sequences](http://www.ixl.com/math/grade-8/write-variable-expressions-for-arithmetic-sequences)

**Variable expressions**

* T.1 [Write variable expressions](http://www.ixl.com/math/grade-8/write-variable-expressions)
* T.2 [Write variable expressions to represent diagrams](http://www.ixl.com/math/grade-8/write-variable-expressions-to-represent-diagrams)
* T.3 [Identify terms and coefficients](http://www.ixl.com/math/grade-8/identify-terms-and-coefficients)
* T.4 [Evaluate single-variable expressions](http://www.ixl.com/math/grade-8/evaluate-single-variable-expressions)
* T.5 [Evaluate multi-variable expressions](http://www.ixl.com/math/grade-8/evaluate-multi-variable-expressions)
* T.6 [Add and subtract like terms](http://www.ixl.com/math/grade-8/add-and-subtract-like-terms)
* T.7 [Simplify variable expressions](http://www.ixl.com/math/grade-8/simplify-variable-expressions)

**Single-variable equations**

* U.1 [Does x satisfy the equation?](http://www.ixl.com/math/grade-8/does-x-satisfy-the-equation)
* U.2 [Model and solve equations using algebra tiles](http://www.ixl.com/math/grade-8/model-and-solve-equations-using-algebra-tiles)
* U.3 [Write and solve equations that represent diagrams](http://www.ixl.com/math/grade-8/write-and-solve-equations-that-represent-diagrams)
* U.4 [Solve one-step linear equations](http://www.ixl.com/math/grade-8/solve-one-step-linear-equations)
* U.5 [Solve two-step linear equations](http://www.ixl.com/math/grade-8/solve-two-step-linear-equations)
* U.6 [Solve equations involving squares and square roots](http://www.ixl.com/math/grade-8/solve-equations-involving-squares-and-square-roots)
* U.7 [Solve multi-step equations](http://www.ixl.com/math/grade-8/solve-multi-step-equations)
* U.8 [Solve equations involving like terms](http://www.ixl.com/math/grade-8/solve-equations-involving-like-terms)

**Linear functions**

* V.1 [Does (x, y) satisfy the linear equation?](http://www.ixl.com/math/grade-8/does-x-y-satisfy-the-linear-equation)
* V.2 [Evaluate a linear function](http://www.ixl.com/math/grade-8/evaluate-a-linear-function)
* V.3 [Complete a function table](http://www.ixl.com/math/grade-8/complete-a-function-table)
* V.4 [Write a rule for a function table](http://www.ixl.com/math/grade-8/write-a-rule-for-a-function-table)
* V.5 [Find points on a function graph](http://www.ixl.com/math/grade-8/find-points-on-a-function-graph)
* V.6 [Graph a line from a function table](http://www.ixl.com/math/grade-8/graph-a-line-from-a-function-table)
* V.7 [Graph a line from an equation](http://www.ixl.com/math/grade-8/graph-a-line-from-an-equation)
* V.8 [Linear function word problems](http://www.ixl.com/math/grade-8/linear-function-word-problems)
* V.9 [Find the slope of a graph](http://www.ixl.com/math/grade-8/find-the-slope-of-a-graph)
* V.10 [Find slope from two points](http://www.ixl.com/math/grade-8/find-slope-from-two-points)
* V.11 [Find slope from an equation](http://www.ixl.com/math/grade-8/find-slope-from-an-equation)
* V.12 [Graph a line using slope](http://www.ixl.com/math/grade-8/graph-a-line-using-slope)
* V.13 [Slopes of parallel and perpendicular lines](http://www.ixl.com/math/grade-8/slopes-of-parallel-and-perpendicular-lines)

**Nonlinear functions**

* W.1 [Identify linear and nonlinear functions](http://www.ixl.com/math/grade-8/identify-linear-and-non-linear-functions)
* W.2 [Does (x, y) satisfy a nonlinear equation?](http://www.ixl.com/math/grade-8/does-x-y-satisfy-a-non-linear-equation)
* W.3 [Evaluate a nonlinear function](http://www.ixl.com/math/grade-8/evaluate-a-non-linear-function)

**Inequalities**

* X.1 [Inequalities on number lines](http://www.ixl.com/math/grade-8/inequalities-on-number-lines)
* X.2 [Solutions to variable inequalities](http://www.ixl.com/math/grade-8/solutions-to-variable-inequalities)
* X.3 [Solve one-step linear inequalities](http://www.ixl.com/math/grade-8/solve-one-step-linear-inequalities)
* X.4 [Solve two-step linear inequalities](http://www.ixl.com/math/grade-8/solve-two-step-linear-inequalities)
* X.5 [Solve advanced linear inequalities](http://www.ixl.com/math/grade-8/solve-advanced-linear-inequalities)

