

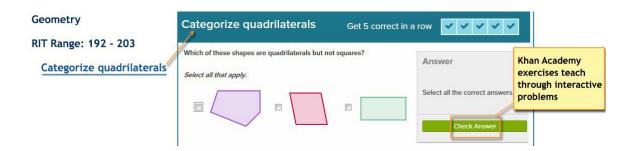
# MAP Growth Mathematics to Khan Academy

Khan Academy Practice Exercises Correlated to RIT

## Common Core MAP Growth Math 2-5

### About this Document

This document correlates MAP<sup>®</sup> Growth<sup>™</sup> test sub-goals and RIT ranges to Khan Academy<sup>®</sup> exercises. The Khan Academy exercises are interactive problems for students with instant feedback.



Having these exercises correlated to RIT ranges means you can use them in conjunction with your flexible student groupings that are also informed by RIT score results. The exercises are also useful for targeting learning in each student's zone of proximal development (Vygotsky).

The correlation between MAP Growth RIT scores and the Khan Academy exercises was determined by using our 2015 norms data to approximate grade levels, which were then matched to the corresponding Common Core State Standards (CCSS). Teachers in states that have not adopted the CCSS may still find these resources valuable by relating goals or sub-goals that are similar to CCSS goals and sub-goals.

NWEA plans to work with Khan Academy to update these links twice a year as new exercises are developed.

### How to Use

- 1. Use MAP Growth reports to find the RIT scores for a given sub-goal.
- 2. In this document, locate that same goal, approximate RIT range, and sub-goals.
- 3. To choose appropriate Khan Academy exercises:
  - Consider both the name of the exercise and the CCSS standard.
  - Click the link and try the exercise yourself. Note: When you're in Khan Academy, the links to videos and other resources add context to the actual exercise, but are not necessarily correlated to MAP Growth.
- 4. In the browser window where the exercise opened, note or copy the Web address URL.
- 5. Optionally deliver exercises to students. For example:
  - Paste the URL into an online document for students to access.
  - Present the exercise in the classroom.
  - Use for parent-teacher conference discussion.

#### Limitations

The instructional suggestions presented in this document are intended to provide supplementary resources based on available Khan Academy exercises and are not intended to replace other options. MAP Growth data should be used as one of many data points for instructional decisions rather than as a placement guide.

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# MAP Growth Mathematics Khan Academy Practice Exercises Correlation

# Common Core Math 2-5

Operations and Algebraic Thinking	
Represent and Solve Problems	Pg. 4
Analyze Patterns and Relationships	Pg. 9
Number and Operations	
Understand Place Value, Counting, and Cardinality	Pg. 11
Number and Operations in Base Ten	Pg. 14
Number and Operations - Fractions	Pg. 20
Measurement and Data	
Geometric Measurement and Problem Solving	Pg. 24
Represent and Interpret Data	Pg. 28
Geometry	
Reason with Shapes, Attributes, & Coordinate Plane	Pg. 30

Operations and Algebraic Thinking Represent and Solve Problems	Standards Alignment
RIT Range: <160	
Add within 10	K.OA.A.1
Subtract within 10	K.OA.A.1
Addition word problems within 10	K.OA.A.2
Subtraction word problems within 10	K.OA.A.2
Making small numbers in different ways	K.OA.A.3
Make 10	K.OA.A.4
Make 10 (grids and number bonds)	K.OA.A.4
Making 5	K.OA.A.4
Add within 5	K.OA.A.5
Subtract within 5	K.OA.A.5
RIT Range: 161-178	
Addition and subtraction word problems 1	1.OA.A.1
Addition and subtraction word problems 2	1.OA.A.1
Word problems with "more" and "fewer"	1.OA.A.1
Word problems with "more" and "fewer" 1	1.OA.A.1
Word problems with "more" and "fewer" 2	1.OA.A.1
Add 3 numbers	1.OA.A.2
Relate addition and subtraction	1.OA.B.4
Add within 20	1.OA.C.6
Equal sign	1.OA.D.7
Find missing number (add and subtract within 20)	1.OA.D.8
RIT Range: 179-191	
Add and subtract within 100 word problems 1	2.OA.A.1
Add and subtract within 100 word problems 2	2.OA.A.1
Add and subtract within 100 word problems 3	2.OA.A.1

