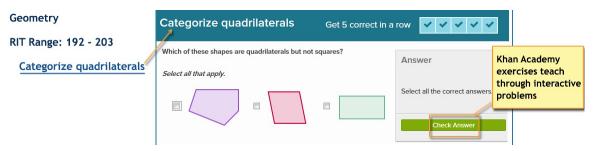


# MAP to Khan Academy:

Khan Academy Practice Exercises Correlated to RIT for Common Core Math MAP Grades 6+

#### **About this Document**

This document correlates MAP® sub-goals and RIT ranges to Khan Academy® exercises. The Khan 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 RIT scores and the Khan Academy exercises was determined by using our 2011 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 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:
  - a. 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.
- 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/MPG data should be used as one of many data points for instructional decisions rather than as a placement guide.

#### **Terms of Use**

These Terms of Use permit you to use this document for your personal, non-commercial use only. You must not reproduce, distribute, modify, create derivative works of, publicly display, publicly perform, republish, download, store or transmit any of the material on this document, except you may print or download one copy of a reasonable number of pages of this document for your own personal, non-commercial use and not for further reproduction, publication or distribution. You must not modify copies of this document. You must not delete or alter any copyright, trademark or other proprietary rights notices from this document. If you breach the Terms of Use your right to use the document will cease immediately and you must, at NWEA's option, return or destroy any copies of the document you have made. No right, title or interest in or to the document or any content on the document is transferred to you, and all rights not expressly granted are reserved by NWEA or their respective owner (see below). Any use of the document not expressly permitted by these Terms of Use is a breach of these Terms of Use and may violate copyright, trademark and other laws.

This document contains links to Khan Academy® sites, materials and/or resources ("Khan Materials"). NWEA's use of the Khan Materials is by license. Khan Academy® is the respective owner of the Khan Materials. NWEA's use of the Khan Materials in no way represents or suggests that Khan Academy® endorses NWEA. All Khan Academy content is available for free at www.khanacademy.org.

The Khan Materials are provided for your convenience only. NWEA has no control over the contents of the Khan Materials and accepts no responsibility for them or for any loss or damage that may arise from your use of them. The information contained in this document, including the Khan Materials, are provided "as-is" and "as available" without any warranty of any kind, express or implied. NWEA does not warrant the accuracy, completeness or usefulness of the Khan Materials or any other information in this document and NWEA expressly disclaims all liability and responsibility arising from any reliance placed on the Khan Materials and/or any other information in this document. If you decide to access any of the Khan Materials, you do so entirely at your own risk and subject to the terms and conditions of use for the Khan Materials.

NWEA disclaims all warranties of any kind, whether express or implied, statutory or otherwise, including but not limited to any warranties of merchantability, non-infringement and fitness for particular purpose. In no event will NWEA be liable for damages of any kind, under any legal theory, arising out of or in connection with your use, or inability to use, this document and/or the information contained within it, including any direct, indirect, special, consequential, incidental or punitive damages. Any dispute or claim arising from or related to this document shall be governed and construed with the laws of the State or Oregon and any suit or action arising out of this document shall be instituted exclusively in the court of the State of Oregon and County of Multnomah.

The Khan Academy® is a registered trademark of Khan Academy. MAP® is a registered trademark of Northwest Evaluation Association. You must not use such marks without the prior written permission of their respective owners. NWEA may update the content on this document from time to time, but its content is not necessarily complete or up-to-date. Any of the material in this document may be out of date at any given time, and NWEA is under no obligation to update such material. However, in the event NWEA, in its sole discretion updates this document, your continued use of it following the posting of revised Terms of Use means that you accept and agree to the changes.

Congruence, Similarity, Right Triangles, & Trig	Р	4
Geometric Measurement and Relationships	Р	5
Operations and Algebraic Thinking		
Expressions and Equations	Р	9
<u>Use Functions to Model Relationships</u>	Р	16
Statistics and Probability		
Interpreting Categorical and Quantitative Data	Р	18
Using Sampling and Probability to Make Decisions	Р	20
The Real and Complex Number Systems		
Extend and Use Properties	Р	21
Perform Operations	Р	25
Ratios and Proportional Relationships	Р	31

Congruence, Similarity, Right Triangles, & Trig	Standards Alignment
RIT Range: 204 - 212	
Angle types	4.G.A.1
Axis of symmetry	4.G.A.3
<u>Quadrilateral types</u>	4.G.A.2
Recognizing angles	4.G.A.1
RIT Range: 221 - 225	
Nets of 3D figures	6.G.A.4
RIT Range: 226 - 230	
Constructing scale drawings	7.G.A.1
Slicing 3D figures	7.G.A.3
<u>Vertical angles</u>	7.G.B.5
RIT Range: 231 - 234	
Angles 1	8.G.A.5
Angles 2	8.G.A.5
Congruent angles	8.G.A.5
<u>Distance formula</u>	8.G.B.8
Exploring angle-preserving transformations and similarity	8.G.A.4
Exploring rigid transformations and congruence	8.G.A.2
Parallel lines 1	8.G.A.5
Parallel lines 2	8.G.A.5
Performing transformations on the coordinate plane	8.G.A.3
<u>Properties of rigid transformations</u>	8.G.A.1
<u>Pythagorean theorem</u>	8.G.B.7
Special right triangles	8.G.B.7
<u>Pythagorean Theorem proofs</u>	8.G.B.6
RIT Range: > 235	
Applying right triangles	HSG-SRT.C.7   HSG-SRT.C.8

## Congruence, Similarity, Right Triangles, & Trig Standards Alignment

RIT Range: > 235

Congruency postulates HSG-CO.B.7 | HSG-CO.B.8

Congruent triangles 1HSG-CO.B.6Congruent triangles 2HSG-CO.B.6Compass constructions 1HSG-CO.D.12

