



IXL Skill Alignment

5th alignment for EngageNY Common Core Curriculum

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Module 1

Place Value and Decimal Fractions

Textbook section	IXL skills
Topic A: Multiplicative Patterns on the Place Value Chart	I.2 Multiply a decimal by a power of ten >> Z.8 Compare and convert metric units of length >> <i>See also:</i> G.4 Place values in decimal numbers >> J.1 Divide by powers of ten >>
Topic B: Decimal Fractions and Place Value Patterns	G.5 Convert decimals between standard and expanded form >> <i>See also:</i> G.3 Understanding decimals expressed in words >> G.4 Place values in decimal numbers >> G.10 Compare decimal numbers >> G.11 Put decimal numbers in order >>
Topic C: Place Value and Rounding Decimal Fractions	
Topic D: Adding and Subtracting Decimals	H.1 Add decimal numbers >> H.2 Subtract decimal numbers >> H.3 Add and subtract decimal numbers >> H.4 Add and subtract decimals: word problems >> <i>See also:</i> S.1 Add and subtract money amounts >> S.2 Add and subtract money: word problems >>
Topic E: Multiplying Decimals	
Topic F: Dividing Decimals	H.4 Add and subtract decimals: word problems >> S.2 Add and subtract money: word problems >>

S.5 Price lists >>

See also:

O.6 Add, subtract, multiply, and divide
decimals: word problems >>

Module 2

Multi-Digit Whole Number and Decimal Fraction Operations

Textbook section	IXL skills
Topic A: Mental Strategies for Multi-Digit Whole Number Multiplication	C.3 Multiplication patterns over increasing place values >>
	C.4 Multiply numbers ending in zeroes >>
	C.5 Multiply numbers ending in zeroes: word problems >>
	C.8 Estimate products >>
	C.9 Estimate products: word problems >>
Topic B: The Standard Algorithm for Multi-Digit Whole Number Multiplication	C.13 Multiply 2-digit numbers by 2-digit numbers >>
	C.14 Multiply 2-digit numbers by 3-digit numbers >>
	C.18 Multiply by 3-digit numbers >>
	O.3 Write numerical expressions >>
	<i>See also:</i>
	C.15 Multiply 2-digit numbers by larger numbers >>
	C.16 Multiply by 2-digit numbers: word problems >>
Topic C: Decimal Multi-Digit Multiplication	I.1 Estimate products of decimals >>
	I.5 Multiply decimals and whole numbers: word problems >>
	S.3 Multiply money amounts: word problems >>
Topic D: Measurement Word Problems with Whole Number and Decimal Multiplication	Z.4 Compare and convert customary units of volume >>
	Z.8 Compare and convert metric units of length >>
	Z.9 Compare and convert metric units of weight >>
	Z.10 Compare and convert metric units of volume >>
	Z.11 Compare and convert metric units >>

See also:

- Y.1** Convert time units >>
- Z.2** Compare and convert customary units of length >>
- Z.3** Compare and convert customary units of weight >>
- Z.5** Compare and convert customary units >>
- Z.13** Compare customary units by multiplying >>

Topic E: Mental Strategies for Multi-Digit Whole Number Division

- D.6** Division patterns over increasing place values >>
- D.7** Divide numbers ending in zeroes >>
- D.8** Divide numbers ending in zeroes: word problems >>
- D.9** Estimate quotients >>
- D.10** Estimate quotients: word problems >>

Topic F: Partial Quotients and Multi-Digit Whole Number Division

- D.11** Divide 2-digit and 3-digit numbers by 2-digit numbers >>
- D.12** Divide 2-digit and 3-digit numbers by 2-digit numbers: word problems >>
- D.13** Divide larger numbers by 2-digit numbers >>
- D.14** Divide larger numbers by 2-digit numbers: word problems >>

Topic G: Partial Quotients and Multi-Digit Decimal Division

- J.2** Decimal division patterns over increasing place values >>
- J.3** Division with decimal quotients >>
- J.5** Division with decimal quotients: word problems >>
- S.4** Divide money amounts: word problems >>

Topic H: Measurement Word Problems with Multi-Digit Division

- D.12** Divide 2-digit and 3-digit numbers by 2-digit numbers: word problems >>
 - D.14** Divide larger numbers by 2-digit numbers: word problems >>
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Module 3

