

Mathematics

Goal: Number and Operations

RIT Score Range: < 161 Statements Last Updated: Sep 23, 2013

Skills and Concepts to Develop (50% Probability*) < 161	Skills and Concepts to Introduce (27% Probability*) 161 - 170
Understand Place Value, Counting, and Cardinality	Understand Place Value, Counting, and Cardinality
Identifies whole numbers under 100 using base-10 blocks	Identifies whole numbers under 100 using base-10 blocks
Identifies the numerical and written name for whole numbers 11 to 20 (e.g., 15 is fifteen, and vice versa)	Identifies the numerical and written name for whole numbers 11 to 20 (e.g., 15 is fifteen, and vice versa)
	Counts 1 to 10 objects
	Identifies missing numbers in a series through 100
	Recognizes and generates equivalent forms for the same number using physical models for whole numbers 11 to 20
	Orders whole numbers less than 10
	Writes whole numbers in standard and expanded form through the tens
Number and Operations in Base Ten	Number and Operations in Base Ten
Uses models to calculate whole number sums through 99	Uses models to calculate whole number sums through 99
Adds 1-digit to multiple-digit number with no regrouping	Adds multiple 1-digit numbers
Adds 1-digit to multiple-digit number with regrouping	Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens)
	Adds 1-digit to multiple-digit number with no regrouping
	Adds 1-digit to multiple-digit number with regrouping
	Adds 2-digit numbers with no regrouping
	Subtracts two 1-digit numbers horizontally
	Subtracts a 2-digit number from a 2-digit number, with no regrouping
Number and Operations - Fractions	Number and Operations - Fractions
New Vocabulary: None	New Vocabulary: None
New Signs and Symbols: None	New Signs and Symbols: + addition, = is equal to, × multiplication, variable

Explanatory Notes

* At the range mid-point, this is the probability students would correctly answer items measuring these concepts and skills. Both data from test items and review by NWEA curriculum specialists are used to place Learning Continuum statements into