Operations and Algebraic Thinking Represent and Solve Problems	Standards Alignment
RIT Range: 179-191	
Challenging add and subtract word problems (within 100)	2.OA.A.1
Find the missing number (add and subtract within 100)	2.OA.A.1
Length word problems	2.OA.A.1
Solve problems with picture graphs 1	2.OA.A.1
Repeated addition	2.OA.C.4
RIT Range: 192-202	
Meaning of multiplication	3.OA.A.1
Multiply with arrays	3.OA.A.1
Divide with visuals	3.OA.A.2
Meaning of division	3.OA.A.2
Multiplication and division word problems (within 100)	3.OA.A.3
Relate division to multiplication word problems	3.OA.A.3   3.OA.B.6
Letters and symbols in multiplication and division equations	3.OA.A.4
Basic multiplication	3.OA.A.4   3.OA.C.7
Find missing divisors and dividends (1-digit division)	3.OA.A.4   3.OA.C.7
Find missing factors (1-digit multiplication)	3.OA.A.4   3.OA.C.7
Associative property of multiplication	3.OA.B.5
Commutative property of multiplication	3.OA.B.5
Distributive property of multiplication	3.OA.B.5
Relate division to multiplication	3.OA.B.6
Basic division	3.OA.C.7
Divide by 1	3.OA.C.7
Divide by 10	3.OA.C.7
Divide by 2	3.OA.C.7
Divide by 3	3.OA.C.7

Operations and Algebraic Thinking Represent and Solve Problems	Standards Alignment
RIT Range: 192-202	
Divide by 4	3.OA.C.7
Divide by 5	3.OA.C.7
Divide by 6	3.OA.C.7
Divide by 7	3.OA.C.7
Divide by 8	3.OA.C.7
Divide by 9	3.OA.C.7
Multiply by 0 or 1	3.OA.C.7
Multiply by 2	3.OA.C.7
Multiply by 3	3.OA.C.7
Multiply by 4	3.OA.C.7
Multiply by 5	3.OA.C.7
Multiply by 6	3.OA.C.7
Multiply by 7	3.OA.C.7
Multiply by 8	3.OA.C.7
Multiply by 9	3.OA.C.7
Whole numbers on the number line	3.OA.C.7
2-step word problems	3.OA.D.8
RIT Range: 203-212	
Compare with multiplication	4.OA.A.1
Compare with multiplication word problems	4.OA.A.1
Multiplication and division word problems	4.OA.A.2
Multi-step estimation word problems	4.OA.A.3
Multi-step word problems with whole numbers	4.OA.A.3
Represent multi-step word problems using equations	4.OA.A.3

Operations and Algebraic Thinking Represent and Solve Problems	Standards Alignment
RIT Range: 213-219	
Evaluate expressions with parentheses	5.OA.A.1
Create expressions with parentheses	5.OA.A.2
Translate expressions with parentheses	5.OA.A.2
RIT Range: 220-223	
Testing solutions to inequalities	6.EE.B.5
Testing solutions to inequalities (basic)	6.EE.B.5
Identify and solve equations from visual models	6.EE.B.5   6.EE.B.7
Identify equations from visual models	6.EE.B.5   6.EE.B.7
Solve equations from visual models	6.EE.B.5   6.EE.B.7
Testing solutions to equations	6.EE.B.5   6.EE.B.7
Model with one-step equations	6.EE.B.6   6.EE.B.7
Model with one-step equations and solve	6.EE.B.6   6.EE.B.7
Translate one-step equations and solve	6.EE.B.6   6.EE.B.7
Find the mistake in one-step equations	6.EE.B.7
One-step addition & subtraction equations	6.EE.B.7
One-step addition & subtraction equations: fractions & decimals	6.EE.B.7
One-step multiplication & division equations	6.EE.B.7
One-step multiplication & division equations: fractions & decimals	6.EE.B.7
Inequalities word problems	6.EE.B.7   6.EE.B.8
Adding & subtracting decimals word problems	6.NS.B.3
Interpreting negative numbers	6.NS.C.5
RIT Range: 224-227	
Interpreting linear expressions	7.EE.A.2
Find the mistake: two-step equations	7.EE.B.4
One-step inequalities	7.EE.B.4

# Operations and Algebraic Thinking

Represent and Solve Problems	Standards Alignment
RIT Range: 224-227	
Two-step equations word problems	7.EE.B.4
Two-step inequalities	7.EE.B.4
Two-step inequality word problems	7.EE.B.4
Interpreting negative number statements	7.NS.A.3

Operations and Algebraic Thinking Analyze Patterns and Relationships	Standards Alignment
RIT Range: 192-202	
Math patterns 1	3.OA.D.9
Patterns in multiplication tables	3.OA.D.9
Patterns with even and odd	3.OA.D.9
RIT Range: 203-212	
Factor pairs	4.OA.B.4
Identify composite numbers	4.OA.B.4
Identify factors and multiples	4.OA.B.4
Identify prime numbers	4.OA.B.4
Math patterns 2	4.OA.C.5
RIT Range: 213-219	
Graphs of rules that relate 2 variables	5.OA.B.3
Identify points on a line	5.OA.B.3
Relationships between 2 patterns	5.OA.B.3
Tables from rules that relate 2 variables	5.OA.B.3
Write rules that relate 2 variables	5.OA.B.3
RIT Range: 220-223	
Independent versus dependent variables	6.EE.C.9
Match equations to coordinates on a line	6.EE.C.9
Relationships between quantities in equations and graphs	6.EE.C.9
Tables from equations with 2 variables	6.EE.C.9
GCF & LCM word problems	6.NS.B.4
Greatest common factor	6.NS.B.4
Least common multiple	6.NS.B.4
Unit rates	6.RP.A.2
Comparing rates	6.RP.A.2   6.RP.A.3

