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Unit 1

Equations

Textbook section	IXL skills
1.1: Solving One and Two-step Equations	1. Solve one-step equations WKM 2. Solve two-step equations QEB 3. Solve two-step equations: word problems D2Y *Also consider* • Write an equation from words N2T • Which x satisfies an equation? DJS
1.2: Solving Multi-Step Equations	1. Solve multi-step equations ZDD 2. Solve equations involving like terms VSW 3. Solve equations with variables on both sides FC9 *Also consider* • Solve equations: complete the solution 66R
1.3: Solutions to Linear Equations	1. Find the number of solutions HQN 2. Create equations with no solutions or infinitely many solutions CRA
1.4: Linear Inequalities	1. Solutions to inequalities 8BA 2. Write inequalities from number lines JNL 3. Solve and graph inequalities NDQ *Also consider* • One-step inequalities: word problems 6HD
1.5: Square Roots & Cube Roots	1. Square roots of perfect squares WRT 2. Cube roots of positive perfect cubes BH5 3. Estimate square roots AU2
1.6: Solving Equations with Exponents	1. Solve equations using square roots XBY 2. Solve equations using cube roots BWL

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Also consider

- Positive and negative square roots K8G

1.7: Simplifying Roots

1. Prime factorization 46F
2. Simplify square roots MVW

Unit 2

The Pythagorean Theorem

Textbook section	IXL skills
2.1: The Pythagorean Theorem	1. Pythagorean theorem: find the length of the hypotenuse LDL 2. Pythagorean theorem: find the missing leg length ME7 3. Converse of the Pythagorean theorem: is it a right triangle? JVX
2.2: Applying the Pythagorean Theorem	1. Pythagorean theorem: word problems U5U
2.3: Distance on the Coordinate Plane	1. Find the distance between two points 7SN *Also consider* • Pythagorean theorem: find the perimeter R53

Unit 3

Proportional Relationships and Slope

Textbook section	IXL skills
3.1: Understanding Functions	1. Domain and range of functions ESM 2. Identify functions VCT 3. Identify functions: graphs LUT *Also consider* • Complete a table for a two-variable relationship 2LU
3.2: Proportional Relationships	1. Identify proportional relationships EAB 2. Write equations for proportional relationships from tables 6GU 3. Write equations for proportional relationships from graphs JKH *Also consider* • Interpret graphs of proportional relationships RMH
3.3: Calculating Slope from Graphs	1. Find the slope from a graph 9BQ 2. Graph a line using slope CHR
3.4: The Slope Formula	1. Find the slope from two points VZG 2. Constant rate of change: graphs TWW *Also consider* • Find a missing coordinate using slope NR2

Unit 4

Functions

Textbook section	IXL skills
4.1: Graphing Using Slope-Intercept Form	1. Slope-intercept form: find the slope and y-intercept PZE 2. Graph a line from an equation in slope-intercept form UKK *Also consider* • Write linear equations: word problems ZRF
4.2: Writing Linear Equations for Graphs	1. Write a linear equation from a graph 78T 2. Interpret a graph: word problems 2V5
4.3: Writing Linear Equations from Key Information	1. Write a linear equation from a slope and y-intercept AGK 2. Write a linear equation from a slope and a point W5A 3. Write a linear equation from two points LVH *Also consider* • Write a linear function from a table BLJ
4.4: Linear Equations in Other Forms	1. Convert a linear equation to slope-intercept form A2R 2. Graph a line from an equation in standard form FPU *Also consider* • Graph a line from an equation in point-slope form UVR
4.5: Introduction to Non-Linear Functions	1. Identify linear and nonlinear functions NTS 2. Identify linear and nonlinear functions: tables 46G
4.6: Interpreting Graphs of Functions	

Unit 5

Systems of Equations

Textbook section	IXL skills
5.1: Parallel, Intersecting, or the Same Line	1. Find the number of solutions to a system of equations by graphing 7JH 2. Find the number of solutions to a system of equations X55
5.2: Solving Systems by Graphing	1. Is (x, y) a solution to the system of equations? XNR 2. Solve a system of equations by graphing V56 3. Solve a system of equations by graphing: word problems EV7
5.3: Solving Systems by Substitution	1. Solve a system of equations using substitution HAX 2. Solve a system of equations using substitution: word problems L2K
5.4: Solving Systems using Elimination	1. Solve a system of equations using elimination CH8 2. Solve a system of equations using elimination: word problems LBK
5.5: Applications of Systems of Equations	1. Solve a system of equations using any method: word problems 9AT *Also consider* • Solve a system of equations using any method WFG
5.6: Converting Repeating Decimals to Fractions	1. Write a repeating decimal as a fraction W49

Unit 6

Two-Dimensional Geometry

Textbook section	IXL skills
6.1: Complementary & Supplementary Angles	1. Identify complementary and supplementary angles XA6 2. Find measures of complementary and supplementary angles JL9
6.2: Vertical Angles and Adjacent Angles	1. Identify vertical, adjacent, and congruent angles BCU 2. Find measures of vertical and adjacent angles 2F6
6.3: Drawing Triangles with Given Conditions	1. Triangle inequality MJ8
6.4: Areas of Polygons	1. Area of rectangles and parallelograms 62H 2. Area of triangles and trapezoids ENE *Also consider* • Area and perimeter: word problems JFR
6.5: Circumference and Pi	1. Parts of a circle 2VL 2. Circumference of circles KS7 3. Central angles of circles CD9
6.6: Area of a Circle	1. Area of circles YA8 2. Area of sectors 7ZX 3. Circles: word problems P56 *Also consider* • Semicircles: calculate area, perimeter, radius, and diameter SMW • Quarter circles: calculate area, perimeter, and radius WK8
6.7: Composite Figures	1. Area of compound figures with triangles, semicircles, and quarter circles N97 2. Area between two shapes RKC