Addition and Subtraction of Fractions

Textbook section	IXL skills
Topic A: Equivalent Fractions	<p>L.1 Decompose fractions multiple ways >></p> <p>M.1 Multiply unit fractions by whole numbers using number lines >></p> <p>M.5 Multiply fractions by whole numbers using number lines >></p> <p><i>See also:</i></p> <p>L.2 Add and subtract fractions with like denominators using number lines >></p> <p>L.3 Add and subtract fractions with like denominators >></p> <p>M.3 Multiples of fractions >></p> <p>M.9 Multiply fractions by whole numbers II >></p> <p>M.10 Multiply fractions by whole numbers: word problems >></p>
Topic B: Making Like Units Pictorially	<p>L.8 Add fractions with unlike denominators >></p> <p>L.10 Subtract fractions with unlike denominators >></p> <p>L.11 Add and subtract fractions with unlike denominators: word problems >></p> <p><i>See also:</i></p> <p>L.6 Add fractions with unlike denominators using models >></p> <p>L.9 Subtract fractions with unlike denominators using models >></p>
Topic C: Making Like Units Numerically	<p>L.8 Add fractions with unlike denominators >></p> <p>L.10 Subtract fractions with unlike denominators >></p> <p>L.11 Add and subtract fractions with unlike denominators: word problems >></p> <p>L.12 Add 3 or more fractions with unlike denominators >></p> <p>L.13 Add 3 or more fractions: word problems >></p> <p>L.18 Add mixed numbers with unlike denominators >></p>

- L.19** Subtract mixed numbers with unlike denominators >>
- L.20** Add and subtract mixed numbers: word problems >>
- L.21** Add and subtract fractions in recipes >>

Topic D: Further Applications

- L.14** Compare sums and differences of unit fractions >>
- L.15** Complete addition and subtraction sentences with fractions >>
- L.16** Inequalities with addition and subtraction of fractions >>
- L.22** Complete addition and subtraction sentences with mixed numbers >>
- L.23** Inequalities with addition and subtraction of mixed numbers >>

See also:

- K.9** Compare fractions using benchmarks >>
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Module 4

Multiplication and Division of Fractions and Decimal Fractions

Textbook section	IXL skills
Topic A: Line Plots of Fraction Measurements	W.12 Create and interpret line plots with fractions >>
Topic B: Fractions as Division	K.6 Convert between improper fractions and mixed numbers >>
Topic C: Multiplication of a Whole Number by a Fraction	M.8 Multiply fractions by whole numbers I >> M.9 Multiply fractions by whole numbers II >> M.10 Multiply fractions by whole numbers: word problems >>
Topic D: Fraction Expressions and Word Problems	L.11 Add and subtract fractions with unlike denominators: word problems >> M.10 Multiply fractions by whole numbers: word problems >> O.8 Add, subtract, multiply, and divide fractions and mixed numbers: word problems >>
Topic E: Multiplication of a Fraction by a Fraction	I.7 Multiply two decimals using grids >> I.8 Multiply two decimals >> M.12 Multiply two unit fractions using models >> M.13 Multiply two fractions using models: fill in the missing factor >> M.14 Multiply two fractions using models >> M.15 Multiply two fractions >> M.16 Multiply two fractions: word problems >> M.23 Multiply a mixed number by a whole number >> M.24 Multiply a mixed number by a fraction >> M.28 Multiply fractions and mixed numbers in recipes >>
Topic F: Multiplication with Fractions and Decimals as Scaling and Word Problems	G.13 Convert mixed numbers to decimals >> I.5 Multiply decimals and whole numbers: word problems >>

- M.10** Multiply fractions by whole numbers: word problems >>
- M.16** Multiply two fractions: word problems >>
- M.17** Scaling whole numbers by fractions >>
- M.18** Scaling fractions by fractions >>
- S.3** Multiply money amounts: word problems >>

Topic G: Division of Fractions and Decimal Fractions

- N.1** Divide unit fractions by whole numbers >>
- N.2** Divide whole numbers by unit fractions using models >>
- N.3** Divide whole numbers by unit fractions >>
- N.4** Divide whole numbers and unit fractions >>
- N.7** Divide unit fractions by whole numbers: word problems >>

