



IXL Skill Alignment

8th alignment for Big Ideas Math Common Core Curriculum

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Chapter 1

Equations

Textbook section	IXL skills
Section 1.1: Solving Simple Equations	W.1 Which x satisfies an equation? >>
	W.5 Properties of equality >>
	W.6 Solve one-step equations >>
Section 1.2: Solving Multi-Step Equations	W.7 Solve two-step equations >>
	W.8 Solve multi-step equations >>
	W.9 Solve equations involving like terms >>
	W.13 Solve equations: word problems >>
Section 1.3: Solving Equations With Variables on Both Sides	W.10 Solve equations with variables on both sides >>
	W.11 Solve equations: mixed review >>
	W.12 Solve equations: complete the solution >>
Section 1.4: Rewriting Equations and Formulas	L.6 Convert between Celsius and Fahrenheit >>

Chapter 2

Transformations

Textbook section	IXL skills
Section 2.1: Congruent Figures	P.9 Congruence statements and corresponding parts >>
	P.10 Side lengths and angle measures of congruent figures >>
Section 2.2: Translations	P.3 Translations: graph the image >>
	P.4 Translations: find the coordinates >>
Section 2.3: Reflections	P.5 Reflections: graph the image >>
	P.6 Reflections: find the coordinates >>
Section 2.4: Rotations	P.2 Identify reflections, rotations, and translations >>
	P.7 Rotations: graph the image >>
	P.8 Rotations: find the coordinates >>
Section 2.5: Similar Figures	Q.1 Similar and congruent figures >>
	Q.5 Side lengths and angle measures of similar figures >>
Section 2.6: Perimeters and Areas of Similar Figures	
Section 2.7: Dilations	Q.2 Dilations: graph the image >>
	Q.3 Dilations: find the coordinates >>
	Q.4 Dilations: scale factor and classification >>

Chapter 3

Angles and Triangles

Textbook section	IXL skills
Section 3.1: Parallel Lines and Transversals	0.10 Identify complementary, supplementary, vertical, adjacent, and congruent angles >> 0.12 Transversal of parallel lines >>
Section 3.2: Angles of Triangles	0.6 Find missing angles in triangles >> 0.8 Exterior Angle Theorem >>
Section 3.3: Angles of Polygons	0.9 Interior angles of polygons >>
Section 3.4: Using Similar Triangles	

Chapter 4

Graphing and Writing Linear Equations

Textbook section	IXL skills
Section 4.1: Graphing Linear Equations	Y.6 Graph a line from an equation in slope-intercept form >>
	Z.8 Complete a table and graph a linear function >>
Section 4.2: Slope of a Line	Y.1 Find the slope of a graph >>
	Y.2 Find the slope from two points >>
Section 4.3: Graphing Proportional Relationships	I.1 Find the constant of proportionality from a table >>
	I.2 Write equations for proportional relationships from tables >>
	I.3 Identify proportional relationships by graphing >>
	I.5 Write equations for proportional relationships from graphs >>
	I.6 Identify proportional relationships >>
	I.7 Graph proportional relationships >>
Section 4.4: Graphing Linear Equations in Slope-Intercept Form	Y.4 Find the slope of a linear equation >>
	Y.6 Graph a line from an equation in slope-intercept form >>
Section 4.5: Graphing Linear Equations in Standard Form	Y.11 Convert a linear equation in standard form to slope-intercept form >>
	Y.12 Graph a line from an equation in standard form >>
Section 4.6: Writing Equations in Slope-Intercept Form	Y.7 Write a linear equation from a slope and y-intercept >>
	Y.8 Write a linear equation from a graph >>
	Y.10 Write a linear equation from two points >>
Section 4.7: Writing Equations in Point-Slope Form	