Compass constructions 2 HSG-CO.D.13

<u>Defining congruence through rigid transformations</u>

HSG-CO.B.6 | HSG-CO.B.7

Defining similarity through angle-preserving transformations

HSG-SRT.A.2 | HSG-SRT.A.3

<u>Dilations</u> HSG-SRT.A.1

<u>Qualitatively defining rigid transformations</u>
HSG-CO.A.2

<u>Quantitatively defining rigid transformations</u>

HSG-CO.A.2

Similar triangles 1 HSG-SRT.A.3

Similar triangles 2 HSG-SRT.A.3

Solving similar triangles 1 HSG-SRT.A.3

Solving similar triangles 2 HSG-SRT.B.5

Solving problems with similar and congruent triangles

HSG-SRT.B.5

Symmetry of two-dimensional shapes HSG-CO.A.3

Transforming polygons HSG-CO.A.5

Trigonometric functions and side ratios in right triangles

HSG-SRT.C.6 | HSG-SRT.C.7

## Geometry

#### Geometric Measurement and Relationships Standards Alignment

RIT Range: < 160

Compare shapes K.G.B.4

Naming shapes K.G.A.1 | K.G.A.2

RIT Range: 161 - 178

Attributes of shapes 1.G.A.1

Measuring lengths 1 1.MD.A.2

Geometric Measurement and Relationships	Standards Alignment
RIT Range: 179 - 191	
Comparing lengths	2.MD.A.4
Measuring lengths 2	2.MD.A.1
Measuring lengths with different units	2.MD.A.2
Recognizing shapes	2.G.A.1
RIT Range: 192 - 203	
Area 1	3.MD.C.5   3.MD.C.5b   3.MD.C.6
Area and the distributive property	3.MD.C.7
<u>Categorize quadrilaterals</u>	3.G.A.1
Comparing area and perimeter	3.MD.D.8
Comparing areas by multiplying	3.MD.C.7   3.MD.C.7b
Creating line plots 2	3.MD.B.4
Decompose shapes to find area	3.MD.C.7
Finding area by multiplying	3.MD.C.7
Mass word problems	3.MD.A.2
Measuring area with unit squares	3.MD.C.5   3.MD.C.5b   3.MD.C.6
Perimeter 1	3.MD.D.8
<u>Finding perimeter</u>	3.MD.D.8
Volume word problems 1	3.MD.A.2
RIT Range: 204 - 212	
Angle types	4.G.A.1
<u>Area problems</u>	4.MD.A.3
Area and perimeter of rectangles word problems	4.MD.A.3
Benchmark angles	4.MD.C.5
Classifying shapes by line and angle types	4.G.A.2
<u>Decomposing angles</u>	4.MD.C.7
<u>Drawing angles</u>	4.MD.C.6
<u>Drawing lines</u>	4.G.A.1

Geometric Measurement and Relationships	Standards Alignment
RIT Range: 204 - 212	
Drawing right, acute, and obtuse angles	4.G.A.1
<u>Measurement units</u>	4.MD.A.1
Measurement word problems with metric units	4.MD.A.2
Measurement word problems with US customary units	4.MD.A.2
<u>Measuring angles</u>	4.MD.C.6
Measuring and converting money word problems	4.MD.A.2
Measuring time word problems	4.MD.A.2
Naming angles	4.MD.C.5
Recognizing rays, lines, and line segments	4.G.A.1
Recognizing parallel and perpendicular lines	4.G.A.1
Recognizing triangles	4.G.A.2
<u>Triangle types</u>	4.G.A.2
<u>Understanding angles</u>	4.MD.C.5
<u>Unit sense</u>	4.MD.A.1
RIT Range: 213 - 220	
Converting measurements word problems	5.MD.A.1
Converting units	5.MD.A.1
Coordinate plane word problems in the first quadrant	5.G.A.2
Graphing points	5.G.A.1   5.G.A.2
Volume 1	5.MD.C.5   5.MD.C.5b   5.MD.C.5c
Volume word problems	5.MD.C.5   5.MD.C.5b   5.MD.C.5c
Volume with unit cubes 1	5.MD.C.4
RIT Range: 221 - 225	
Area of parallelograms	6.G.A.1
Area of triangles	6.G.A.1
Area of quadrilaterals and polygons	6.G.A.1
Area of trapezoids, rhombi, and kites	6.G.A.1

Geometric Measurement and Relationships	Standards Alignment
RIT Range: 221 - 225	
Finding area by composing and decomposing shapes	6.G.A.1
Nets of 3D figures	6.G.A.4
Polygons in the coordinate plane	6.G.A.3
Surface area	6.G.A.4
Volume with fractions	6.G.A.2
Volume with unit cubes 2	6.G.A.2
Volume word problems with fractions	6.G.A.2
RIT Range: 226 - 230	
Area of a circle	7.G.B.4
Area and circumference of circles	7.G.B.4
Area, volume, and surface area	7.G.B.6
Complementary and supplementary angles	7.G.B.5
Congruent segments	7.NS.A.1c
Constructing scale drawings	7.G.A.1
<u>Constructing triangles</u>	7.G.A.2
Interpreting scale drawings	7.G.A.1   7.G.A.1
<u>Measuring segments</u>	7.NS.A.1b
<u>Quadrilateral angles</u>	7.G.B.5
Radius, diameter, and circumference	7.G.B.4
Slicing 3D figures	7.G.A.3
Solid geometry	7.G.B.6
Solving for unknown angles	7.G.B.5
<u>Vertical angles</u>	7.G.B.5
RIT Range: 231 - 234	
Parallel lines 1	8.G.A.5
Parallel lines 2	8.G.A.5
Volume word problems with cones, cylinders, and spheres	8.G.C.9   HSG-GMD.A.3