Mathematics

Goal: Number and Operations

161 - 170 RIT Score Range: Statements Last Updated: Sep 23, 2013

Skills and Concepts to Enhance (73% Probability*) < 161	Skills and Concepts to Develop (50% Probability*) 161 - 170	Skills and Concepts to Introduce (27% Probability*) 171 - 180
Understand Place Value, Counting, and Cardinality	Understand Place Value, Counting, and Cardinality	Understand Place Value, Counting, and Cardinality
 Identifies whole numbers under 100 using base-10 blocks 	Identifies whole numbers under 100 using base-10 blocks	 Identifies whole numbers 100 - 999 using base-10 blocks
 Identifies the numerical and written name for whole numbers 11 to 20 (e.g., 15 is fifteen, and vice versa) 	Identifies the numerical and written name for whole numbers 11 to 20 (e.g., 15 is fifteen, and vice versa)	• Identifies the numerical and written name for whole numbers 21 to 100 (e.g., 62 is sixty-two, and vice versa)
	Counts 1 to 10 objects Identifies missing numbers in a series through 100	• Identifies the numeral and written name for whole numbers 101 to 999 (e.g., 342 is three hundred forty-two, and vice versa)
	Recognizes and generates equivalent forms for the same number	Identifies missing numbers in a series through 100
	using physical models for whole numbers 11 to 20 Orders whole numbers less than 10	Counts backwards from a given number (given number greater than 10)
	Writes whole numbers in standard and expanded form through the tens	 Recognizes and generates equivalent forms for the same number using physical models for whole numbers 11 to 20
		Compares sets of objects and identifies which is equal to, more than, or less than the other (1 to 10 objects)
		Compares whole numbers through 999
		Counts objects that are grouped into tens and ones
		 Identifies the place value and value of each digit in whole numbers through the tens place
Number and Operations in Base Ten	Number and Operations in Base Ten	Number and Operations in Base Ten
	Transor and operations in Edge 1611	Number and Operations in base ren
Uses models to calculate whole number sums through 99	Uses models to calculate whole number sums through 99	Uses models to calculate whole number sums through 999
		Uses models to calculate whole number sums through 999 Uses strategies for addition facts (e.g., compatible numbers, counting
Uses models to calculate whole number sums through 99	Uses models to calculate whole number sums through 99 Adds multiple 1-digit numbers Uses strategies for addition facts (e.g., compatible numbers, counting)	Uses models to calculate whole number sums through 999 Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens)
Uses models to calculate whole number sums through 99 Adds 1-digit to multiple-digit number with no regrouping	Uses models to calculate whole number sums through 99 Adds multiple 1-digit numbers Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens)	Uses models to calculate whole number sums through 999 Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds two or three 2-digit number with regrouping
Uses models to calculate whole number sums through 99 Adds 1-digit to multiple-digit number with no regrouping	Uses models to calculate whole number sums through 99 Adds multiple 1-digit numbers Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds 1-digit to multiple-digit number with no regrouping	Uses models to calculate whole number sums through 999 Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds two or three 2-digit number with regrouping Adds 1- and/or 2-digit numbers with sums under 100
Uses models to calculate whole number sums through 99 Adds 1-digit to multiple-digit number with no regrouping	Uses models to calculate whole number sums through 99 Adds multiple 1-digit numbers Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds 1-digit to multiple-digit number with no regrouping Adds 1-digit to multiple-digit number with regrouping	Uses models to calculate whole number sums through 999 Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds two or three 2-digit number with regrouping Adds 1- and/or 2-digit numbers with sums under 100 Adds 3-digit numbers with no regrouping
Uses models to calculate whole number sums through 99 Adds 1-digit to multiple-digit number with no regrouping	Uses models to calculate whole number sums through 99 Adds multiple 1-digit numbers Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds 1-digit to multiple-digit number with no regrouping Adds 1-digit to multiple-digit number with regrouping Adds 2-digit numbers with no regrouping	Uses models to calculate whole number sums through 999 Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds two or three 2-digit number with regrouping Adds 1- and/or 2-digit numbers with sums under 100 Adds 3-digit numbers with no regrouping Adds 3-digit numbers, with regrouping, with sums under 1000
Uses models to calculate whole number sums through 99 Adds 1-digit to multiple-digit number with no regrouping	Uses models to calculate whole number sums through 99 Adds multiple 1-digit numbers Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds 1-digit to multiple-digit number with no regrouping Adds 1-digit to multiple-digit number with regrouping Adds 2-digit numbers with no regrouping Subtracts two 1-digit numbers horizontally	Uses models to calculate whole number sums through 999 Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds two or three 2-digit number with regrouping Adds 1- and/or 2-digit numbers with sums under 100 Adds 3-digit numbers with no regrouping Adds 3-digit numbers, with regrouping, with sums under 1000 Subtracts a 2-digit number from a 2-digit number, with no regrouping
Uses models to calculate whole number sums through 99 Adds 1-digit to multiple-digit number with no regrouping	Uses models to calculate whole number sums through 99 Adds multiple 1-digit numbers Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds 1-digit to multiple-digit number with no regrouping Adds 1-digit to multiple-digit number with regrouping Adds 2-digit numbers with no regrouping	Uses models to calculate whole number sums through 999 Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds two or three 2-digit number with regrouping Adds 1- and/or 2-digit numbers with sums under 100 Adds 3-digit numbers with no regrouping Adds 3-digit numbers, with regrouping, with sums under 1000
Uses models to calculate whole number sums through 99 Adds 1-digit to multiple-digit number with no regrouping	Uses models to calculate whole number sums through 99 Adds multiple 1-digit numbers Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds 1-digit to multiple-digit number with no regrouping Adds 1-digit to multiple-digit number with regrouping Adds 2-digit numbers with no regrouping Subtracts two 1-digit numbers horizontally	Uses models to calculate whole number sums through 999 Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds two or three 2-digit number with regrouping Adds 1- and/or 2-digit numbers with sums under 100 Adds 3-digit numbers with no regrouping Adds 3-digit numbers, with regrouping, with sums under 1000 Subtracts a 2-digit number from a 2-digit number, with no regrouping
Uses models to calculate whole number sums through 99 Adds 1-digit to multiple-digit number with no regrouping Adds 1-digit to multiple-digit number with regrouping	Uses models to calculate whole number sums through 99 Adds multiple 1-digit numbers Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds 1-digit to multiple-digit number with no regrouping Adds 1-digit to multiple-digit number with regrouping Adds 2-digit numbers with no regrouping Subtracts two 1-digit numbers horizontally Subtracts a 2-digit number from a 2-digit number, with no regrouping	Uses models to calculate whole number sums through 999 Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds two or three 2-digit number with regrouping Adds 1- and/or 2-digit numbers with sums under 100 Adds 3-digit numbers with no regrouping Adds 3-digit numbers, with regrouping, with sums under 1000 Subtracts a 2-digit number from a 2-digit number, with no regrouping Subtracts 2- and/or 3-digit numbers with no regrouping
Uses models to calculate whole number sums through 99 Adds 1-digit to multiple-digit number with no regrouping Adds 1-digit to multiple-digit number with regrouping	Uses models to calculate whole number sums through 99 Adds multiple 1-digit numbers Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds 1-digit to multiple-digit number with no regrouping Adds 1-digit to multiple-digit number with regrouping Adds 2-digit numbers with no regrouping Subtracts two 1-digit numbers horizontally Subtracts a 2-digit number from a 2-digit number, with no regrouping	Uses models to calculate whole number sums through 999 Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds two or three 2-digit number with regrouping Adds 1- and/or 2-digit numbers with sums under 100 Adds 3-digit numbers with no regrouping Adds 3-digit numbers, with regrouping, with sums under 1000 Subtracts a 2-digit number from a 2-digit number, with no regrouping Subtracts 2- and/or 3-digit numbers with no regrouping Number and Operations - Fractions
Uses models to calculate whole number sums through 99 Adds 1-digit to multiple-digit number with no regrouping Adds 1-digit to multiple-digit number with regrouping	Uses models to calculate whole number sums through 99 Adds multiple 1-digit numbers Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds 1-digit to multiple-digit number with no regrouping Adds 1-digit to multiple-digit number with regrouping Adds 2-digit numbers with no regrouping Subtracts two 1-digit numbers horizontally Subtracts a 2-digit number from a 2-digit number, with no regrouping	Uses models to calculate whole number sums through 999 Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds two or three 2-digit number with regrouping Adds 1- and/or 2-digit numbers with sums under 100 Adds 3-digit numbers with no regrouping Adds 3-digit numbers, with regrouping, with sums under 1000 Subtracts a 2-digit number from a 2-digit number, with no regrouping Subtracts 2- and/or 3-digit numbers with no regrouping Number and Operations - Fractions Represents 1/2 with a diagram or model
Uses models to calculate whole number sums through 99 Adds 1-digit to multiple-digit number with no regrouping Adds 1-digit to multiple-digit number with regrouping	Uses models to calculate whole number sums through 99 Adds multiple 1-digit numbers Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds 1-digit to multiple-digit number with no regrouping Adds 1-digit to multiple-digit number with regrouping Adds 2-digit numbers with no regrouping Subtracts two 1-digit numbers horizontally Subtracts a 2-digit number from a 2-digit number, with no regrouping	Uses models to calculate whole number sums through 999 Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds two or three 2-digit number with regrouping Adds 1- and/or 2-digit numbers with sums under 100 Adds 3-digit numbers with no regrouping Adds 3-digit numbers, with regrouping, with sums under 1000 Subtracts a 2-digit number from a 2-digit number, with no regrouping Subtracts 2- and/or 3-digit numbers with no regrouping Number and Operations - Fractions Represents 1/2 with a diagram or model Represents 1/4 with a diagram or model

