



IXL Skill Alignment

Course 2 alignment for EdGems Math



Use IXL's interactive skill plan to get up-to-date skill alignments, assign skills to your students, and track progress.

www.ixl.com/math/skill-plans/edgems-math-course-2

This document includes the IXL® skill alignments to EdGems MS Math's **EdGems Math** curriculum. IXL provides skill alignments as a service to teachers, students, and parents. The skill alignments are provided by IXL and are not affiliated with, sponsored by, reviewed, approved or endorsed by EdGems MS Math or any other third party. IXL® and IXL Learning® are registered trademarks of IXL Learning, Inc. All other intellectual property rights (e.g., unregistered and registered trademarks and copyrights) are the property of their respective owners.

Unit 1

Ratios & Rates

| Textbook section | IXL skills |
|--|---|
| 1.1: Ratios | <ol style="list-style-type: none">1. Understanding ratios ZTC2. Use tape diagrams to solve ratio word problems DKD3. Word problems involving ratios JKY <p><i>Also consider</i></p> <ul style="list-style-type: none">• Ratio tables FN6• Identify equivalent ratios ZFM |
| 1.2: Unit rates | <ol style="list-style-type: none">1. Unit rates 2NB2. Unit prices N7G <p><i>Also consider</i></p> <ul style="list-style-type: none">• Compare rates: word problems VVS• Unit prices with unit conversions KJ8 |
| 1.3: Rates & Ratios with a Complex Fraction | <ol style="list-style-type: none">1. Calculate unit rates with fractions 57X |
| 1.4: Scale Drawings | <ol style="list-style-type: none">1. Scale drawings: word problems 84H2. Scale drawings: scale factor word problems KCM <p><i>Also consider</i></p> <ul style="list-style-type: none">• Perimeter and area: changes in scale ZC6 |

Unit 2

Proportional Relationships

| Textbook section | IXL skills |
|---|---|
| 2.1: Proportional Relationships | <ol style="list-style-type: none"> 1. Do the ratios form a proportion? MJQ 2. Do the ratios form a proportion: word problems SHV 3. Solve proportions TDA |
| 2.2: Problem Solving with Proportions | <ol style="list-style-type: none"> 1. Solve proportions: word problems WB7 |
| 2.3: Tables & Graphs of Proportional Relationships | <ol style="list-style-type: none"> 1. Find the constant of proportionality from a table LKZ 2. Identify proportional relationships in tables and graphs VZK 3. Identify proportional relationships by graphing AAN <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Find the constant of proportionality from a graph ZUT • Interpret graphs of proportional relationships RMH |
| 2.4: Proportional Relationship Equations | <ol style="list-style-type: none"> 1. Write equations for proportional relationships from tables 6GU 2. Write equations for proportional relationships from graphs JKH 3. Complete a table and graph a proportional relationship 5DR <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Write and solve equations for proportional relationships VKK |

Unit 3

Percents

Textbook section

IXL skills

3.1: Fractions, Decimals, & Percents

1. Convert fractions or mixed numbers to decimals M2D
2. Convert between percents, fractions, and decimals 2HW

Also consider

- Convert decimals to fractions or mixed numbers HZD
- Convert between decimals and fractions or mixed numbers 8XE
- Compare percents to fractions and decimals JAE

3.2: Percent of a Number

1. Percents of numbers and money amounts 93K
2. Solve percent equations 67F
3. Solve percent equations: word problems JS6

Also consider

- Percents of numbers: word problems EXE
- Estimate percents of numbers 29D

3.3: Percent of Change

1. Percent of change BL7
2. Percent of change: word problems 54S

Also consider

- Percent of change: find the original amount word problems RCM

3.4: Percent Applications

1. Percent of a number: tax, discount, and more SPN
2. Multi-step problems with percents ZHX
3. Simple interest E7Y

Also consider

- Which is the better coupon? QT6
- Sale prices: find the original price BDA
- Find the percent: tax, discount, and more PBM