#### Geometric Measurement and Relationships

Standards Alignment

RIT Range: > 235

2D geometric models HSG-MG.A.1 | HSG-MG.A.3

Areas of circles and sectors HSG-C.B.5

Radians and arc length HSG-C.B.5

Central, inscribed, and circumscribed angles

HSG-C.A.2 | HSG-C.A.3

Circles and arcs HSG-C.B.5

Constructing a line tangent to a circle

HSG-C.A.4

Coordinate plane word problems with polygons

HSG-GPE.B.7

Cross sections of 3D objects HSG-GMD.B.4

Dividing line segments

HSG-GPE.B.6

Equation of a circle in factored form HSG-GPE.A.1

Equation of a circle in non-factored form HSG-GPE.A.1

Geometry problems on the coordinate plane

HSG-GPE.B.4

Inscribing and circumscribing circles on a triangle

HSG-C.A.3

Equations of parallel and perpendicular lines

HSG-GPE.B.5

Midpoint formula HSG-GPE.B.6

Parabola intuition 1 HSG-GPE.A.2

Parabola intuition 2 HSG-GPE.A.2

Parabola intuition 3 HSG-GPE.A.2

Pythagorean theorem and the equation of a circle HSG-GPE.A.1

Surface and volume density word problems

HSG-MG.A.2

Volume word problems with cones, cylinders, and spheres 8.G.C.9 | HSG-GMD.A.3

## **Operations and Algebraic Thinking**

#### **Expressions and Equations** Standards Alignment

RIT Range: < 160

Put together K.OA.A.1

Take apart K.OA.A.1

Expressions and Equations	Standards Alignment
RIT Range: 161 - 178	
Adding three numbers	1.OA.A.2
Addition within 20	1.OA.C.6
Addition and subtraction within 10	1.OA.D.8
Addition and subtraction word problems within 20: Level 1	1.OA.A.1
Addition and subtraction word problems within 20: Level 2	1.OA.A.1
Addition and subtraction word problems within 20: Level 3	1.OA.A.1
Addition and subtraction word problems within 20: Level 4	1.OA.A.1
Add within 100: Level 1	1.NBT.C.4
Add within 100: Level 2	1.NBT.C.4
Meaning of equal sign 1	1.OA.D.7
RIT Range: 179 - 191	
Addition and subtraction word problems within 100: Level 1	2.OA.A.1
Addition and subtraction word problems within 100: Level 2	2.OA.A.1
Addition and subtraction word problems within 100: Level 3	2.OA.A.1
Addition and subtraction word problems within 100: Level 4	2.OA.A.1
Add within 1000: Level 1	2.NBT.B.7
Add within 1000: Level 2	2.NBT.B.7
Comparing lengths	2.OA.A.1
Counting money (U.S.)	2.MD.C.8
Length word problems	2.OA.A.1
Solving problems with picture graphs 1	2.OA.A.1
Subtraction within 20	2.NBT.B.5
Subtract within 1000: Level 1	2.NBT.B.7
Subtract within 1000: Level 2	2.NBT.B.7
Writing numbers to 1000	2.NBT.A.3
RIT Range: 192 - 203	
Addition within 100	3.NBT.A.2

Expressions and Equations	Standards Alignment
RIT Range: 192 - 203	
Addition within 1000	3.NBT.A.2
Basic division	3.OA.A.4
1- digit division	3.OA.A.4
Multiplying 1-digit numbers	3.OA.A.4
Properties of multiplication 1	3.OA.B.5
Properties of multiplication 2	3.OA.B.5
Solving basic multiplication and division equations	3.OA.A.4   3.OA.A.4
Subtraction within 100	3.NBT.A.2
Subtraction within 1000	3.NBT.A.2
Telling time word problems	3.MD.A.1
Two-step word problems with addition, subtraction, multiplication, and division	3.OA.D.8
RIT Range: 204 - 212	
Multiplication and division word problems	4.OA.A.2
Comparing with multiplication	4.OA.A.1
Measurement word problems with metric units	4.MD.A.2
Measurement word problems with US customary units	4.MD.A.2
Measuring and converting money word problems	4.MD.A.2
Measuring time word problems	4.MD.A.2
Multiplication without carrying	4.NBT.B.5
<u>Multiplication with carrying</u>	4.NBT.B.5
Multiplying 2 digits by 2 digits	4.NBT.B.5
Multiplying 2 digits by 2 digits with area models	4.NBT.B.5
Multiplying 4 digits by 1 digit with visual models	4.NBT.B.5
Multiplying fractions and whole numbers word problems	4.NF.B.4c
Multi-step word problems with whole numbers	4.OA.A.3   4.OA.A.3
RIT Range: 213 - 220	
Adding decimals 1	5.NBT.B.7

Expressio	ns and Equations	Standards Alignment
RIT Range	: 213 - 220	
<u>Addi</u>	ing decimals 0.5	5.NBT.B.7
<u>Addi</u>	ing fractions with unlike denominators	5.NF.A.1
<u>Addi</u>	ing and subtracting mixed numbers 1	5.NF.A.1
Conv	verting measurements word problems	5.MD.A.1
Conv	verting units	5.MD.A.1
Divid	ding completely	5.NBT.B.7
Divid	ding decimals 1	5.NBT.B.7
Divid	ding decimals 2	5.NBT.B.7
Divid	ding decimals 3	5.NBT.B.7
Divis	sion by 2 digits	5.NBT.B.6
Expr	ressions with parentheses	5.OA.A.1   5.OA.A.2
Mult	tiplying decimals 1	5.NBT.B.7
Mult	tiplying decimals 2	5.NBT.B.7
Mult	tiplying fractions by fractions word problems	5.NF.B.6
<u>Patte</u>	erns in zeros	5.NBT.A.2
Subt	racting decimals	5.NBT.B.7
Subt	racting decimals 0.5	5.NBT.B.7
Subt	racting fractions with unlike denominators	5.NF.A.1
<u>Und</u>	erstanding moving the decimal	5.NBT.A.2
<u>Und</u>	erstanding fractions as division	5.NF.B.3
<u>Und</u>	erstanding multiplying fractions by fractions	5.NF.B.4a
RIT Range:	: 221 - 225	
Com	bining like terms	6.EE.A.3
Depe	endent and independent variables	6.EE.C.9
Cons	structing and solving equations in the real world 1	6.EE.B.6   6.EE.B.7
<u>Equi</u>	valent forms of expressions 1	6.EE.A.3   6.EE.A.4
Eval	uating expressions in one variable	6.EE.A.2c
<u>Eval</u>	uating expressions in 2 variables	6.EE.A.2c

Expressions and Equations	Standards Alignment			
RIT Range: 221 - 225	RIT Range: 221 - 225			
Evaluating expressions with variables word problems	6.EE.A.2   6.EE.A.2c			
Evaluating numerical expressions with exponents	6.EE.A.1			
Evaluating numerical expressions with exponents word problems	6.EE.A.1			
Identifying parts of expressions	6.EE.A.2b			
<u>Inequalities on a number line</u>	6.EE.B.8			
Inequalities in one variable 1	6.EE.B.6   6.EE.B.8			
One-step equations with multiplication	6.EE.B.7			
One step equation intuition	6.EE.B.7			
One step equations	6.EE.B.7			
Order of operations	6.EE.A.2c			
Positive and zero exponents	6.EE.A.1			
Solving equations and inequalities through substitution	6.EE.B.5			
Writing expressions	6.EE.A.2   6.EE.A.2a   6.EE.A.2b			
Writing expressions 2	6.EE.A.2   6.EE.A.2a   6.EE.A.2b			
Writing expressions with variables word problems	6.EE.A.2   6.EE.A.2a			
Writing numerical expressions with exponents word problems	6.EE.A.1			
RIT Range: 226 - 230				
Average word problems	7.EE.B.3			
Combining like terms with distribution	7.EE.A.1			
Discount, tax, and tip word problems	7.EE.B.3			
Interpreting linear expressions	7.EE.A.2			
Interpreting and solving linear inequalities	7.EE.B.4b			
2- step equations	7.EE.B.4			
<u>Linear equation word problems</u>	7.EE.B.4   7.EE.B.4a			
Manipulating linear expressions with rational coefficients	7.EE.A.1			
Markup and commission word problems	7.EE.B.3			
Multi-step equations without variables	7.EE.B.3			
One step inequalities	7.EE.B.4			

