



IXL Skill Alignment

Course 1 alignment for McGraw-Hill Integrated Math

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Chapter 0

Preparing for Integrated Math

Textbook section	IXL skills	
Lesson 0-1: Plan For Problem Solving	A1-O.1	Word problems: mixed review >>
Lesson 0-2: Real Numbers	A1-A.6	Square roots >>
	A1-A.8	Sort rational and irrational numbers >>
	A1-A.9	Classify rational and irrational numbers >>
Lesson 0-3: Operations with Integers	A1-B.1	Add, subtract, multiply, and divide integers >>
Lesson 0-4: Adding & Subtracting Rational Numbers	A1-B.4	Add and subtract rational numbers >>
Lesson 0-5: Multiplying & Dividing Rational Numbers	A1-B.5	Multiply and divide rational numbers >>
Lesson 0-6: The Percent Proportion	A1-D.2	Solve percent equations >>
Lesson 0-7: Perimeter	A1-F.1	Perimeter >>
Lesson 0-8: Area	A1-F.2	Area >>
Lesson 0-9: Volume	A1-F.4	Volume >>
Lesson 0-10: Surface Area	A1-F.5	Surface area >>
Lesson 0-11: Simple Probability & Odds	A1-JJ.1	Theoretical probability >>
	A1-JJ.7	Counting principle >>
Lesson 0-12: Measures of Center, Variation, & Position	A1-KK.2	Mean, median, mode, and range >>
	A1-KK.3	Quartiles >>
Lesson 0-13: Representing Data	A1-N.2	Create bar graphs, line graphs, and histograms >>

Chapter 1

Expressions, Equations, and Functions

Textbook section	IXL skills	
Lesson 1-1: Variables and Expressions	A1-I.1	Write variable expressions >>
Lesson 1-2: Order of Operations	A1-B.2	Evaluate numerical expressions involving integers >>
	A1-B.3	Evaluate variable expressions involving integers >>
	A1-V.1	Exponents with integer bases >>
Lesson 1-3: Properties of Numbers	A1-H.1	Properties of addition and multiplication >>
Lesson 1-4: The Distributive Property	A1-H.2	Distributive property >>
	A1-I.2	Simplify variable expressions involving like terms and the distributive property >>
Lesson 1-5: Equations	A1-I.5	Does x satisfy the equation? >>
	A1-I.6	Which x satisfies an equation? >>
	A1-I.7	Solve equations using order of operations >>
Lesson 1-6: Relations	A1-G.1	Coordinate plane review >>
	A1-Q.1	Relations: convert between tables, graphs, mappings, and lists of points >>
	A1-Q.2	Domain and range of relations >>
	A1-Q.3	Identify independent and dependent variables >>
Lesson 1-7: Functions	A1-Q.4	Identify functions >>
	A1-Q.5	Identify functions: vertical line test >>
	A1-Q.7	Evaluate a function >>
	A1-Q.8	Evaluate a function: plug in an expression >>
	A1-Q.9	Complete a function table from a graph >>
	A1-Q.10	Complete a function table from an equation >>

Lesson 1-8: Interpreting Graphs of Functions**A1-Q.6**

Find values using function graphs >>

A1-Q.11

Interpret the graph of a function: word problems >>

Chapter 2

Linear Equations

Textbook section	IXL skills	
Lesson 2-1: Writing Equations	A1-I.4	Write variable equations >>
Lesson 2-2: Solving One-Step Equations	A1-J.2	Write and solve equations that represent diagrams >>
	A1-J.3	Solve one-step linear equations >>
Lesson 2-3: Solving Multi-Step Equations	A1-J.1	Model and solve equations using algebra tiles >>
	A1-J.4	Solve two-step linear equations >>
	A1-J.5	Solve advanced linear equations >>
	A1-J.10	Solve linear equations: word problems >>
	A1-O.3	Consecutive integer problems >>
Lesson 2-4: Solving Equations with the Variable on Each Side	A1-J.6	Solve equations with variables on both sides >>
	A1-J.7	Solve equations: complete the solution >>
	A1-J.11	Solve linear equations: mixed review >>
Lesson 2-5: Solving Equations Involving Absolute Value	A1-L.1	Solve absolute value equations >>
	A1-L.2	Graph solutions to absolute value equations >>
Lesson 2-6: Ratios and Proportions	A1-C.1	Identify equivalent ratios >>
	A1-C.3	Unit rates >>
	A1-C.5	Solve proportions >>
	A1-C.6	Solve proportions: word problems >>
	A1-D.2	Solve percent equations >>
Lesson 2-7: Percent of Change	A1-D.4	Percent of change >>
	A1-D.5	Percent of change: word problems >>
	A1-D.6	Percent of a number: tax, discount, and more >>
	A1-D.7	Find the percent: tax, discount, and more >>