**Monomials and polynomials**

* Y.1 [Identify monomials](http://www.ixl.com/math/grade-8/identify-monomials)
* Y.2 [Model polynomials with algebra tiles](http://www.ixl.com/math/grade-8/model-polynomials-with-algebra-tiles)
* Y.3 [Add and subtract polynomials using algebra tiles](http://www.ixl.com/math/grade-8/add-and-subtract-polynomials-using-algebra-tiles)
* Y.4 [Add and subtract polynomials](http://www.ixl.com/math/grade-8/add-and-subtract-polynomials)
* Y.5 [Add polynomials to find perimeter](http://www.ixl.com/math/grade-8/add-polynomials-to-find-perimeter)
* Y.6 [Multiply monomials](http://www.ixl.com/math/grade-8/multiply-monomials)
* Y.7 [Divide monomials](http://www.ixl.com/math/grade-8/divide-monomials)
* Y.8 [Multiply and divide monomials](http://www.ixl.com/math/grade-8/multiply-and-divide-monomials)
* Y.9 [Powers of monomials](http://www.ixl.com/math/grade-8/powers-of-monomials)
* Y.10 [Square and cube roots of monomials](http://www.ixl.com/math/grade-8/square-and-cube-roots-of-monomials)
* Y.11 [Multiply polynomials using algebra tiles](http://www.ixl.com/math/grade-8/multiply-polynomials-using-algebra-tiles)
* Y.12 [Multiply polynomials](http://www.ixl.com/math/grade-8/multiply-polynomials)
* Y.13 [Multiply polynomials to find area](http://www.ixl.com/math/grade-8/multiply-polynomials-to-find-area)

**Properties**

* Z.1 [Properties of addition and multiplication](http://www.ixl.com/math/grade-8/properties-of-addition-and-multiplication)
* Z.2 [Distributive property](http://www.ixl.com/math/grade-8/distributive-property)
* Z.3 [Simplify variable expressions using properties](http://www.ixl.com/math/grade-8/simplify-variable-expressions-using-properties)
* Z.4 [Properties of equality](http://www.ixl.com/math/grade-8/properties-of-equality)

**Probability**

* AA.1 [Probability of simple events](http://www.ixl.com/math/grade-8/probability-of-simple-events)
* AA.2 [Probability of opposite, mutually exclusive, and overlapping events](http://www.ixl.com/math/grade-8/probability-of-opposite-mutually-exclusive-and-overlapping-events)
* AA.3 [Experimental probability](http://www.ixl.com/math/grade-8/experimental-probability)
* AA.4 [Make predictions](http://www.ixl.com/math/grade-8/make-predictions)
* AA.5 [Compound events: find the number of outcomes](http://www.ixl.com/math/grade-8/compound-events-find-the-number-of-outcomes)
* AA.6 [Identify independent and dependent events](http://www.ixl.com/math/grade-8/identify-independent-and-dependent-events)
* AA.7 [Probability of independent and dependent events](http://www.ixl.com/math/grade-8/probability-of-independent-and-dependent-events)
* AA.8 [Factorials](http://www.ixl.com/math/grade-8/factorials)
* AA.9 [Permutations](http://www.ixl.com/math/grade-8/permutations)
* AA.10 [Combinations](http://www.ixl.com/math/grade-8/combinations)
* AA.11 [Combination and permutation notation](http://www.ixl.com/math/grade-8/combination-and-permutation-notation)

**Statistics**

* BB.1 [Calculate mean, median, mode, and range](http://www.ixl.com/math/grade-8/calculate-mean-median-mode-and-range)
* BB.2 [Interpret charts to find mean, median, mode, and range](http://www.ixl.com/math/grade-8/interpret-charts-to-find-mean-median-mode-and-range)
* BB.3 [Mean, median, mode, and range: find the missing number](http://www.ixl.com/math/grade-8/mean-median-mode-and-range-find-the-missing-number)
* BB.4 [Changes in mean, median, mode, and range](http://www.ixl.com/math/grade-8/changes-in-mean-median-mode-and-range)
* BB.5 [Quartiles](http://www.ixl.com/math/grade-8/quartiles)
* BB.6 [Identify representative, random, and biased samples](http://www.ixl.com/math/grade-8/identify-representative-random-and-biased-samples)