6.8: Scale Drawings

1. Scale drawings: word problems 84H
2. Scale drawings: scale factor word problems KCM

Also consider

- Perimeter and area: changes in scale ZC6

Unit 7

Parallel Lines, Transversals, & Triangles

Textbook section	IXL skills
7.1: Alternate Exterior and Interior Angles	1. Transversals of parallel lines: name angle pairs JQV 2. Find angle measures: supplementary, vertical, and alternate interior angles WUT
7.2: Corresponding and Same-Side Interior	1. Identify corresponding and consecutive interior angles ZMM *Also consider* • Transversals of parallel lines: find angle measures CG9
7.3: Angle Sum of a Triangle	1. Classify triangles N5Z 2. Find missing angles in triangles 4U6 3. Triangle Angle-Sum Theorem 9XQ
7.4: Congruent and Similar Triangles	1. Side lengths and angle measures of similar triangles XVP 2. Identify similar triangles D8K
7.5: Angle Relationships	1. Exterior Angle Theorem E2L 2. Find missing side lengths in proportional triangles WNW

Unit 8

Transformations

Textbook section	IXL skills
8.1: Reflections	1. Reflections over the x- and y-axes: graph the image UPK 2. Reflections over the x- and y-axes: find the coordinates TF8
8.2: Translations	1. Translations: graph the image ZUF 2. Translations: find the coordinates MHD 3. Translations: write the rule XUJ
8.3: Rotations	1. Rotations: graph the image 5EQ 2. Rotations: find the coordinates C2Q *Also consider* • Identify reflections, rotations, and translations 7MB
8.4: Dilations	1. Dilations: graph the image 8V9 2. Dilations: find the coordinates XYY 3. Dilations: find the scale factor G64 *Also consider* • Perimeter and area: changes in scale ZC6
8.5: Composition of Transformations	1. Sequences of congruence transformations: graph the image 8GA

Unit 9

Exponent Properties

Textbook section	IXL skills
9.1: Multiplication Property of Exponents	1. Multiplication with exponents EDA 2. Power rule with exponents 7L6
9.2: Division Property of Exponents	1. Understanding negative exponents AEA 2. Division with exponents SPE 3. Identify equivalent expressions involving exponents 76C
9.3: Scientific Notation	1. Scientific notation 3S7 2. Compare numbers written in scientific notation G9C *Also consider* • Scientific notation on calculators H2W
9.4: Application of Scientific Notation	1. Multiply numbers written in scientific notation GGU 2. Divide numbers written in scientific notation JPU 3. Add and subtract numbers written in scientific notation QRD

Unit 10

Three-Dimensional Geometry

Textbook section	IXL skills
10.1: Three-Dimensional Figures	1. Count vertices, edges, faces F5D 2. Cross sections of three-dimensional figures HFJ *Also consider* • Bases of three-dimensional figures RF6 • Front, side, and top view 9Q3
10.2: Surface Area of Prisms	1. Nets of three-dimensional figures 3R2 2. Surface area of cubes and prisms RFP
10.3: Surface Area of Pyramids	1. Surface area of pyramids XSJ
10.4: Volume of Prisms and Pyramids	1. Volume of cubes and prisms URT 2. Volume of cubes and rectangular prisms: word problems 8WV 3. Volume of pyramids CKU
10.5: Volume of Cylinders	1. Volume of cylinders NX6
10.6: Volume of Cones	1. Volume of cones NRX
10.7: Volume of Spheres	1. Volume of spheres DPW

Unit 11

Bivariate Data

Textbook section	IXL skills
11.1: Scatter Plots and Associations	1. Create scatter plots FTG 2. Identify trends with scatter plots 7T5 3. Outliers in scatter plots V2Y
11.2: Lines of Best Fit	1. Identify lines of best fit D5Q 2. Make predictions with scatter plots M8S
11.3: Writing Equations for Lines of Best Fit	1. Write equations for lines of best fit EJP
11.4: Bivariate Data and Frequency Tables	1. Find probabilities using two-way frequency tables G8G

Unit 12

Probability & Statistics

Textbook section	IXL skills
12.1: Probability	1. Certain, probable, unlikely, impossible RVM 2. Probability of simple events and opposite events F88 3. Probability of mutually exclusive events and overlapping events 8TP
12.2: Using Probability to Predict	1. Experimental probability 9AA 2. Make predictions using experimental probability WP6 3. Make predictions using theoretical probability 9UW *Also consider* • Use collected data to find probabilities and make predictions VST
12.3: Compound Probability	1. Sample spaces for compound events 8HY 2. Compound events: find the number of outcomes HZR 3. Probability of compound events YPQ *Also consider* • Compound events: find the number of sums SCV • Probability of independent and dependent events NED
12.4: Random Sampling & Inferences	1. Populations and samples YHZ 2. Identify representative, random, and biased samples 5V3 *Also consider* • Interpret tables LEP • Interpret bar graphs YYE • Interpret circle graphs SGL

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12.5: Measures of Center & Variability

1. Calculate mean, median, mode, and range U2A
2. Calculate mean absolute deviation YNM
3. Compare populations using measures of center and spread PCK

Also consider

- Box plots SKN
- Interpret line plots W92