Operations and Algebraic Thinking Analyze Patterns and Relationships	Standards Alignment
RIT Range: 220-223	
Equivalent ratio word problems	6.RP.A.3
Equivalent ratios	6.RP.A.3
Part-part-whole ratios	6.RP.A.3
Percents from fraction models	6.RP.A.3
Rate problems	6.RP.A.3
Ratio tables	6.RP.A.3
Ratios and units of measurement	6.RP.A.3
Ratios on coordinate plane	6.RP.A.3
Ratios with double number lines	6.RP.A.3
Ratios with tape diagrams	6.RP.A.3
Understand equivalent ratios	6.RP.A.3
RIT Range: 224-227	
Rates with fractions	7.RP.A.1

Number and Operations	
Understand Place Value, Counting, and Cardinality	Standards Alignment
RIT Range: <160	
Count tens	K.CC.A.1
Numbers to 100	K.CC.A.1
Missing numbers	K.CC.A.2
Count in pictures	K.CC.B.4
Count objects 1	K.CC.B.5
Count objects 2	K.CC.B.5
Count with small numbers	K.CC.B.5
Compare numbers of objects 1	K.CC.C.6
Comparing numbers to 10	K.CC.C.7
Teen numbers	K.NBT.A.1
RIT Range: 161-178	
Numbers to 120	1.NBT.A.1
2-digit place value challenge	1.NBT.B.2
Groups of ten objects	1.NBT.B.2
Compare 2-digit numbers	1.NBT.B.3
Compare 2-digit numbers 2	1.NBT.B.3
RIT Range: 179-191	
Hundreds, tens, and ones	2.NBT.A.1
Count money (U.S.)	2.NBT.A.2
Skip-count by 10s	2.NBT.A.2
Skip-count by 5s	2.NBT.A.2
Skip-counting by 100s	2.NBT.A.2
3-digit place value challenge	2.NBT.A.3
Compare 3-digit numbers	2.NBT.A.4

Number and Operations Understand Place Value, Counting, and Cardinality	Standards Alignment
RIT Range: 192-202	
Round to nearest 10 or 100	3.NBT.A.1
Round to nearest 10 or 100 on the number line	3.NBT.A.1
Rounding challenge	3.NBT.A.1
RIT Range: 203-212	
Creating largest or smallest number	4.NBT.A.1
Divide whole numbers by 10	4.NBT.A.1
Multiply and divide by 10	4.NBT.A.1
Multiply whole numbers by 10	4.NBT.A.1
Place value blocks	4.NBT.A.1
Place value when multiplying and dividing by 10	4.NBT.A.1
Compare multi-digit numbers	4.NBT.A.2
Compare multi-digit numbers word problems	4.NBT.A.2
Compare numbers: place value challenge	4.NBT.A.2
Intro to place value	4.NBT.A.2
Regroup whole numbers	4.NBT.A.2
Whole number place value challenge	4.NBT.A.2
Write numbers in written form	4.NBT.A.2
Write whole numbers in expanded form	4.NBT.A.2
Round whole numbers	4.NBT.A.3
Round whole numbers challenge	4.NBT.A.3
Round whole numbers word problems	4.NBT.A.3
RIT Range: 213-219	
Compare decimal place value	5.NBT.A.1
Value of a digit	5.NBT.A.1

5.NBT.A.2

Standards Alignment

Number	and	Operations
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Understand Place Value, Counting, and Cardinality

## RIT Range: 213-219

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Multiply and divide decimals by 10	5.NBT.A.2
Multiply and divide decimals by 10, 100, and 1000	5.NBT.A.2
Multiply and divide whole numbers by 10, 100, and 1000	5.NBT.A.2
Powers of ten	5.NBT.A.2
Understanding moving the decimal	5.NBT.A.2
Compare decimals challenge	5.NBT.A.3
Compare decimals through thousandths	5.NBT.A.3
Compare decimals word problems	5.NBT.A.3
Decimals in expanded form	5.NBT.A.3
Decimals in written form	5.NBT.A.3
Order decimals	5.NBT.A.3
Place value names	5.NBT.A.3
Regroup decimals	5.NBT.A.3
Round decimals	5.NBT.A.4
Round decimals challenge	5.NBT.A.4
Round decimals using a number line	5.NBT.A.4
Round decimals word problems	5.NBT.A.4
RIT Range: 220-223	
Negative numbers, variables, number line	6.NS.C.7
Ordering negative numbers	6.NS.C.7