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Explanatory Notes

* At the range mid-point, this is the probability students would correctly answer items measuring these concepts and skills. Both data from test items and review by NWEA curriculum specialists are used to place Learning Continuum statements into



Mathematics

Goal: Number and Operations

RIT Score Range: 171 - 180 Statements Last Updated: Sep 23, 2013

Skills and Concepts to Enhance (73% Probability*) 161 - 170	Skills and Concepts to Develop (50% Probability*) 171 - 180	Skills and Concepts to Introduce (27% Probability*) 181 - 190
Understand Place Value, Counting, and Cardinality	Understand Place Value, Counting, and Cardinality	Understand Place Value, Counting, and Cardinality
Identifies whole numbers under 100 using base-10 blocks Identifies the numerical and written name for whole numbers 11 to 20.	Identifies whole numbers 100 - 999 using base-10 blocks Identifies the numerical and written name for whole numbers 21 to 100.	Identifies the numeral and written name for whole numbers 101 to 999 (e.g., 342 is three hundred forty-two, and vice versa)
 Identifies the numerical and written name for whole numbers 11 to 20 (e.g., 15 is fifteen, and vice versa) Counts 1 to 10 objects Identifies missing numbers in a series through 100 Recognizes and generates equivalent forms for the same number using physical models for whole numbers 11 to 20 Orders whole numbers less than 10 Writes whole numbers in standard and expanded form through the tens 	Identifies the numerical and written name for whole numbers 21 to 100 (e.g., 62 is sixty-two, and vice versa) Identifies the numeral and written name for whole numbers 101 to 999 (e.g., 342 is three hundred forty-two, and vice versa) Identifies missing numbers in a series through 100 Counts backwards from a given number (given number greater than 10) Recognizes and generates equivalent forms for the same number using physical models for whole numbers 11 to 20 Compares sets of objects and identifies which is equal to, more than, or less than the other (1 to 10 objects) Compares whole numbers through 999 Counts objects that are grouped into tens and ones Identifies the place value and value of each digit in whole numbers through the tens place	Identifies the numeral and written name for whole numbers to 1000 to 9999 (e.g., 3456 is three thousand, four hundred fifty-six, and vice versa) Identifies the numeral and written name for whole numbers 10,000 to 100,000 Compares whole numbers through 999 Rounds 2- and 3- digit whole numbers to the nearest ten Rounds 3-digit whole numbers to the nearest hundred Counts objects that are grouped into tens and ones Identifies whole numbers under 100 given place value terms (e.g., 3 tens and 4 ones = 34) Identifies the place value and value of each digit in whole numbers through the tens place Identifies the place value and value of each digit in whole numbers through the hundreds place Identifies the place value and value of each digit in whole numbers through the thousands Identifies the place value and value of each digit in whole numbers through the thousands Compares and orders decimals to the hundredths place (same
N 1 10 " : D 7		number of digits after decimal)
Number and Operations in Base Ten	Number and Operations in Base Ten	Number and Operations in Base Ten
 Uses models to calculate whole number sums through 99 Adds multiple 1-digit numbers Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds 1-digit to multiple-digit number with no regrouping Adds 1-digit to multiple-digit number with regrouping Adds 2-digit numbers with no regrouping Subtracts two 1-digit numbers horizontally Subtracts a 2-digit number from a 2-digit number, with no regrouping 	Uses models to calculate whole number sums through 999 Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds two or three 2-digit number with regrouping Adds 1- and/or 2-digit numbers with sums under 100 Adds 3-digit numbers with no regrouping Adds 3-digit numbers, with regrouping, with sums under 1000 Subtracts a 2-digit number from a 2-digit number, with no regrouping Subtracts 2- and/or 3-digit numbers with no regrouping	 Adds two or three 2-digit number with regrouping Adds 3-digit numbers, with regrouping, with sums under 1000 Performs mental computation with 2, 3, or 4 addends Adds two 3- and/or 4-digit numbers, with regrouping, with sums over 1000 Adds multiple-digit numbers, with regrouping, with sums over 1000 Uses models to calculate differences through 100 (whole numbers) Subtracts a 2-digit number from a 2-digit number, with regrouping Uses strategies for sums and differences with 2-digit numbers (e.g., decomposing, compatible, compensation, partial sums, counting on) Subtracts 2- and/or 3-digit numbers with no regrouping Subtracts 3- or 4-digit numbers with regrouping Performs mental subtraction with numbers under 1000 Subtracts multiple-digit numbers with no regrouping Multiplies a 2-digit number by a 1-digit number with no regrouping Multiplies a 2-digit number by a 2-digit number with no regrouping