- Estimate tips Y5R
-

Unit 4

Sums & Differences of Rational Numbers

| Textbook section | IXL skills |
|--|--|
| 4.1: Adding Integers | <ol style="list-style-type: none">1. Add integers using number lines A632. Add integers QFU3. Add three or more integers PBC <p><i>Also consider</i></p> <ul style="list-style-type: none">• Absolute value and opposite integers NSB• Integer addition rules ERH• Add integers using counters FTM |
| 4.2: Adding Rational Numbers | <ol style="list-style-type: none">1. Add positive and negative decimals Y6V2. Add positive and negative fractions DMY <p><i>Also consider</i></p> <ul style="list-style-type: none">• Add rational numbers STX |
| 4.3: Subtracting Integers | <ol style="list-style-type: none">1. Subtract integers using number lines FGG2. Subtract integers HEU3. Add and subtract integers: word problems 2DD <p><i>Also consider</i></p> <ul style="list-style-type: none">• Integer subtraction rules QZA• Subtract integers using counters BGL• Complete addition and subtraction equations with integers P6A• Quantities that combine to zero: word problems 7SP |
| 4.4: Subtracting Rational Numbers | <ol style="list-style-type: none">1. Subtract positive and negative decimals FGV2. Subtract positive and negative fractions QLV <p><i>Also consider</i></p> <ul style="list-style-type: none">• Subtract rational numbers FXY• Apply addition and subtraction rules Y8T |

Unit 5

Products and Quotients of Rational Numbers

| Textbook section | IXL skills |
|---|--|
| 5.1: Multiplying and Dividing Integers | <ol style="list-style-type: none"> 1. Understand multiplying by a negative integer using a number line NB8 2. Multiply and divide integers R8D 3. Integer multiplication and division rules 5R8 <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Equal quotients of integers 2QY • Complete multiplication and division equations with integers K94 • Add, subtract, multiply, and divide integers B8A |
| 5.2: Multiplying Rational Numbers | <ol style="list-style-type: none"> 1. Multiply positive and negative fractions K6H 2. Multiply positive and negative decimals VN5 3. Multiply rational numbers FGQ |
| 5.3: Dividing Rational Numbers | <ol style="list-style-type: none"> 1. Divide positive and negative fractions 92N 2. Divide positive and negative decimals XUH 3. Multi-step word problems JVU <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Divide rational numbers C9V • Apply multiplication and division rules V5V • Identify quotients of rational numbers: word problems JT9 |
| 5.4: Order of Operations | <ol style="list-style-type: none"> 1. Evaluate exponents SZQ 2. Evaluate numerical expressions involving integers J2F <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Evaluate numerical expressions involving decimals FNM • Evaluate numerical expressions involving fractions XXQ |

Unit 6

Algebraic Expressions

| Textbook section | IXL skills |
|---------------------------------------|---|
| 6.1: Algebraic Expressions | <ol style="list-style-type: none">1. Write variable expressions N482. Evaluate one-variable expressions 6Z83. Evaluate multi-variable expressions T56 <p><i>Also consider</i></p> <ul style="list-style-type: none">• Identify terms and coefficients E7H |
| 6.2: The Distributive Property | <ol style="list-style-type: none">1. Multiply using the distributive property NUY2. Factors of linear expressions J9G <p><i>Also consider</i></p> <ul style="list-style-type: none">• Sort factors of variable expressions BUX |
| 6.3: Equivalent Expressions | <ol style="list-style-type: none">1. Add and subtract linear expressions 6BT2. Identify equivalent linear expressions I DRB3. Identify equivalent linear expressions II KAR <p><i>Also consider</i></p> <ul style="list-style-type: none">• Identify equivalent linear expressions: word problems KWH• Write equivalent expressions using properties 6XR |