Number and Operations	
Number and Operations in Base Ten	Standards Alignment
RIT Range: 161-178	
Add 1s or 10s (no regrouping)	1.NBT.C.4
Add 2-digit numbers (no regrouping)	1.NBT.C.4
Break apart 2-digit addition problems	1.NBT.C.4
Regroup when adding 1-digit numbers	1.NBT.C.4
<u>Add 1 or 10</u>	1.NBT.C.4   1.NBT.C.5
RIT Range: 179-191	
Subtract 1-digit numbers with regrouping	2.NBT.A.4
Add 2-digit numbers by making tens	2.NBT.B.5
Add 2-digit numbers by making tens 2	2.NBT.B.5
Add within 100	2.NBT.B.5
Subtract 1 or 10	2.NBT.B.5
Subtract 2-digit numbers (no regrouping)	2.NBT.B.5
Subtract within 100	2.NBT.B.5
Subtract within 20	2.NBT.B.5
Subtracting 1s or 10s (no regrouping)	2.NBT.B.5
Add 10s and 100s (no regrouping)	2.NBT.B.7
Add 2- and 3-digit numbers (no regrouping)	2.NBT.B.7
Add and subtract on a number line	2.NBT.B.7
Add and subtract using a number line	2.NBT.B.7
Select strategies for adding within 100	2.NBT.B.7
Subtract 10s and 100s (no regrouping)	2.NBT.B.7
Subtract 2- and 3-digit numbers (no regrouping)	2.NBT.B.7
Add using groups of 10 and 100	2.NBT.B.7   3.NBT.A.2
Break apart 3-digit addition problems	2.NBT.B.7   3.NBT.A.2
Estimate to add and subtract multi-digit whole numbers	2.NBT.B.7   3.NBT.A.2

Number and Operations Number and Operations in Base Ten	Standards Alignment
RIT Range: 192-202	
Add using groups of 10 and 100	2.NBT.B.7   3.NBT.A.2
Break apart 3-digit addition problems	2.NBT.B.7   3.NBT.A.2
Estimate to add and subtract multi-digit whole numbers	2.NBT.B.7   3.NBT.A.2
Add within 1000	3.NBT.A.2
Subtract within 1000	3.NBT.A.2
Multiply by tens	3.NBT.A.3
Multiply by tens word problems	3.NBT.A.3
DIT Denger 202 212	
RIT Range: 203-212 Multi-digit addition	4.NBT.B.4
Multi-digit subtraction	4.NBT.B.4
Multiply 1-digit numbers by 10, 100, and 1000	4.NBT.B.5
Multiply 1-digit numbers by a multiple of 10, 100, and 1000	4.NBT.B.5
Multiply 2-, 3-, and 4-digits by 1-digit with area models	4.NBT.B.5
Multiply 2-digit numbers	4.NBT.B.5
Multiply 2-digit numbers with area models	4.NBT.B.5
Multiply using place value	4.NBT.B.5
Multiply with regrouping	4.NBT.B.5
Multiply without regrouping	4.NBT.B.5
Multiplying 10s	4.NBT.B.5
Cancel zeros when dividing	4.NBT.B.6
Divide by 1-digit numbers (no remainders)	4.NBT.B.6
Divide by 1-digit numbers (visual models)	4.NBT.B.6
Divide using place value	4.NBT.B.6
Divide with remainders	4.NBT.B.6
Divide with remainders (basic)	4.NBT.B.6

Number and Operations Number and Operations in Base Ten	Standards Alignment
RIT Range: 203-212	
Intro to remainders	4.NBT.B.6
Quotients that are multiples of 10	4.NBT.B.6
Zeros in the dividend (no remainders)	4.NBT.B.6
Zeros in the quotient (no remainders)	4.NBT.B.6
RIT Range: 213-219	
Estimate multi-digit multiplication problems	5.NBT.B.5
Multi-digit multiplication	5.NBT.B.5
Multiply by taking out factors of 10	5.NBT.B.5
Basic multi-digit division	5.NBT.B.6
Divide by taking out factors of 10	5.NBT.B.6
Estimate multi-digit division problems	5.NBT.B.6
Add decimals like 0.7+0.5	5.NBT.B.7
Add decimals like 0.76+0.21	5.NBT.B.7
Add decimals like 4+5.7	5.NBT.B.7
Add decimals like 40.1+7.6	5.NBT.B.7
Add decimals like 47.75+11.98	5.NBT.B.7
Add decimals like 5.53+6.1	5.NBT.B.7
Add decimals visually	5.NBT.B.7
Divide decimals and whole numbers by 0.1 or 0.01	5.NBT.B.7
Divide decimals like 0.72÷0.08	5.NBT.B.7
Divide decimals like 1.32÷0.12	5.NBT.B.7
Divide decimals like 1.86÷2	5.NBT.B.7
Divide decimals like 16.8÷40 by factoring out a 10	5.NBT.B.7
Divide decimals visually	5.NBT.B.7
Divide whole numbers like 63÷12 to get a decimal	5.NBT.B.7