Chapter 5

Systems of Linear Equations

Textbook section	IXL skills
Section 5.1: Solving Systems of Linear Equations by Graphing	AA.2 Solve a system of equations by graphing >> AA.3 Solve a system of equations by graphing: word problems >>
Section 5.2: Solving Systems of Linear Equations by Substitution	AA.8 Solve a system of equations using substitution >> AA.9 Solve a system of equations using substitution: word problems >>
Section 5.3: Solving Systems of Linear Equations by Elimination	AA.10 Solve a system of equations using elimination >> AA.11 Solve a system of equations using elimination: word problems >>
Section 5.4: Solving Special Systems of Linear Equations	AA.1 Is (x, y) a solution to the system of equations? >> AA.4 Find the number of solutions to a system of equations by graphing >> AA.5 Find the number of solutions to a system of equations >>

Chapter 6

Functions

Textbook section	IXL skills
Section 6.1: Relations and Functions	Z.1 Identify functions >>
Section 6.2: Representations of Functions	Z.6 Evaluate a linear function >>
	Z.7 Complete a table for a linear function >>
Section 6.3: Linear Functions	Z.2 Does (x, y) satisfy the linear function? >>
	Z.3 Identify independent and dependent variables >>
	Z.10 Write a linear function from a table >>
	Z.12 Write linear functions: word problems >>
Section 6.4: Comparing Linear and Nonlinear Functions	Z.14 Identify linear and nonlinear functions >>
Section 6.5: Analyzing and Sketching Graphs	

Chapter 7

Real Numbers and the Pythagorean Theorem

Textbook section	IXL skills
Section 7.1: Finding Square Roots	F.14 Square roots of perfect squares >>
	F.15 Positive and negative square roots >>
	F.17 Relationship between squares and square roots >>
Section 7.2: Finding Cube Roots	A.4 Prime factorization >>
	F.19 Cube roots of perfect cubes >>
Section 7.3: The Pythagorean Theorem	R.1 Pythagorean theorem: find the length of the hypotenuse >>
	R.2 Pythagorean theorem: find the missing leg length >>
	R.4 Pythagorean theorem: word problems >>
Section 7.4: Approximating Square Roots	D.5 Identify rational and irrational numbers >>
	F.16 Estimate positive and negative square roots >>
Section 7.5: Using the Pythagorean Theorem	N.4 Find the distance between two points >>
	R.5 Converse of the Pythagorean theorem: is it a right triangle? >>

Chapter 8

Volume and Similar Solids

Textbook section	IXL skills
Section 8.1: Volumes of Cylinders	T.9 Volume of cylinders >>
Section 8.2: Volumes of Cones	T.10 Volume of cones >>
Section 8.3: Volumes of Spheres	T.13 Volume of spheres >>
Section 8.4: Surface Areas and Volumes of Similar Solids	T.15 Volume and surface area of similar solids >>

Chapter 9

Data Analysis and Displays

Textbook section	IXL skills
Section 9.1: Scatter Plots	CC.14 Scatter plots >> DD.8 Outliers in scatter plots >>
Section 9.2: Lines of Fit	DD.9 Scatter plots: line of best fit >>
Section 9.3: Two-Way Tables	
Section 9.4: Choosing a Data Display	CC.17 Choose the best type of graph >>

Chapter 10

Exponents and Scientific Notation

Textbook section	IXL skills
Section 10.1: Exponents	F.1 Understanding exponents >>
	F.2 Evaluate exponents >>
	F.4 Exponents with negative bases >>
	F.5 Exponents with decimal and fractional bases >>
Section 10.2: Product of Powers Property	F.8 Multiplication with exponents >>
Section 10.3: Quotient of Powers Property	F.9 Division with exponents >>
	F.10 Multiplication and division with exponents >>
	F.11 Power rule >>
Section 10.4: Zero and Negative Exponents	F.6 Understanding negative exponents >>
	F.7 Evaluate negative exponents >>
	F.12 Evaluate expressions using properties of exponents >>
Section 10.5: Reading Scientific Notation	G.2 Compare numbers written in scientific notation >>
Section 10.6: Writing Scientific Notation	G.1 Convert between standard and scientific notation >>
Section 10.7: Operations in Scientific Notation	G.3 Multiply numbers written in scientific notation >>
	G.4 Divide numbers written in scientific notation >>