Unit 7

Equations and Inequalities

| Textbook section | IXL skills |
|---|--|
| 7.1: Solve One-step Equations | <ol style="list-style-type: none"> 1. Which x satisfies an equation? DJS 2. Solve one-step equations WKM |
| 7.2: Solve Two-step Equations | <ol style="list-style-type: none"> 1. Solve two-step equations QEB 2. Solve equations: word problems D2Y 3. Solve equations: complete the solution 66R <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Model and solve equations using algebra tiles EGK • Write and solve equations that represent diagrams FVH • Write an equation from words N2T |
| 7.3: Simplifying and Solving Equations | <ol style="list-style-type: none"> 1. Solve equations involving like terms VSW 2. Solve multi-step equations ZDD |
| 7.4: Linear Inequalities | <ol style="list-style-type: none"> 1. Solutions to inequalities 8BA 2. Write inequalities from number lines JNL 3. Solve and graph inequalities NDQ <p><i>Also consider</i></p> <ul style="list-style-type: none"> • One-step inequalities: word problems 6HD |

Unit 8

Two-Dimensional Geometry

| Textbook section | IXL skills |
|---|--|
| 8.1: Complementary & Supplementary Angles | <ol style="list-style-type: none"> 1. Identify complementary and supplementary angles XA6 2. Find measures of complementary and supplementary angles JL9 |
| 8.2: Vertical Angles and Adjacent Angles | <ol style="list-style-type: none"> 1. Identify vertical, adjacent, and congruent angles BCU 2. Find measures of vertical and adjacent angles 2F6 |
| 8.3: Drawing Triangles with Given Conditions | <ol style="list-style-type: none"> 1. Triangle inequality MJ8 |
| 8.4: Areas of Polygons | <ol style="list-style-type: none"> 1. Area of rectangles and parallelograms 62H 2. Area of triangles and trapezoids ENE <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Area and perimeter: word problems JFR |
| 8.5: Circumference and Pi | <ol style="list-style-type: none"> 1. Parts of a circle 2VL 2. Circumference of circles KS7 3. Central angles of circles CD9 |
| 8.6: Area of a Circle | <ol style="list-style-type: none"> 1. Area of circles YA8 2. Area of sectors 7ZX 3. Circles: word problems P56 <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Semicircles: calculate area, perimeter, radius, and diameter SMW • Quarter circles: calculate area, perimeter, and radius WK8 |
| 8.7: Composite Figures | <ol style="list-style-type: none"> 1. Area of compound figures with triangles, semicircles, and quarter circles N97 2. Area between two shapes RKC |

Unit 9

Three-Dimensional Geometry

| Textbook section | IXL skills |
|---|---|
| 9.1: Three-Dimensional Figures | <ol style="list-style-type: none">Count vertices, edges, faces F5DCross sections of three-dimensional figures HFJ <p><i>Also consider</i></p> <ul style="list-style-type: none">Bases of three-dimensional figures RF6Front, side, and top view 9Q3 |
| 9.2: Surface Area of Prisms | <ol style="list-style-type: none">Nets of three-dimensional figures 3R2Surface area of cubes and prisms RFP |
| 9.3: Surface Area of Pyramids | <ol style="list-style-type: none">Surface area of pyramids XSJ |
| 9.4: Volume of Prisms and Pyramids | <ol style="list-style-type: none">Volume of cubes and prisms URTVolume of cubes and rectangular prisms: word problems 8WVVolume of pyramids CKU |

Unit 10

Probability & Statistics

| Textbook section | IXL skills |
|---|---|
| 10.1: Probability | <ol style="list-style-type: none"> 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 |
| 10.2: Using Probability to Predict | <ol style="list-style-type: none"> 1. Experimental probability 9AA 2. Make predictions using experimental probability WP6 3. Make predictions using theoretical probability 9UW |
| 10.3: Compound Probability | <ol style="list-style-type: none"> 1. Compound events: find the number of outcomes HZR 2. Compound events: find the number of sums SCV 3. Probability of compound events YPQ <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Probability of independent and dependent events NED |
| 10.4: Random Sampling and Inferences | <ol style="list-style-type: none"> 1. Identify representative, random, and biased samples 5V3 <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Interpret tables LEP • Interpret bar graphs YYE • Interpret circle graphs SGL |
| 10.5: Measures of Center and Variability | <ol style="list-style-type: none"> 1. Calculate mean, median, mode, and range U2A 2. Calculate mean absolute deviation YNM 3. Box plots SKN <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Interpret line plots W92 |