Number and Operations Number and Operations in Base Ten Standards Alignment		
RIT Range: 213-219	·	
Divide whole numbers like 7÷5 to get a decimal	5.NBT.B.7	
Divide whole numbers like 80÷200 to get a decimal	5.NBT.B.7	
Dividing decimals 1	5.NBT.B.7	
Dividing decimals 2	5.NBT.B.7	
Estimating with adding decimals	5.NBT.B.7	
Estimating with dividing decimals	5.NBT.B.7	
Estimating with multiplying decimals	5.NBT.B.7	
Estimating with subtracting decimals	5.NBT.B.7	
Multiply decimals like 0.56x4	5.NBT.B.7	
Multiply decimals like 0.6x0.4	5.NBT.B.7	
Multiply decimals like 1.7x0.12	5.NBT.B.7	
Multiply decimals visually	5.NBT.B.7	
Subtract decimals like 0.6-0.43	5.NBT.B.7	
Subtract decimals like 0.75-0.56	5.NBT.B.7	
Subtract decimals like 0.9-0.7	5.NBT.B.7	
Subtract decimals like 1.6-0.3	5.NBT.B.7	
Subtract decimals like 15-7.45	5.NBT.B.7	
Subtract decimals like 56.8-17.9	5.NBT.B.7	
Subtract decimals like 67.89-6	5.NBT.B.7	
Subtract decimals like 78.4-3	5.NBT.B.7	
Subtract decimals visually	5.NBT.B.7	
Adding decimals: hundredths	5.NBT.B.7   6.NS.B.3	
Adding decimals: tenths	5.NBT.B.7   6.NS.B.3	
Multiplying decimals like 4x0.6 (standard algorithm)	5.NBT.B.7   6.NS.B.3	
Subtracting decimals: hundredths	5.NBT.B.7   6.NS.B.3	
Subtracting decimals: tenths	5.NBT.B.7   6.NS.B.3	

Number and Operations	
Number and Operations in Base Ten	Standards Alignment
RIT Range: 220-223	
Adding decimals: hundredths	5.NBT.B.7   6.NS.B.3
Adding decimals: tenths	5.NBT.B.7   6.NS.B.3
Multiplying decimals like 4x0.6 (standard algorithm)	5.NBT.B.7   6.NS.B.3
Subtracting decimals: hundredths	5.NBT.B.7   6.NS.B.3
Subtracting decimals: tenths	5.NBT.B.7   6.NS.B.3
Exponents	6.EE.A.1
Exponents (basic)	6.EE.A.1
Variable expressions with exponents	6.EE.A.1
Division by 2-digits	6.NS.B.2
Multi-digit division	6.NS.B.2
Adding decimals: thousandths	6.NS.B.3
Dividing decimals: hundredths	6.NS.B.3
Dividing decimals: thousandths	6.NS.B.3
Dividing whole numbers like 56:35 to get a decimal	6.NS.B.3
Multiplying decimals like 0.847x3.54 (standard algorithm)	6.NS.B.3
Multiplying decimals like 2.45x3.6 (standard algorithm)	6.NS.B.3
Subtracting decimals: thousandths	6.NS.B.3
RIT Range: 224-227	
Adding & subtracting negative numbers	7.NS.A.1
Adding negative numbers	7.NS.A.1
Adding negative numbers on the number line	7.NS.A.1
Addition & subtraction: find the missing value	7.NS.A.1
Interpret negative number addition and subtraction expressions	7.NS.A.1
Negative number addition and subtraction: word problems	7.NS.A.1
Number equations & number lines	7.NS.A.1

## Number and Operations

Number and Operations in Base Ten

## Standards Alignment

RIT Range: 224-227

Subtracting negative numbers

7.NS.A.1

Number and Operations Number and Operations - Fractions	Standards Alignment	
RIT Range: 192-202		
Cut shapes into equal parts	3.NF.A.1	
Identify numerators and denominators	3.NF.A.1	
Identify unit fractions	3.NF.A.1	
Recognize fractions	3.NF.A.1	
Recognize fractions greater than 1	3.NF.A.1	
Find 1 on the number line	3.NF.A.2	
Fractions on the number line	3.NF.A.2	
Unit fractions on the number line	3.NF.A.2	
Relate fractions to 1	3.NF.A.2   3.NF.A.3	
Compare fractions of different wholes	3.NF.A.3	
Compare fractions with the same denominator	3.NF.A.3	
Compare fractions with the same numerator	3.NF.A.3	
Compare fractions with the same numerator or denominator	3.NF.A.3	
Equivalent fraction models	3.NF.A.3	
Equivalent fractions on the number line	3.NF.A.3	
Visually compare fractions 1	3.NF.A.3	
Write fractions as whole numbers	3.NF.A.3	
RIT Range: 203-212 Equivalent fractions	4.NF.A.1	
Equivalent fractions (fraction models)	4.NF.A.1	
Common denominators	4.NF.A.2	
Compare fractions and mixed numbers	4.NF.A.2	
Compare fractions with different numerators and denominators	4.NF.A.2	
Equivalent fractions and different wholes	4.NF.A.2	
Order fractions	4.NF.A.2	