Topic H: Interpretation of Numerical Expressions

- N.7** Divide unit fractions by whole numbers: word problems >>
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Module 5

Addition and Multiplication with Volume and Area

Textbook section	IXL skills
Topic A: Concepts of Volume	EE.11 Volume of rectangular prisms made of unit cubes >>
	EE.12 Volume of irregular figures made of unit cubes >>
Topic B: Volume and the Operations of Multiplication and Addition	EE.11 Volume of rectangular prisms made of unit cubes >>
	EE.13 Volume of cubes and rectangular prisms >>
Topic C: Area of Rectangular Figures with Fractional Side Lengths	M.15 Multiply two fractions >>
	M.23 Multiply a mixed number by a whole number >>
	M.24 Multiply a mixed number by a fraction >>
	M.25 Multiply two mixed numbers >>
	EE.4 Area of squares and rectangles >>
	EE.8 Area between two rectangles >>
	<i>See also:</i>
	EE.7 Area of compound figures >>
	EE.10 Area and perimeter: word problems >>
Topic D: Drawing, Analysis, and Classification of Two-Dimensional Shapes	AA.7 Measure angles with a protractor >>
	BB.9 Classify quadrilaterals >>

Module 6

Problem Solving with the Coordinate Plane

Textbook section	IXL skills
Topic A: Coordinate Systems	G.8 Decimal number lines >> U.1 Objects on a coordinate plane >> U.3 Coordinate planes as maps >> AA.5 Parallel, perpendicular, and intersecting lines >> <i>See also:</i> G.9 Compare decimals on number lines >> K.8 Graph and compare fractions on number lines >> U.4 Follow directions on a coordinate plane >>
Topic B: Patterns in the Coordinate Plane and Graphing Number Patterns from Rules	C.22 Multiplication input/output tables >> C.23 Multiplication input/output tables: find the rule >> M.11 Multiply fractions by whole numbers: input/output tables >> V.9 Complete a table from a graph >> <i>See also:</i> V.10 Graph a two-variable relationship >>
Topic C: Drawing Figures in the Coordinate Plane	AA.5 Parallel, perpendicular, and intersecting lines >> CC.1 Lines of symmetry >>
Topic D: Problem Solving in the Coordinate Plane	W.2 Interpret line graphs >> W.3 Create line graphs >>
Topic E: Multi-Step Word Problems	O.3 Write numerical expressions >> O.4 Evaluate numerical expressions >> P.1 Multi-step word problems >> P.2 Word problems with extra or missing information >> P.3 Guess-and-check problems >>

See also:

P.4 Find the order >>

Topic F: The Years In Review: A Reflection on A Story of Units

C.3 Multiplication patterns over increasing place values >>

C.4 Multiply numbers ending in zeroes >>

C.13 Multiply 2-digit numbers by 2-digit numbers >>

C.14 Multiply 2-digit numbers by 3-digit numbers >>

D.11 Divide 2-digit and 3-digit numbers by 2-digit numbers >>

H.1 Add decimal numbers >>

H.2 Subtract decimal numbers >>

I.3 Multiply a decimal by a one-digit whole number >>

I.8 Multiply two decimals >>

K.6 Convert between improper fractions and mixed numbers >>

M.8 Multiply fractions by whole numbers I >>

M.9 Multiply fractions by whole numbers II >>

M.15 Multiply two fractions >>

N.1 Divide unit fractions by whole numbers >>

N.3 Divide whole numbers by unit fractions >>

S.1 Add and subtract money amounts >>

AA.5 Parallel, perpendicular, and intersecting lines >>

AA.6 Types of angles >>

AA.7 Measure angles with a protractor >>

BB.9 Classify quadrilaterals >>

EE.11 Volume of rectangular prisms made of unit cubes >>

EE.13 Volume of cubes and rectangular prisms >>

See also:

G.10 Compare decimal numbers >>

K.7 Least common denominator >>

BB.4 Parallel sides in quadrilaterals >>

DD.1 Identify three-dimensional figures >>

DD.2 Count vertices, edges, and faces >>