Expressions and Equations	Standards Alignment
RIT Range: 231 - 234	
Age word problems	8.EE.C.7   8.EE.C.7b
Angle addition postulate	8.EE.C.7b
Rates and proportional relationships	8.EE.B.5
Computing in scientific notation	8.EE.A.4
Constructing consistent and inconsistent systems	8.EE.C.8a
Converting multi-digit repeating decimals to fractions	8.EE.C.7
<u>Cube roots</u>	8.EE.A.2
Evaluating expressions with exponents	8.EE.A.1
Negative exponents	8.EE.A.1
<u>Graphical solutions to systems</u>	8.EE.C.8a
Graphing systems of equations	8.EE.C.8   8.EE.C.8a   HSA-REI.C.6
Graphing proportional relationships	8.EE.B.5
<u>Integer sums</u>	8.EE.C.7b
Equations with variables on both sides	8.EE.C.7   8.EE.C.7b
Midpoint of a segment	8.EE.C.7b
Multiplying and dividing scientific notation	8.EE.A.4
Multi-step equations with distribution	8.EE.C.7   8.EE.C.7b
Orders of magnitude	8.EE.A.3
<u>Scientific notation</u>	8.EE.A.4
Segment addition	8.EE.C.7b
Slope and triangle similarity	8.EE.B.6
Solutions to systems of equations	8.EE.C.8   HSA-REI.C.6
Solutions to linear equations	8.EE.C.7   8.EE.C.7a
Square roots of perfect squares	8.EE.A.2
Systems of equations	8.EE.C.8   8.EE.C.8a   8.EE.C.8b   HSA-REI.C.6
Systems of equations with elimination	8.EE.C.8   8.EE.C.8b
Systems of equations with simple elimination	8.EE.C.8   8.EE.C.8b
Systems of equations with substitution	8.EE.C.8   8.EE.C.8b

#### **Expressions and Equations**Standards Alignment

RIT Range: 231 - 234

<u>Systems of equations word problems</u>

8.EE.C.8 | 8.EE.C.8c | HSA-REI.C.6

Understanding systems of equations word problems 8.EE.C.8 | 8.EE.C.8a | 8.EE.C.8b | 8.EE.C.8c

Vertical angles 2 8.EE.C.7b

RIT Range: > 235

Adding and subtracting polynomials HSA-APR.A.1

Solving quadratics by completing the square 1 HSA-REI.B.4 | HSA-REI.B.4a | HSA-SSE.B.3 |

HSA-SSE.B.3b

Solving quadratics by completing the square 2 HSA-REI.B.4 | HSA-REI.B.4a | HSA-SSE.B.3 |

HSA-SSE.B.3b

Completing the square in quadratic expressions HSA-SSE.B.3b

Compound inequalities HSA-REI.B.3

Equivalent forms of expressions with variable exponents

HSA-SSE.B.3c

Factoring difference of squares 1 HSA-SSE.A.2

Factoring difference of squares 2 HSA-SSE.A.2

Factoring difference of squares 3 HSA-SSE.A.2

Factoring linear binomials

HSA-SSE.A.2

Factoring quadratics 1 HSA-SSE.B.3 | HSA-SSE.B.3 | HSA-SSE.B.3a

Factoring quadratics 2 HSA-SSE.A.2

Factoring polynomials by grouping

HSA-SSE.A.2

Factoring quadratics with two variables

HSA-SSE.A.2

Graphing linear inequalities in two variables

HSA-REI.D.12

Graphing and solving linear inequalities HSA-REI.D.12

Graphing systems of equations 8.EE.C.8 | 8.EE.C.8a | HSA-REI.C.6

Graphing systems of inequalities HSA-REI.D.12

Graphing and solving systems of inequalities

HSA-REI.D.12

Graphs of inequalities in two variables

HSA-REI.D.12

Interpreting the structure of expressions

HSA-SSE.A.1 | HSA-SSE.A.1a | HSA-SSE.A.1b

Intersecting functions HSA-REI.D.11

Multi-step linear inequalities

HSA-REI.B.3

Expressions and Equations	Standards Alignment
---------------------------	---------------------

RIT Range: > 235

Manipulating formulasHSA-CED.A.4Modeling constraintsHSA-CED.A.3Modeling with one-variable equations and inequalitiesHSA-CED.A.1Modeling with two-variable equations and graphsHSA-CED.A.2Multiplying polynomialsHSA-APR.A.1