Lesson 2-8: Literal Equations and Dimensional Analysis

A1-E.1

Convert rates and measurements: customary units >>

A1-E.2

Convert rates and measurements: metric units >>

A1-I.8

Rearrange multi-variable equations >>

Lesson 2-9: Weighted Averages

A1-O.5

Weighted averages: word problems >>

Chapter 3

Linear Functions

Textbook section	IXL skills	
Lesson 3-1: Graphing Linear Equations	A1-S.15	Write equations in standard form >>
	A1-S.16	Standard form: find x- and y-intercepts >>
	A1-S.17	Standard form: graph an equation >>
Lesson 3-2: Solving Linear Equations by Graphing	A1-S.12	Write linear functions to solve word problems >>
	A1-S.13	Complete a table and graph a linear function >>
Lesson 3-3: Rate of Change and Slope	A1-S.2	Find the slope of a graph >>
	A1-S.3	Find the slope from two points >>
	A1-S.4	Find a missing coordinate using slope >>
Lesson 3-4: Direct Variation	A1-R.2	Find the constant of variation >>
	A1-R.3	Graph a proportional relationship >>
	A1-R.4	Write direct variation equations >>
	A1-R.5	Write and solve direct variation equations >>
Lesson 3-5: Arithmetic Sequences as Linear Functions	A1-P.2	Arithmetic sequences >>
	A1-P.5	Write variable expressions for arithmetic sequences >>
Lesson 3-6: Proportional and Nonproportional Relationships	A1-R.1	Identify proportional relationships >>

Chapter 4

Equations of Linear Functions

Textbook section	IXL skills	
Lesson 4-1: Graphing Equations in Slope-Intercept Form	A1-S.5	Slope-intercept form: find the slope and y-intercept >>
	A1-S.6	Slope-intercept form: graph an equation >>
	A1-S.11	Linear equations: solve for y >>
	A1-S.19	Graph a horizontal or vertical line >>
Lesson 4-2: Writing Equations in Slope-Intercept Form	A1-S.8	Slope-intercept form: write an equation >>
	A1-S.9	Slope-intercept form: write an equation from a table >>
	A1-S.10	Slope-intercept form: write an equation from a word problem >>
Lesson 4-3: Writing Equations in Point-Slope Form	A1-S.20	Point-slope form: graph an equation >>
	A1-S.21	Point-slope form: write an equation >>
	A1-S.22	Point-slope form: write an equation from a graph >>
Lesson 4-4: Parallel and Perpendicular Lines	A1-S.23	Slopes of parallel and perpendicular lines >>
	A1-S.24	Write an equation for a parallel or perpendicular line >>
Lesson 4-5: Scatter Plots and Lines of Fit	A1-KK.8	Interpret a scatter plot >>
	A1-KK.12	Scatter plots: line of best fit >>
Lesson 4-6: Regression and Median-Fit Lines	A1-KK.10	Match correlation coefficients to scatter plots >>
	A1-KK.11	Calculate correlation coefficients >>
	A1-KK.13	Find the equation of a regression line >>
	A1-KK.14	Interpret regression lines >>
	A1-KK.15	Analyze a regression line of a data set >>
Lesson 4-7: Inverse Linear Functions		

