



IXL Skill Alignment

8th grade alignment for Big Ideas Math 2014 Common Core Curriculum



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Chapter 1

Equations

Textbook section	IXL skills
Section 1.1: Solving Simple Equations	<ol style="list-style-type: none">1. Which x satisfies an equation? BVQ2. Properties of equality 7WL3. Solve one-step equations 5J4
Section 1.2: Solving Multi-Step Equations	<ol style="list-style-type: none">1. Solve two-step equations JXD2. Solve multi-step equations 55K3. Solve equations involving like terms Q2B4. Solve one-step and two-step equations: word problems HCP
Section 1.3: Solving Equations With Variables on Both Sides	<ol style="list-style-type: none">1. Solve equations with variables on both sides ZYL2. Solve equations: mixed review HZZ3. Solve equations: complete the solution PGH
Section 1.4: Rewriting Equations and Formulas	<ol style="list-style-type: none">1. Convert between Celsius and Fahrenheit L9F

Chapter 2

Transformations

Textbook section	IXL skills
Section 2.1: Congruent Figures	<ol style="list-style-type: none">1. Congruence statements and corresponding parts LPP2. Side lengths and angle measures of congruent figures DSQ
Section 2.2: Translations	<ol style="list-style-type: none">1. Translations: graph the image XUS2. Translations: find the coordinates RUP
Section 2.3: Reflections	<ol style="list-style-type: none">1. Reflections: graph the image NBM2. Reflections: find the coordinates KUX
Section 2.4: Rotations	<ol style="list-style-type: none">1. Identify reflections, rotations, and translations UYL2. Rotations: graph the image AC93. Rotations: find the coordinates HHS
Section 2.5: Similar Figures	<ol style="list-style-type: none">1. Similar and congruent figures U852. Side lengths and angle measures of similar figures 79Y
Section 2.6: Perimeters and Areas of Similar Figures	
Section 2.7: Dilations	<ol style="list-style-type: none">1. Dilations: graph the image 9T42. Dilations: find the coordinates UV93. Dilations: scale factor and classification 8NK

Chapter 3

Angles and Triangles

Textbook section	IXL skills
Section 3.1: Parallel Lines and Transversals	<ol style="list-style-type: none">1. Identify complementary, supplementary, vertical, adjacent, and congruent angles <small>HGV</small>2. Transversals of parallel lines: find angle measures <small>V99</small>
Section 3.2: Angles of Triangles	<ol style="list-style-type: none">1. Find missing angles in triangles <small>JFJ</small>2. Exterior Angle Theorem <small>FMP</small>
Section 3.3: Angles of Polygons	<ol style="list-style-type: none">1. Interior angles of polygons <small>JBP</small>
Section 3.4: Using Similar Triangles	

Chapter 4

Graphing and Writing Linear Equations

Textbook section	IXL skills
Section 4.1: Graphing Linear Equations	<ol style="list-style-type: none"> 1. Graph a line from an equation in slope-intercept form W5E 2. Complete a table and graph a linear function DC2
Section 4.2: Slope of a Line	<ol style="list-style-type: none"> 1. Find the slope of a graph D7M 2. Find the slope from two points ZAC
Section 4.3: Graphing Proportional Relationships	<ol style="list-style-type: none"> 1. Find the constant of proportionality from a table ZCK 2. Write equations for proportional relationships from tables S69 3. Identify proportional relationships by graphing RXD 4. Write equations for proportional relationships from graphs G7N 5. Identify proportional relationships from graphs and equations 45N 6. Graph proportional relationships and find the slope MQD
Section 4.4: Graphing Linear Equations in Slope-Intercept Form	<ol style="list-style-type: none"> 1. Slope-intercept form: find the slope and y-intercept U55 2. Graph a line from an equation in slope-intercept form W5E
Section 4.5: Graphing Linear Equations in Standard Form	<ol style="list-style-type: none"> 1. Convert a linear equation in standard form to slope-intercept form NKM 2. Graph a line from an equation in standard form 7MZ
Section 4.6: Writing Equations in Slope-Intercept Form	<ol style="list-style-type: none"> 1. Write a linear equation from a slope and y-intercept WHP 2. Write a linear equation from a graph WHM 3. Write a linear equation from two points 2R9