Using the quadratic formula HSA-REI.B.4 | HSA-REI.B.4b

Quadratic formula with complex solutions

HSA-REI.B.4 | HSA-REI.B.4b | HSN-CN.C.7

Rewriting quadratic expressions to reveal key features

HSA-SSE.B.3 | HSA-SSE.B.3a | HSA-SSE.B.3b

Solutions to quadratic equations

HSA-REI.B.4 | HSA-REI.B.4b

Solutions to systems of equations 8.EE.C.8 | HSA-REI.C.6

Solving equations in terms of a variable HSA-CED.A.4

Solving quadratics by factoring

HSA-REI.B.4 | HSA-REI.B.4b | HSA-SSE.B.3 |

HSA-SSE.B.3a

Solving quadratics by factoring 2 HSA-REI.B.4 | HSA-REI.B.4b | HSA-SSE.B.3 |

HSA-SSE.B.3a

Solving quadratics by taking the square root

HSA-REI.B.4 | HSA-REI.B.4b

Structure in expressions 1 HSA-SSE.A.1 | HSA-SSE.A.1a | HSA-SSE.A.1b

Systems of equations 8.EE.C.8 | 8.EE.C.8a | 8.EE.C.8b | HSA-REI.C.6

Systems of equations word problems 8.EE.C.8 | 8.EE.C.8c | HSA-REI.C.6

Systems of nonlinear equations HSA-REI.C.7

Graphically understanding solution methods to systems of equations

HSA-REI.C.5

Understanding the process for solving quadratic equations

HSA-REI.A.1

Understanding the process for solving linear equations

HSA-REI.A.1

Vertex of a parabola HSA-SSE.B.3 | HSA-SSE.B.3b

## **Operations and Algebraic Thinking**

Use Functions to Model Relationships Standards Alignment

RIT Range: 231 - 234

<u>Comparing linear functions</u>

8.F.A.2

Comparing linear functions applications

8.F.A.2

Use Functions to Model Relationships	Standards Alignment
RIT Range: 231 - 234	
Constructing and interpreting linear functions	8.F.B.4   8.F.B.5
Graphing linear equations	8.F.B.4   8.F.B.5   HSF-IF.C.7a
Ordered pair solutions to linear equations	8.F.B.4
Interpreting linear relationships	8.F.B.5
Interpreting and finding intercepts of linear functions	8.F.B.4
Interpreting linear functions	8.F.B.4
Interpreting graphs of linear and nonlinear functions	8.F.B.5   HSA-REI.D.10
<u>Linear function intercepts</u>	8.F.B.4   HSF-IF.C.7a
<u>Linear and nonlinear functions</u>	8.F.A.3
Equations from tables	8.F.B.4
Recognizing functions	8.F.A.1
<u>Identifying slope of a line</u>	8.F.B.4
Solving for the x-intercept	8.F.B.4
Solving for the y-intercept	8.F.B.4
Views of a function	8.F.A.1
RIT Range: > 235	
Average rate of change	HSF-IF.B.6
Comparing features of functions	HSF-IF.C.9
Comparing growth rates of exponentials and polynomials	HSF-LE.A.3
Constructing linear and exponential functions	HSF-LE.A.2
Converting between point-slope and slope-intercept form	HSF-IF.C.7a
Converting between slope-intercept and standard form	HSF-IF.C.7a
Domain and range from graph	HSF-IF.B.5
Domain of a function	HSF-IF.A.1   HSF-IF.B.5
Even and odd functions	HSF-BF.B.3
<u>Features of trigonometric functions</u>	HSF-IF.C.7e
<u>Understanding function notation</u>	HSF-IF.A.2
Evaluating expressions with function notation	HSF-IF.A.2

Standards Alignment

HSF-LE.A.1a | HSF-LE.A.1b | HSF-LE.A.1c

## **Operations and Algebraic Thinking**

Understanding linear and exponential models

#### **Use Functions to Model Relationships**

RIT Range: > 235 **Graphing linear equations** 8.F.B.4 | 8.F.B.5 | HSF-IF.C.7a HSF-IF.C.7a Graphing parabolas in standard form HSF-IF.C.7a Graphing parabolas in vertex form HSF-IF.C.7a Graphing parabolas in all forms HSF-IF.C.7b Graphs of piecewise functions HSF-IF.C.7b **Graphs of absolute value functions** HSF-IF.C.7e Graphs of exponentials and logarithms **Graphs of square root functions** HSF-IF.C.7b HSF-IF.C.7e Graphs of trigonometric functions HSF-IF.B.4 Interpreting features of functions 8.F.B.5 | HSA-REI.D.10 Interpreting graphs of linear and nonlinear functions HSF-BF.B.4a Inverses of linear functions HSF-IF.C.7a **Line graph intuition** 8.F.B.4 | HSF-IF.C.7a Linear function intercepts HSF-LE.B.5 Modeling with exponential functions Modeling with one-variable equations and inequalities HSF-BF.A.1b HSF-IF.C.7a Point slope form HSF-IF.B.4 Positive and negative parts of functions HSF-IF.A.1 Range of a function HSF-IF.B.4 Recognizing features of functions HSF-IF.A.1 Recognizing functions 2 HSF-BF.A.1a | HSF-BF.A.2 | HSF-IF.A.3 **Recursive and explicit functions** HSF-IF.C.8 | HSF-IF.C.8a Rewriting quadratic expressions to reveal key features HSF-BF.B.3 **Shifting and reflecting functions** HSF-IF.C.7a Slope intercept form

## **Statistics and Probability**

Interpreting Categorical and Quantitative Data

Standards Alignment

RIT Range: 161 - 178

Solving problems with bar graphs 1

1.MD.C.4

RIT Range: 179 - 191

Solving problems with bar graphs 2

2.MD.D.10

Solving problems with line plots 1

2.MD.D.9

Solving problems with picture graphs 1 2.MD.D.10 | 2.OA.A.1

RIT Range: 192 - 203

Creating picture and bar graphs 23.MD.B.3Solving problems with bar graphs 33.MD.B.3Solving problems with picture graphs 23.MD.B.3

RIT Range: 204 - 212

Interpreting line plots with fraction addition and subtraction 4.MD.B.4

RIT Range: 213 - 220

<u>Interpreting line plots with fraction multiplication and division</u>

<u>Visualizing and interpreting relationships between patterns</u>

5.MD.B.2

5.OA.B.3

RIT Range: 221 - 225

Analyzing data with box plots 6.SP.A.2 | 6.SP.A.3 | 6.SP.B.5

<u>Creating bar charts</u>

Creating box and whisker plots

6.SP.B.4

6.SP.B.4

Exploring mean and median 6.SP.B.5d

Mean, median, and mode 6.SP.A.2 | 6.SP.B.5 | 6.SP.B.5 c

Reading bar charts 1 6.SP.B.5 | 6.SP.B.5a

Reading bar charts 2 6.SP.B.5

Reading bar charts 3 6.SP.B.5

Reading pictographs 1 6.SP.B.5 | 6.SP.B.5a

Reading pictographs 2 6.SP.B.5 | 6.SP.B.5a

## **Statistics and Probability**

Interpreting Categorical and Quantitative Data

Standards Alignment

RIT Range: 221 - 225

Statistical questions 6.SP.A.1

<u>Understanding the mean</u> 6.SP.A.2 | 6.SP.A.3

RIT Range: 226 - 230

Comparing populations 7.SP.B.3 | 7.SP.B.4

RIT Range: 231 - 234

Constructing scatter plots 8.SP.A.1

Frequencies of bivariate data 8.SP.A.4

Interpreting scatter plots 8.SP.A.1

Linear models of bivariate data 8.SP.A.3 | HSS-ID.B.6a | H

ID.B.6c | HSS-ID.C.7

Estimating the line of best fit 8.SP.A.2 | HSS-ID.B.6 | HSS-ID.B.6c

RIT Range: > 235

Exploring standard deviation HSS-ID.A.3

Interpreting and comparing data distributions

HSS-ID.A.1 | HSS-ID.A.2 | HSS-ID.A.3

Linear models of bivariate data 8.SP.A.3 | HSS-ID.B.6a | H

ID.B.6c | HSS-ID.C.7

Estimating the line of best fit 8.SP.A.2 | HSS-ID.B.6 | HSS-ID.B.6c

Standard deviation of a population

HSS-ID.A.2

Trends in categorical data HSS-CP.A.4 | HSS-CP.A.5 | HSS-CP.B.6 | HSS-CP.A.5 | HSS-CP.B.6 | HSS-CP.A.5 | HSS-CP.A.5 | HSS-CP.B.6 | HSS-CP.A.5 | HSS-CP.B.6 | HSS-CP.A.5 | HSS-CP.B.6 | HSS-CP.A.5 | HSS-CP.B.6 | HSS-