Chapter 5

Linear Inequalities

Textbook section	IXL skills	
Lesson 5-1: Solving Inequalities by Addition and Subtraction	A1-K.3	Identify solutions to inequalities >>
	A1-K.4	Solve one-step linear inequalities: addition and subtraction >>
Lesson 5-2: Solving Inequalities by Multiplication and Division	A1-K.5	Solve one-step linear inequalities: multiplication and division >>
	A1-K.6	Solve one-step linear inequalities >>
	A1-K.7	Graph solutions to one-step linear inequalities >>
Lesson 5-3: Solving Multi-Step Inequalities	A1-K.8	Solve two-step linear inequalities >>
	A1-K.9	Graph solutions to two-step linear inequalities >>
	A1-K.10	Solve advanced linear inequalities >>
	A1-K.11	Graph solutions to advanced linear inequalities >>
Lesson 5-4: Solving Compound Inequalities	A1-K.12	Graph compound inequalities >>
	A1-K.13	Write compound inequalities from graphs >>
	A1-K.14	Solve compound inequalities >>
	A1-K.15	Graph solutions to compound inequalities >>
Lesson 5-5: Inequalities Involving Absolute Value	A1-L.3	Solve absolute value inequalities >>
	A1-L.4	Graph solutions to absolute value inequalities >>
Lesson 5-6: Graphing Inequalities in Two-Variables	A1-T.1	Does (x, y) satisfy the inequality? >>
	A1-T.2	Linear inequalities: solve for y >>
	A1-T.3	Graph a two-variable linear inequality >>
	A1-T.4	Linear inequalities: word problems >>

Chapter 6

Systems of Linear Equations and Inequalities

Textbook section	IXL skills	
Lesson 6-1: Graphing Systems of Equations	A1-U.2	Solve a system of equations by graphing >>
	A1-U.3	Solve a system of equations by graphing: word problems >>
	A1-U.4	Find the number of solutions to a system of equations by graphing >>
	A1-U.6	Classify a system of equations by graphing >>
Lesson 6-2: Substitution	A1-U.8	Solve a system of equations using substitution >>
	A1-U.9	Solve a system of equations using substitution: word problems >>
Lesson 6-3: Elimination Using Addition and Subtraction		
Lesson 6-4: Elimination Using Multiplication	A1-U.10	Solve a system of equations using elimination >>
	A1-U.11	Solve a system of equations using elimination: word problems >>
Lesson 6-5: Applying Systems of Linear Equations	A1-U.14	Solve a system of equations using any method >>
	A1-U.15	Solve a system of equations using any method: word problems >>
Lesson 6-6: Systems on Inequalities	A1-T.5	Is (x, y) a solution to the system of inequalities? >>
	A1-T.6	Solve systems of linear inequalities by graphing >>

Chapter 7

Exponents and Exponential Functions

Textbook section	IXL skills
Lesson 7-1: Multiplication Properties of Exponents	A1-V.4 Multiplication with exponents >>
	A1-Y.1 Identify monomials >>
	A1-Y.2 Multiply monomials >>
	A1-Y.5 Powers of monomials >>
Lesson 7-2: Division Properties of Exponents	A1-V.3 Negative exponents >>
	A1-V.5 Division with exponents >>
	A1-V.6 Multiplication and division with exponents >>
	A1-V.7 Power rule >>
	A1-Y.3 Divide monomials >>
Lesson 7-3: Rational Exponents	A1-V.10 Evaluate integers raised to rational exponents >>
Lesson 7-4: Scientific Notation	A1-W.1 Convert between standard and scientific notation >>
	A1-W.2 Compare numbers written in scientific notation >>
	A1-W.3 Multiply numbers written in scientific notation >>
	A1-W.4 Divide numbers written in scientific notation >>
Lesson 7-5: Exponential Functions	A1-X.1 Evaluate an exponential function >>
	A1-X.2 Match exponential functions and graphs >>
	A1-X.3 Domain and range of exponential functions: graphs >>
	A1-X.4 Domain and range of exponential functions: equations >>
Lesson 7-6: Growth and Decay	A1-X.5 Exponential growth and decay: word problems >>

Lesson 7-7: Geometric Sequences as Exponential Functions

- A1-P.1** Identify arithmetic and geometric sequences >>
- A1-P.3** Geometric sequences >>
- A1-P.6** Write variable expressions for geometric sequences >>
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Lesson 7-8: Recursive Formulas