# Number and Operations

Number and Operations - Fractions

## Standards Alignment

### RIT Range: 203-212

ł	Range: 203-212	
	Visually compare fractions with unlike denominators	4.NF.A.2
	Add and subtract fractions: word problems	4.NF.B.3
	Add and subtract mixed numbers (no regrouping)	4.NF.B.3
	Add and subtract mixed numbers (with regrouping)	4.NF.B.3
	Add and subtract mixed numbers word problems (like denominators)	4.NF.B.3
	Add fractions with common denominators	4.NF.B.3
	Decompose fractions	4.NF.B.3
	Rewrite mixed numbers and improper fractions	4.NF.B.3
	Subtract fractions with common denominators	4.NF.B.3
	Equivalent unit fraction and whole number multiplication expressions	4.NF.B.4
	Multiply fractions and whole numbers intuition	4.NF.B.4
	Multiply unit fractions and whole numbers	4.NF.B.4
	Multiply fractions and whole numbers	4.NF.B.4   5.NF.B.4
	Interpret multiplying fraction and whole number word problems	4.NF.B.4   5.NF.B.6
	Multiply fractions and whole numbers word problems	4.NF.B.4   5.NF.B.6
	Add fractions (denominators 10 & 100)	4.NF.C.5
	Decompose fractions with denominators of 100	4.NF.C.5
	Equivalent expressions with common denominators (denominators 10 & 100)	4.NF.C.5
	Equivalent fractions (denominators 10 & 100)	4.NF.C.5
	Equivalent fractions with fraction models (denominators 10 & 100)	4.NF.C.5
	Decimals in words	4.NF.C.6
	Decimals on the number line: hundredths	4.NF.C.6
	Decimals on the number line: hundredths 0-0.1	4.NF.C.6
	Decimals on the number line: tenths	4.NF.C.6
	Decimals on the number line: tenths 0-1	4.NF.C.6

Number and Operations Number and Operations - Fractions	Standards Alignment
RIT Range: 203-212	Ū
Place value for decimals greater than 1	4.NF.C.6
Rewrite decimals as fractions	4.NF.C.6
Rewrite fractions as decimals (denominators of 10 & 100)	4.NF.C.6
Write decimal numbers shown in grids	4.NF.C.6
Write number as a fraction and decimal	4.NF.C.6
Compare decimals (tenths and hundredths)	4.NF.C.7
Compare decimals and fractions	4.NF.C.7
Compare decimals visually	4.NF.C.7
RIT Range: 213-219	
Multiply fractions and whole numbers	4.NF.B.4   5.NF.B.4
Interpret multiplying fraction and whole number word problems	4.NF.B.4   5.NF.B.6
Multiply fractions and whole numbers word problems	4.NF.B.4   5.NF.B.6
Add and subtract fractions challenge	5.NF.A.1
Add and subtract mixed numbers with unlike denominators 1	5.NF.A.1
Add and subtract mixed numbers with unlike denominators 2	5.NF.A.1
Add fractions with unlike denominators	5.NF.A.1
Equivalent expressions with common denominators	5.NF.A.1
Subtracting fractions with unlike denominators	5.NF.A.1
Visually add and subtract fractions	5.NF.A.1
Add and subtract fractions word problems	5.NF.A.2
Fractions as division	5.NF.B.3
Fractions as division word problems	5.NF.B.3
Area of rectangles with fraction side lengths	5.NF.B.4
Multiply fractions and whole numbers visually	5.NF.B.4
Multiply mixed numbers	5.NF.B.4

Number and Operations Number and Operations - Fractions	Standards Alignment
RIT Range: 213-219	
Multiplying fractions	5.NF.B.4
Multiplying fractions with visuals	5.NF.B.4
Multiply fractions word problems	5.NF.B.6
Divide fractions and whole numbers word problems	5.NF.B.7
Dividing unit fractions by whole numbers	5.NF.B.7
Dividing unit fractions by whole numbers visually	5.NF.B.7
Dividing whole numbers by unit fractions	5.NF.B.7
Dividing whole numbers by unit fractions visually	5.NF.B.7
RIT Range: 220-223	
Divide mixed numbers	6.NS.A.1
Divide whole numbers by fractions	6.NS.A.1
Dividing fractions	6.NS.A.1
Dividing fractions word problems	6.NS.A.1
Understanding dividing fractions by fractions	6.NS.A.1
RIT Range: 224-227	
Negative number addition and subtraction: word problems	7.NS.A.3
Equivalent representations of percent problems	7.RP.A.3