ID.B.5

Types of statistical studies

HSS-ID.C.9

**Statistics and Probability** 

Using Sampling and Probability to Make Decisions Standards Alignment

RIT Range: 226 - 230

Compound events 7.SP.C.8a | 7.SP.C.8b

Probability space 7.SP.C.8b

Finding probability 7.SP.C.6

## **Statistics and Probability**

#### Using Sampling and Probability to Make Decisions Standards Alignment

RIT Range: 226 - 230

Probability 17.SP.C.7 | 7.SP.C.7aProbability models7.SP.C.7 | 7.SP.C.7bSample spaces for compound events7.SP.C.8b

Understanding probability7.SP.C.5Valid claims7.SP.A.1

<u>Variation in samples</u> 7.SP.A.2

RIT Range: > 235

Adding probabilities HSS-CP.B.7

Describing subsets of sample spaces HSS-CP.A.1

<u>Identifying dependent and independent events</u>

HSS-CP.A.2 | HSS-CP.A.3

## **The Real and Complex Number Systems**

#### Extend and Use Properties Standards Alignment

RIT Range: < 160

Compare groups through 10K.CC.C.6Count from any numberK.CC.A.2Count to 100K.CC.A.1How many objects 1K.CC.B.5How many objects 2K.CC.B.5Teen numbers 1K.NBT.A.1

RIT Range: 161 - 178

Comparing two-digit numbers 1 1.NBT.B.3

Groups of tens 1.NBT.B.2 | 1.NBT.B.2c

<u>Halves and fourths</u> 1.G.A.3

Numbers to 120 1.NBT.A.1

Teen numbers 2 1.NBT.B.2 | 1.NBT.B.2b

Understanding 2-digit numbers 1.NBT.B.2

Extend and Use Properties	Standards Alignment
RIT Range: 179 - 191	
Comparing whole numbers	2.NBT.A.4
Comparing numbers within 1000	2.NBT.A.4
Counting money (U.S.)	2.NBT.A.2
Equal parts of circles and rectangles	2.G.A.3
<u>Hundreds, tens, and ones</u>	2.NBT.A.1   2.NBT.A.1a   2.NBT.A.1b
Skip-counting by 100s	2.NBT.A.2
Skip-counting by 10s	2.NBT.A.2
Skip-counting by 5s	2.NBT.A.2
Writing numbers to 1000	2.NBT.A.3
RIT Range: 192 - 203	
Addition within 100	3.NBT.A.2
Comparing fractions 1	3.NF.A.3   3.NF.A.3d
Comparing fractions with the same denominator	3.NF.A.3   3.NF.A.3d
Comparing fractions with the same numerator	3.NF.A.3   3.NF.A.3d
Cutting shapes into equal parts	3.G.A.2
Equivalent fraction models	3.NF.A.3   3.NF.A.3b
Finding 1 on the number line	3.NF.A.2   3.NF.A.2b   3.NF.A.3c
Fractions on the number line 1	3.NF.A.2
Fractions on the number line 2	3.NF.A.2   3.NF.A.2b
<u>Fractions greater than one</u>	3.NF.A.1   3.NF.A.1
Meaning of division	3.OA.A.2
Meaning of multiplication	3.0A.A.1
Naming the whole	3.NF.A.3d
Properties of multiplication 1	3.OA.B.5
Properties of multiplication 2	3.OA.B.5
<u>Identifying numerators and denominators</u>	3.NF.A.1
Recognizing fractions	3.NF.A.1   3.NF.A.1
Rounding to the nearest ten or hundred	3.NBT.A.1

Extend and Use Properties	Standards Alignment
RIT Range: 192 - 203	
Subtraction within 100	3.NBT.A.2
RIT Range: 204 - 212	
Adding fractions with 10 and 100 as denominators	4.NF.C.5
Adding and subtracting mixed numbers 0.5	4.NF.B.3c
Comparing decimals 1	4.NF.C.7
Comparing fractions 2	4.NF.A.2
	4.NF.A.2
Comparing with multiplication	4.OA.A.1
Comparing with multiplication	4.OA.B.4
<u>Composite numbers</u>	4.NF.C.6
Converting decimals to fractions 1	4.NF.C.6
Fractions as division by 10 or 100	
<u>Decimals on the number line 1</u>	4.NF.C.6   4.NF.C.6
Decimals on the number line 2	4.NF.C.6   4.NF.C.6
Equivalent fractions	4.NF.A.1
<u>Fractions as division by a multiple of 10</u>	4.NF.C.6
Fractions cut and copy 1	4.NF.A.1
Ordering fractions	4.NF.A.2
<u>Place value</u>	4.NBT.A.2
<u>Prime numbers</u>	4.OA.B.4
Rounding whole numbers	4.NBT.A.3
<u>Understanding place value</u>	4.NBT.A.1
<u>Understanding whole number representations</u>	4.NBT.A.2
<u>Unit sense</u>	4.MD.A.1
Visualizing equivalent fractions	4.NF.A.1
RIT Range: 213 - 220	
Comparing decimals 2	5.NBT.A.3b
Comparing decimal place value	5.NBT.A.1   5.NBT.A.1

Extend and Use Properties	Standards Alignment
RIT Range: 213 - 220	
Coordinate plane word problems in the first quadrant	5.G.A.2
<u>Graphing points</u>	5.G.A.1   5.G.A.2
Ordering decimals	5.NBT.A.3b
Patterns in zeros	5.NBT.A.2
Regrouping decimals	5.NBT.A.1
Regrouping whole numbers	5.NBT.A.1
Rounding numbers	5.NBT.A.4
Money and decimal place value intuition	5.NBT.A.3
<u>Understanding moving the decimal</u>	5.NBT.A.2
<u>Understanding fractions as division</u>	5.NF.B.3
Writing and interpreting decimals	5.NBT.A.3a
DIT Danger, 221, 225	
RIT Range: 221 - 225	6.NS.C.7   6.NS.C.7c
Finding absolute values	6.NS.C.7   6.NS.C.7c   6.NS.C.7d
Absolute value word problems	6.NS.C.7   6.NS.C.7c
Comparing absolute values  Converse and an advantage of the second secon	6.NS.C.8
Coordinate plane word problems in all four quadrants	
Decimals on the number line 3	6.NS.C.6c
Fractions on the number line 3	6.NS.C.6
Graphing points and naming quadrants	6.NS.C.6   6.NS.C.6b   6.NS.C.6c
Points on the coordinate plane	6.NS.C.6   6.NS.C.6b   6.NS.C.6c
Negative number word problems	6.NS.C.5
Negative numbers on the number line	6.NS.C.6   6.NS.C.6a   6.NS.C.6c
Number line 3	6.NS.C.6   6.NS.C.6a   6.NS.C.6c
<u>Number opposites</u>	6.NS.C.6   6.NS.C.6a
Ordering negative numbers	6.NS.C.7   6.NS.C.7c
Reflecting points	6.NS.C.6   6.NS.C.6c
Comparing positive and negative numbers on the number line	6.NS.C.7a
Writing numerical inequalities	6.NS.C.7b