Chapter 8

Radical Functions, Rational Functions, and Geometry

Textbook section	IXL skills	
Lesson 8-1: Square Root Functions	A1-FF.1	Evaluate a radical function >>
	A1-FF.2	Domain and range of radical functions: graphs >>
	A1-FF.3	Domain and range of radical functions: equations >>
Lesson 8-2: Simplifying Radical Expressions	A1-EE.1	Simplify radical expressions >>
	A1-EE.2	Simplify radical expressions with variables >>
	A1-EE.3	Simplify radical expressions involving fractions >>
	A1-EE.4	Multiply radical expressions >>
	A1-EE.7	Divide radical expressions >>
Lesson 8-3: Operations with Radical Expressions	A1-EE.5	Add and subtract radical expressions >>
	A1-EE.6	Simplify radical expressions using the distributive property >>
Lesson 8-4: Radical Equations	A1-FF.4	Solve radical equations I >>
	A1-FF.5	Solve radical equations II >>
Lesson 8-5: Inverse Variation	A1-R.6	Identify direct variation and inverse variation >>
	A1-R.7	Write inverse variation equations >>
	A1-R.8	Write and solve inverse variation equations >>
Lesson 8-6: Rational Functions	A1-GG.1	Rational functions: asymptotes and excluded values >>
Lesson 8-7: Rational Equations	A1-GG.7	Solve rational equations >>

Chapter 9

Statistics and Probability

Textbook section	IXL skills	
Lesson 9-1: Statistics and Parameters	A1-KK.6	Mean absolute deviation >>
	A1-KK.7	Variance and standard deviation >>
Lesson 9-2: Distributions of Data	A1-N.5	Interpret box-and-whisker plots >>
Lesson 9-3: Comparing Sets of Data		

Chapter 10

Tools of Geometry

Textbook section	IXL skills	
Lesson 10-1: Points, Lines, and Planes		
Lesson 10-2: Linear Measure	G-B.2	Lengths of segments on number lines >>
	G-B.3	Additive property of length >>
	G-B.5	Congruent line segments >>
Lesson 10-3: Distance and Midpoints	G-B.4	Midpoints >>
	G-B.7	Midpoint formula - find the midpoint >>
	G-B.9	Distance formula >>
Lesson 10-4: Angle Measure	G-C.1	Angle vocabulary >>
	G-C.2	Angle measures >>
	G-C.6	Construct an angle bisector >>
Lesson 10-5: Constructing Perpendicular	G-D.2	Construct a perpendicular line >>
Lesson 10-6: Two-Dimensional Figures	A1-F.1	Perimeter >>
	A1-F.2	Area >>
	G-G.1	Polygon vocabulary >>
	G-S.2	Area of rectangles and squares >>
	G-S.5	Area and perimeter in the coordinate plane I >>
	G-S.6	Area and perimeter in the coordinate plane II >>
	G-S.7	Area and circumference of circles >>
Lesson 10-7: Proving Segment Relationships		
Lesson 10-8: Proving Angle Relationships	G-C.3	Identify complementary, supplementary, vertical, adjacent, and congruent angles >>
	G-C.4	Find measures of complementary, supplementary, vertical, and adjacent angles >>
	G-C.8	Proofs involving angles >>

Chapter 11

Parallel and Perpendicular Lines

Textbook section	IXL skills	
Lesson 11-1: Parallel Lines and Transversals	G-D.1	Identify parallel, perpendicular, and skew lines and planes >>
	G-D.3	Transversals: name angle pairs >>
Lesson 11-2: Angles and Parallel Lines	G-D.4	Transversals of parallel lines: find angle measures >>
Lesson 11-3: Slopes of Lines	G-E.2	Slopes of lines >>
	G-E.5	Slopes of parallel and perpendicular lines >>
Lesson 11-4: Equations of Lines	G-E.4	Equations of lines >>
	G-E.6	Equations of parallel and perpendicular lines >>
Lesson 11-5: Proving Lines Parallel	G-D.6	Proofs involving parallel lines I >>
	G-D.7	Proofs involving parallel lines II >>
Lesson 11-6: Perpendiculars and Distance	G-E.7	Find the distance between a point and a line >>
	G-E.8	Find the distance between two parallel lines >>