Section 4.7: Writing Equations in Point-Slope Form

1. Graph a line from an equation in point-slope form RZZ
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Chapter 5

Systems of Linear Equations

Textbook section	IXL skills
Section 5.1: Solving Systems of Linear Equations by Graphing	<ol style="list-style-type: none">1. Solve a system of equations by graphing WV52. Solve a system of equations by graphing: word problems W9J
Section 5.2: Solving Systems of Linear Equations by Substitution	<ol style="list-style-type: none">1. Solve a system of equations using substitution J8X2. Solve a system of equations using substitution: word problems 9M8
Section 5.3: Solving Systems of Linear Equations by Elimination	<ol style="list-style-type: none">1. Solve a system of equations using elimination ZQV2. Solve a system of equations using elimination: word problems Z97
Section 5.4: Solving Special Systems of Linear Equations	<ol style="list-style-type: none">1. Is (x, y) a solution to the system of equations? N462. Find the number of solutions to a system of equations by graphing AGZ3. Find the number of solutions to a system of equations UYM

Chapter 6

Functions

Textbook section	IXL skills
Section 6.1: Relations and Functions	1. Identify functions <small>ELJ</small>
Section 6.2: Representations of Functions	1. Evaluate a linear function <small>LVN</small> 2. Complete a table for a linear function <small>D9B</small>
Section 6.3: Linear Functions	1. Does (x, y) satisfy the linear function? <small>5BD</small> 2. Identify independent and dependent variables <small>FSF</small> 3. Write a linear function from a table <small>UYU</small> 4. Write linear functions: word problems <small>YK6</small>
Section 6.4: Comparing Linear and Nonlinear Functions	1. Identify linear and nonlinear functions: graphs and equations <small>XB8</small>
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	<ol style="list-style-type: none">1. Square roots of perfect squares 9RS2. Positive and negative square roots 8TF3. Relationship between squares and square roots 8W2
Section 7.2: Finding Cube Roots	<ol style="list-style-type: none">1. Prime factorization YVA2. Cube roots of positive perfect cubes RYG
Section 7.3: The Pythagorean Theorem	<ol style="list-style-type: none">1. Pythagorean theorem: find the length of the hypotenuse 7ZL2. Pythagorean theorem: find the missing leg length Y9C3. Pythagorean theorem: word problems 87U
Section 7.4: Approximating Square Roots	<ol style="list-style-type: none">1. Identify rational and irrational numbers NV62. Estimate positive and negative square roots 96T
Section 7.5: Using the Pythagorean Theorem	<ol style="list-style-type: none">1. Find the distance between two points ZBP2. Converse of the Pythagorean theorem: is it a right triangle? EQZ

Chapter 8

Volume and Similar Solids

Textbook section	IXL skills
Section 8.1: Volumes of Cylinders	1. Volume of cylinders 9F3
Section 8.2: Volumes of Cones	1. Volume of cones Y9R
Section 8.3: Volumes of Spheres	1. Volume of spheres QX7
Section 8.4: Surface Areas and Volumes of Similar Solids	1. Volume and surface area of similar solids 8TT

Chapter 9

Data Analysis and Displays

Textbook section	IXL skills
Section 9.1: Scatter Plots	<ol style="list-style-type: none">1. Identify trends with scatter plots GZE2. Outliers in scatter plots RP8
Section 9.2: Lines of Fit	<ol style="list-style-type: none">1. Scatter plots: line of best fit ZQ6
Section 9.3: Two-Way Tables	
Section 9.4: Choosing a Data Display	<ol style="list-style-type: none">1. Choose the best type of graph 5XX

Chapter 10

Exponents and Scientific Notation

Textbook section	IXL skills
Section 10.1: Exponents	<ol style="list-style-type: none"> 1. Understanding exponents VFV 2. Evaluate exponents EYR 3. Exponents with negative bases ZQC 4. Exponents with decimal and fractional bases 8CT
Section 10.2: Product of Powers Property	<ol style="list-style-type: none"> 1. Multiplication with exponents EQY
Section 10.3: Quotient of Powers Property	<ol style="list-style-type: none"> 1. Division with exponents M2C 2. Multiplication and division with exponents L2J 3. Power rule AEQ
Section 10.4: Zero and Negative Exponents	<ol style="list-style-type: none"> 1. Understanding negative exponents YBB 2. Evaluate negative exponents WGS 3. Evaluate expressions using properties of exponents UTY
Section 10.5: Reading Scientific Notation	<ol style="list-style-type: none"> 1. Compare numbers written in scientific notation RHT
Section 10.6: Writing Scientific Notation	<ol style="list-style-type: none"> 1. Convert between standard and scientific notation H8A
Section 10.7: Operations in Scientific Notation	<ol style="list-style-type: none"> 1. Multiply numbers written in scientific notation YZU 2. Divide numbers written in scientific notation SGT