Measurement and Data Geometric Measurement and Problem Solving	Standards Alignment
RIT Range: <160	
Compare size	K.MD.A.2
RIT Range: 161-178	
Indirect measurement	1.MD.A.1
Order by length	1.MD.A.1
Measure lengths 1	1.MD.A.2
Tell time to hour or half hour	1.MD.B.3
RIT Range: 179-191	
Measure lengths 2	2.MD.A.1
Estimate lengths	2.MD.A.3
Length word problems	2.MD.B.5
Add and subtract on the number line word problems	2.MD.B.6
Tell time with a labeled clock	2.MD.C.7
Tell time without labels	2.MD.C.7
Count money (U.S.)	2.MD.C.8
RIT Range: 192-202	
Tell time to the nearest minute	3.MD.A.1
Telling time on the number line	3.MD.A.1
Telling time word problems (within the hour)	3.MD.A.1
Time differences (within the hour)	3.MD.A.1
Time word problems with number line	3.MD.A.1
Word problems with mass	3.MD.A.2
Word problems with volume	3.MD.A.2
Estimate mass (grams and kilograms)	3.MD.A.2   4.MD.A.1
Estimate volume (milliliters and liters)	3.MD.A.2   4.MD.A.1
Understanding area	3.MD.C.5

Measurement and Data Geometric Measurement and Problem Solving	Standards Alignment
RIT Range: 192-202	
Find area by counting unit squares	3.MD.C.5   3.MD.C.6
Create rectangles with a given area	3.MD.C.6
Find area with partial unit squares	3.MD.C.6
Area and the distributive property	3.MD.C.7
Area of rectangles	3.MD.C.7
Compare areas by multiplying	3.MD.C.7
Decompose figures to find area 1	3.MD.C.7
Decompose figures to find area 2	3.MD.C.7
Find a missing side length when given area	3.MD.C.7
Measure to find area	3.MD.C.7
Transition from unit squares to area formula	3.MD.C.7
Compare area and perimeter	3.MD.D.8
Find a missing side length when given perimeter	3.MD.D.8
Find perimeter by counting unit squares	3.MD.D.8
Find perimeter when given side lengths	3.MD.D.8
Measure to find perimeter	3.MD.D.8
Perimeter word problems	3.MD.D.8
RIT Range: 203-212	
Estimate mass (grams and kilograms)	3.MD.A.2   4.MD.A.1
Estimate volume (milliliters and liters)	3.MD.A.2   4.MD.A.1
Convert to smaller units (c, pt, qt, & gal)	4.MD.A.1
Convert to smaller units (g and kg)	4.MD.A.1
Convert to smaller units (in, ft, yd, & mi)	4.MD.A.1
Convert to smaller units (mL and L)	4.MD.A.1
Convert to smaller units (mm, cm, m, & km)	4.MD.A.1

Measurement and Data Geometric Measurement and Problem Solving	Standards Alignment
RIT Range: 203-212	
Convert to smaller units (oz and lb)	4.MD.A.1
Convert to smaller units (sec, min, & hr)	4.MD.A.1
Estimating length (in, ft, yd, and mi)	4.MD.A.1
Estimating length (mm, cm, m, km)	4.MD.A.1
Estimating mass (ounces and pounds)	4.MD.A.1
Estimating time (seconds, minutes, and hours)	4.MD.A.1
Estimating volume (cups, pints, quarts, and gallons)	4.MD.A.1
Convert money word problems	4.MD.A.2
Metric conversions word problems	4.MD.A.2
Telling time word problems	4.MD.A.2
Time conversion word problems	4.MD.A.2
Time differences	4.MD.A.2
US customary conversion word problems	4.MD.A.2
Area & perimeter of rectangles word problems	4.MD.A.3
Area of squares and rectangles	4.MD.A.3
Angle basics	4.MD.C.5
Benchmark angles	4.MD.C.5
Name angles	4.MD.C.5
Draw angles	4.MD.C.6
Measure angles	4.MD.C.6
Angles in circles	4.MD.C.6   5.MD.C.5
Decompose angles	4.MD.C.7
RIT Range: 213-219	
Angles in circles	4.MD.C.6   5.MD.C.5
Convert units (metrics)	5.MD.A.1

Measurement and Data Geometric Measurement and Problem Solving	Standards Alignment
RIT Range: 213-219	
Convert units (US customary)	5.MD.A.1
Convert units word problems (metric)	5.MD.A.1
Convert units word problems (US customary)	5.MD.A.1
Volume with unit cubes 1	5.MD.C.4
Compare volumes with unit cubes	5.MD.C.4   5.MD.C.5
Decompose figures to find volume	5.MD.C.5
Decompose figures to find volume (unit cubes)	5.MD.C.5
Volume 1	5.MD.C.5
Volume formula intuition	5.MD.C.5
Volume word problems	5.MD.C.5
RIT Range: 220-223	
Area challenge	6.G.A.1
Area of composite shapes	6.G.A.1
Area of parallelograms	6.G.A.1
Area of right triangles	6.G.A.1
Area of triangles	6.G.A.1
Volume by multiplying area of base times height	6.G.A.2
Volume with cubes with fraction lengths	6.G.A.2
Volume with fractions	6.G.A.2
Volume word problems: fractions & decimals	6.G.A.2