Addition within 20

Addition and subtraction within 10

Extend and Use Properties	Standards Alignment
RIT Range: 231 - 234	
Approximating irrational numbers	8.NS.A.2
Converting decimals to fractions 2	8.NS.A.1
Converting 1-digit repeating decimals to fractions	8.NS.A.1
Converting multi-digit repeating decimals to fractions	8.NS.A.1
<u>Properties of exponents</u>	8.EE.A.1
Recognizing rational and irrational numbers	8.NS.A.1
Scientific notation intuition	8.EE.A.4
Writing fractions as repeating decimals	8.NS.A.1
RIT Range: > 235	
Fractional exponents	HSN-RN.A.2
	HSN-RN.A.2
Fractional exponents 2	HSN-RN.A.2
Manipulating fractional exponents	
Simplifying radicals 2	HSN-RN.A.2
Simplifying expressions with exponents	HSN-RN.A.2
The Real and Complex Number Systems	
Perform Operations	Standards Alignment
RIT Range: < 160	
Addition word problems within 10	K.OA.A.2
Making five	K.OA.A.4
Making ten	K.OA.A.4
Making ten 2	K.OA.A.4
Subtraction word problems within 10	K.OA.A.2
DIT Downer, 464, 470	
RIT Range: 161 - 178	1.04.4.2
Adding three numbers	1.OA.A.2

©July 2014 NWEA 25

1.OA.C.6 1.OA.D.8

Perform Operations	Standards Alignment
RIT Range: 161 - 178	
Addition and subtraction word problems within 20: Level 1	1.OA.A.1
Addition and subtraction word problems within 20: Level 2	1.OA.A.1
Addition and subtraction word problems within 20: Level 3	1.OA.A.1
Addition and subtraction word problems within 20: Level 4	1.OA.A.1
Add within 100: Level 1	1.NBT.C.4
Add within 100: Level 2	1.NBT.C.4
Meaning of equal sign 1	1.OA.D.7
<u>Subtract tens</u>	1.NBT.C.6
RIT Range: 179 - 191	2.OA.A.1
Addition and subtraction word problems within 100: Level 1	
Addition and subtraction word problems within 100: Level 2	2.OA.A.1
Addition and subtraction word problems within 100: Level 3	2.OA.A.1
Addition and subtraction word problems within 100: Level 4	2.OA.A.1
Add within 1000: Level 1	2.NBT.B.7
Add within 1000: Level 2	2.NBT.B.7
Length word problems	2.OA.A.1
Repeated addition	2.OA.C.4
Subtraction within 20	2.NBT.B.5
Subtract within 1000: Level 1	2.NBT.B.7
Subtract within 1000: Level 2	2.NBT.B.7
RIT Range: 192 - 203	
Addition within 100	3.NBT.A.2
Addition within 1000	3.NBT.A.2   4.NBT.B.4
Basic division	3.OA.A.4
1-digit division	3.OA.A.4
Mass word problems	3.MD.A.2
Multiplying 1-digit numbers	3.OA.A.4

Perform Operations	Standards Alignment
RIT Range: 192 - 203	
Multiply by tens	3.NBT.A.3
Multiply by tens word problems	3.NBT.A.3
Number line 1	3.OA.C.7
Math patterns 1	3.OA.D.9
Identifying numerators and denominators	3.NF.A.1
Relate division to multiplication	3.OA.B.6
Subtraction within 100	3.NBT.A.2
Subtraction within 1000	3.NBT.A.2   4.NBT.B.4
Telling time word problems	3.MD.A.1
Two-step word problems with addition, subtraction, multiplication, and division	3.OA.D.8
RIT Range: 204 - 212	
Adding fractions with 10 and 100 as denominators	4.NF.C.5
Adding and subtracting mixed numbers 0.5	4.NF.B.3c
Adding and subtracting fractions with like denominators word problems	4.NF.B.3d
Addition within 1000	3.NBT.A.2   4.NBT.B.4
Multiplication and division word problems	4.OA.A.2
Comparing with multiplication	4.OA.A.1
Converting decimals to fractions 1	4.NF.C.6
Fractions as division by 10 or 100	4.NF.C.6
<u>Decomposing fractions</u>	4.NF.B.3b
Divisibility 0.5	4.OA.B.4
<u>Divisibility intuition</u>	4.OA.B.4
Multi-digit division without remainders	4.NBT.B.6
<u>Division with remainders</u>	4.NBT.B.6
<u>Fraction word problems 1</u>	4.NF.B.3d
Fractions as division by a multiple of 10	4.NF.C.6
Measurement word problems with metric units	4.MD.A.2

Perform Operations	Standards Alignment
RIT Range: 204 - 212	
Measurement word problems with US customary units	4.MD.A.2
Measuring and converting money word problems	4.MD.A.2
Measuring time word problems	4.MD.A.2
Multiplication without carrying	4.NBT.B.5
Multiplication with carrying	4.NBT.B.5
Multiplying 2 digits by 2 digits	4.NBT.B.5
Multiplying fractions by integers	4.NF.B.4
Multiplying 2 digits by 2 digits with area models	4.NBT.B.5
Multiplying 4 digits by 1 digit with visual models	4.NBT.B.5
Multiplying fractions and whole numbers word problems	4.NF.B.4c
Multi-step word problems with whole numbers	4.OA.A.3
Subtracting fractions with common denominators	4.NF.B.3a
Subtraction within 1000	3.NBT.A.2   4.NBT.B.4
<u>Understanding multiplying fractions and whole numbers</u>	4.NF.B.4   4.NF.B.4a
<u>Understanding place value</u>	4.NBT.A.1
RIT Range: 213 - 220	
Adding decimals 1	5.NBT.B.7
Adding decimals 0.5	5.NBT.B.7
Adding fractions with unlike denominators	5.NF.A.1
Adding and subtracting mixed numbers 1	5.NF.A.1
Adding and subtracting fractions with unlike denominators word problem	5.NF.A.2
<u>Dividing completely</u>	5.NBT.B.7
Dividing decimals 1	5.NBT.B.7
Dividing decimals 2	5.NBT.B.7
Dividing decimals 3	5.NBT.B.7
<u>Dividing whole numbers by fractions</u>	5.NF.B.7
<u>Dividing fractions by whole numbers</u>	5.NF.B.7   5.NF.B.7a
<u>Division by 2 digits</u>	5.NBT.B.6