Chapter 12

Congruent Triangles

Textbook section	IXL skills	
Lesson 12-1: Classifying Triangles	G-F.1	Classify triangles >>
Lesson 12-2: Angles of Triangles	G-F.2	Triangle Angle-Sum Theorem >>
	G-F.3	Exterior Angle Theorem >>
Lesson 12-3: Congruent Triangles	G-J.1	Congruence statements and corresponding parts >>
	G-J.2	Solve problems involving corresponding parts >>
	G-J.3	Identify congruent figures >>
Lesson 12-4: Proving Triangles Congruent-SSS, SAS	G-K.1	SSS and SAS Theorems >>
	G-K.2	Proving triangles congruent by SSS and SAS >>
	G-K.6	SSS Theorem in the coordinate plane >>
Lesson 12-5: Proving Triangles Congruent-ASA, AAS	G-K.3	ASA and AAS Theorems >>
	G-K.4	Proving triangles congruent by ASA and AAS >>
	G-K.5	SSS, SAS, ASA, and AAS Theorems >>
	G-K.7	Proving triangles congruent by SSS, SAS, ASA, and AAS >>
	G-K.8	Proofs involving corresponding parts of congruent triangles >>
Lesson 12-6: Isosceles and Equilateral Triangles	G-K.9	Congruency in isosceles and equilateral triangles >>
	G-K.10	Proofs involving isosceles triangles >>
Lesson 12-7: Congruence Transformations	G-L.1	Classify congruence transformations >>
Lesson 12-8: Triangles and Coordinate Proof		

Chapter 13

Quadrilaterals

Textbook section	IXL skills	
Lesson 13-1: Parallelograms	G-N.4	Properties of parallelograms >>
Lesson 13-2: Tests for Parallelograms	G-N.5	Proving a quadrilateral is a parallelogram >>
Lesson 13-3: Rectangles		
Lesson 13-4: Rhombi and Squares	G-N.6	Properties of rhombuses >>
	G-N.7	Properties of squares and rectangles >>
Lesson 13-5: Trapezoids and Kites	G-N.1	Identify trapezoids >>
	G-N.3	Graph quadrilaterals >>
	G-N.8	Properties of trapezoids >>
	G-N.9	Properties of kites >>
	G-N.10	Review: properties of quadrilaterals >>

Chapter 14

Similarity, Transformations, and Symmetry

Textbook section	IXL skills	
Lesson 14-1: Similar Triangles	G-P.5	Similar triangles and indirect measurement >>
	G-P.7	Similarity rules for triangles >>
Lesson 14-2: Parallel Lines and Proportional Parts	G-M.1	Midsegments of triangles >>
	G-P.10	Triangle Proportionality Theorem >>
Lesson 14-3: Similarity Transformations	G-L.15	Dilations: scale factor and classification >>
Lesson 14-4: Reflections	G-L.5	Reflections: graph the image >>
	G-L.6	Reflections: find the coordinates >>
Lesson 14-5: Translations	G-L.2	Translations: graph the image >>
	G-L.3	Translations: find the coordinates >>
Lesson 14-6: Rotations	G-L.8	Rotations: graph the image >>
	G-L.9	Rotations: find the coordinates >>
Lesson 14-7: Compositions of Transformations	G-L.10	Compositions of congruence transformations: graph the image >>
Lesson 14-8: Symmetry	G-O.1	Line symmetry >>
	G-O.2	Rotational symmetry >>
	G-O.3	Draw lines of symmetry >>
	G-O.4	Count lines of symmetry >>
Lesson 14-9: Dilations	G-L.13	Dilations: graph the image >>
	G-L.14	Dilations: find the coordinates >>

Chapter 15

Circles

Textbook section	IXL skills	
Lesson 15-1: Circles and Circumference		
Lesson 15-2: Arcs and Chords	G-U.1	Parts of a circle >>
	G-U.2	Central angles >>
	G-U.3	Arc measure and arc length >>
	G-U.5	Circle measurements: mixed review >>
	G-U.6	Arcs and chords >>
Lesson 15-3: Tangents	G-U.7	Tangent lines >>
	G-U.13	Construct a tangent line to a circle >>
Lesson 15-4: Equations of Circles	G-V.3	Write equations of circles in standard form from graphs >>
	G-V.4	Write equations of circles in standard form using properties >>
	G-V.7	Graph circles from equations in standard form >>
	G-V.8	Graph circles from equations in general form >>