Measurement and Data Represent and Interpret Data	Standards Alignment
RIT Range: <160	
Compare numbers of objects 2	K.MD.B.3
RIT Range: 161-178	
Solve problems with bar graphs 1	1.MD.C.4
RIT Range: 179-191	
Solve problems with bar graphs 2	2.MD.D.10
Solve problems with picture graphs 1	2.MD.D.10
Make bar graphs 1	2.MD.D.9
Make line plots	2.MD.D.9
Make picture graphs 1	2.MD.D.9
Solve problems with line plots	2.MD.D.9
RIT Range: 192-202	
Create bar graphs	3.MD.B.3
Create picture graphs (picture more than 1)	3.MD.B.3
Read bar graphs and solve 1-step problems	3.MD.B.3
Read bar graphs and solve 2 step problems	3.MD.B.3
Read picture graphs	3.MD.B.3
Read picture graphs (multi-step problems)	3.MD.B.3
Graph data on line plots	3.MD.B.4
Read line plots (data with fractions)	3.MD.B.4
RIT Range: 203-212	
Interpret dot plots with fractions 1	4.MD.B.4
RIT Range: 213-219	
Interpret dot plots with fraction operations	5.MD.B.2

## Measurement and Data

Represent and Interpret Data	Standards Alignment
RIT Range: 220-223	
Calculating the median: data displays	6.SP.B.4
Create histograms	6.SP.B.4
Creating dot plots	6.SP.B.4
Creating frequency tables	6.SP.B.4
Read histograms	6.SP.B.4
Reading box plots	6.SP.B.4
Reading dot plots & frequency tables	6.SP.B.4
RIT Range: 224-227	
Making inferences from random samples	7.SP.A.2
Valid claims	7.SP.A.2

4.G.A.1

Geometry	
Reason with Shapes, Attributes, & Coordinate Plane	Standards Alignment
RIT Range: <160	
Name shapes 1	K.G.A.1
Relative position	K.G.A.1
Name shapes 2	K.G.A.2
Compare shapes	K.G.B.4
Compose shapes	K.G.B.6
RIT Range: 161-178	
Name shapes 3	1.G.A.1
Halves and fourths	1.G.A.3
RIT Range: 179-191	
Name shapes 4	2.G.A.1
Equal parts of circles and rectangles	2.G.A.3
RIT Range: 192-202	
Categorize quadrilaterals	3.G.A.1
Identify quadrilaterals	3.G.A.1   5.G.B.4
Cut shapes into equal parts	3.G.A.2
Identify unit fractions	3.G.A.2
RIT Range: 203-212	
Angle types	4.G.A.1
Draw parallel and perpendicular lines	4.G.A.1
Draw rays, lines, & line segments	4.G.A.1
Draw right, acute, and obtuse angles	4.G.A.1
Identify parallel and perpendicular lines	4.G.A.1
Identify rays, lines, & line segments	4.G.A.1

# Geometry

Reason with Shapes, Attributes, & Coordinate Plane	Standards Alignment
RIT Range: 203-212	
Classify shapes by line and angle types	4.G.A.2
Identify triangles by angles	4.G.A.2
Identify triangles by side lengths	4.G.A.2
Quadrilateral types	4.G.A.2   5.G.B.4
Draw lines of symmetry and symmetrical figures	4.G.A.3
Identify lines of symmetry	4.G.A.3
Identify symmetrical figures	4.G.A.3
RIT Range: 213-219	
Identify quadrilaterals	3.G.A.1   5.G.B.4
Quadrilateral types	4.G.A.2   5.G.B.4
Graph points	5.G.A.1   5.G.A.2
Identify coordinates	5.G.A.1   5.G.A.2
Identify points	5.G.A.1   5.G.A.2
Coordinate plane word problems (quadrant 1 - challenging)	5.G.A.2
Coordinate plane word problems (quadrant 1)	5.G.A.2
Distance between points in first quadrant	5.G.A.2
Shapes on the coordinate plane	5.G.A.2
Properties of shapes	5.G.B.3   5.G.B.4
RIT Range: 220-223	
Drawing polygons with coordinates	6.G.A.3
Quadrilateral problems on the coordinate plane	6.G.A.3
Nets of polyhedra	6.G.A.4
Points on the coordinate plane	6.NS.C.6
Reflecting points in the coordinate plane	6.NS.C.8

## Geometry

Reason with Shapes, Attributes, & Coordinate Plane

#### Standards Alignment

### RIT Range: 224-227

Cross sections of 3D objects (basic)

7.G.A.3

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