Perform Operations	Standards Alignment
RIT Range: 213 - 220	
Division with fractions and whole numbers word problems	5.NF.B.7c
Expressions with parentheses	5.OA.A.1   5.OA.A.2
Multi-digit multiplication	5.NBT.B.5
Multiplying decimals 1	5.NBT.B.7
Multiplying decimals 2	5.NBT.B.7
Multiplying fractions by fractions word problems	5.NF.B.6
<u>Patterns in zeros</u>	5.NBT.A.2
Regrouping decimals	5.NBT.A.1
Regrouping whole numbers	5.NBT.A.1
<u>Subtracting decimals</u>	5.NBT.B.7
Subtracting decimals 0.5	5.NBT.B.7
Subtracting fractions with unlike denominators	5.NF.A.1
<u>Understanding moving the decimal</u>	5.NBT.A.2
<u>Understanding fractions as division</u>	5.NF.B.3
RIT Range: 221 - 225	
Adding and subtracting decimals word problems	6.NS.B.3
Adding decimals 2	6.NS.B.3
<u>Dividing decimals 4</u>	6.NS.B.3
<u>Dividing positive fractions</u>	6.NS.A.1
Dividing fractions by fractions and whole numbers applications	6.NS.A.1
Multi-digit division	6.NS.B.2
<u>Greatest common divisor</u>	6.NS.B.4
<u>Least common multiple</u>	6.NS.B.4
Multiplying decimals 3	6.NS.B.3
Subtracting decimals 2	6.NS.B.3
<u>Understanding dividing fractions by fractions</u>	6.NS.A.1

Perform Operations Standards Alignment

RIT Range: 226 - 230

Adding and subtracting fractions 7.NS.A.1 | 7.NS.A.1d

Adding and subtracting negative numbers 7.NS.A.1 | 7.NS.A.1c | 7.NS.A.1d

Adding and subtracting rational numbers 7.NS.A.1d

Adding negative numbers 7.NS.A.1 | 7.NS.A.1c

Adding and subtracting negative numbers word problems 7.NS.A.1 | 7.NS.A.1b | 7.NS.A.1c

Constructing and interpreting absolute value 7.NS.A.1 | 7.NS.A.1a | 7.NS.A.1b | 7.NS.A.1c

Converting fractions to decimals 7.NS.A.2 | 7.NS.A.2d

<u>Dividing positive and negative fractions</u>

Positive and zero exponents of integers

7.NS.A.2b

Positive exponents with positive and negative bases

7.NS.A.2

Multiplying and dividing negative numbers 7.NS.A.2 | 7.NS.A.2a

Multiplying fractions
7.NS.A.2a
Operations with rational numbers
7.NS.A.3

Order of operations with negative numbers 7.NS.A.1 | 7.NS.A.2

Rational number word problems 7.NS.A.3

Understanding addition and subtraction with negative numbers 7.NS.A.1 | 7.NS.A.1a | 7.NS.A.1b | 7.NS.A.1c

7.NS.A.1d

RIT Range: > 235

Adding and subtracting complex numbers

Adding and subtracting radicals

HSN-CN.A.2

Imaginary unit powers

HSN-CN.A.2

Measurement precision

HSN-Q.A.3

Multiplying complex numbers

HSN-CN.A.2

The imaginary unit and complex numbers

HSN-CN.A.1

<u>Units and scale of graphs</u>

Reasonable units HSN-Q.A.1

Working with units algebraically

HSN-Q.A.1

Ratios and Proportional Relationships	Standards Alignment
RIT Range: 192 - 203	
Comparing fractions 1	3.NF.A.3
Comparing fractions with the same denominator	3.NF.A.3
Comparing fractions with the same numerator	3.NF.A.3
Equivalent fraction models	3.NF.A.3   3.NF.A.3b
RIT Range: 204 - 212	
Multiplication and division word problems	4.OA.A.2
Comparing fractions 2	4.NF.A.2
Comparing improper fractions and mixed numbers	4.NF.A.2
<u>Measurement units</u>	4.MD.A.1   4.MD.A.1
Measurement word problems with metric units	4.MD.A.2
Measurement word problems with US customary units	4.MD.A.2
Measuring and converting money word problems	4.MD.A.2
Measuring time word problems	4.MD.A.2
Multi-step word problems with whole numbers	4.OA.A.3
Ordering fractions	4.NF.A.2
<u>Unit sense</u>	4.MD.A.1
RIT Range: 213 - 220	
Adding and subtracting fractions with unlike denominators word problems	5.NF.A.2
Converting measurements word problems	5.MD.A.1
Converting units	5.MD.A.1
<u>Division by 2 digits</u>	5.NBT.B.6
Division with fractions and whole numbers word problems	5.NF.B.7c
Multiplying fractions by fractions word problems	5.NF.B.6
RIT Range: 221 - 225	
<u>Finding percents</u>	6.RP.A.3   6.RP.A.3c
Percentage word problems 1	6.RP.A.3   6.RP.A.3c
Rate problems 0.5	6.RP.A.2   6.RP.A.3   6.RP.A.3b

#### Ratios and Proportional Relationships Standards Alignment

RIT Range: 221 - 225

Ratio word problems 6.RP.A.2 | 6.RP.A.3 | 6.RP.A.3b

Solving ratio problems with tables 6.RP.A.3 | 6.RP.A.3a

<u>Units</u> 6.RP.A.3 | 6.RP.A.3d

RIT Range: 226 - 230

Analyzing and identifying proportional relationships
7.RP.A.2a | 7.RP.A.2c | 7.RP.A.2d

Constructing and comparing proportional relationships
7.RP.A.2a | 7.RP.A.2c | 7.RP.A.2d

Constructing proportions to solve application problems 7.RP.A.3

Proportions 1 7.RP.A.3

Rate problems 1 7.RP.A.1 | 7.RP.A.2b

Rate problems 2 7.RP.A.3

Writing proportions 7.RP.A.3