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Explanatory Notes

* At the range mid-point, this is the probability students would correctly answer items measuring these concepts and skills. Both data from test items and review by NWEA curriculum specialists are used to place Learning Continuum statements into appropriate RIT ranges. Blank cells indicate data are limited or unavailable for this range or document version.

3



Mathematics RIT Score Range: 171 - 180 Statements Last Updated: Sep 23, 2013 Goal: Number and Operations

Skills and Concepts to Enhance (73% Probability*) 161 - 170	Skills and Concepts to Develop (50% Probability*) 171 - 180	Skills and Concepts to Introduce (27% Probability*) 181 - 190
Number and Operations in Base Ten	Number and Operations in Base Ten	Number and Operations in Base Ten
		Adds decimals to the hundredths place (same number of digits)
		Identifies the number that is 1 less than a given number
		Compares whole numbers through 9999
Number and Operations - Fractions	Number and Operations - Fractions	Number and Operations - Fractions
	• Represents 1/2 with a diagram or model	• Represents 3/4 with a diagram or model
	Represents 1/4 with a diagram or model	Identifies 1/2 from a region or set
	Identifies one-half from a region or set	Identifies one-half from a region or set
		Identifies 1/4 from a region or set
		• Identifies 2/4, 3/4, or 4/4 from a region or set
		• Identifies 2/3 or 3/3 from a region or set
		Identifies tenths from a region or set
		Identifies eighths from a region or set
		 Identifies a fraction (denominators other than 2, 3, 4, 8, 10) from a region or set
New Vocabulary: None	New Vocabulary: fourth, hundred, thirds, thousand	New Vocabulary: closest, digit, hundreds, million, nearest, one, ten
New Signs and Symbols: + addition, = is equal to, × multiplication,	New Signs and Symbols: None thousand	thousand
variable		New Signs and Symbols: { } set notation, \$ dollar sign, - subtraction

Explanatory Notes

* At the range mid-point, this is the probability students would correctly answer items measuring these concepts and skills. Both data from test items and review by NWEA curriculum specialists are used to place Learning Continuum statements into



Mathematics

Goal: Number and Operations

RIT Score Range: 181 - 190 Statements Last Updated: Sep 23, 2013

Skills and Concepts to Enhance (73% Probability*) 171 - 180	Skills and Concepts to Develop (50% Probability*) 181 - 190	Skills and Concepts to Introduce (27% Probability*) 191 - 200
Understand Place Value, Counting, and Cardinality	Understand Place Value, Counting, and Cardinality	Understand Place Value, Counting, and Cardinality
Identifies whole numbers 100 - 999 using base-10 blocks Identifies the numerical and written name for whole numbers 21 to 100 (a.g., 62 is given two and vice verse)	Identifies the numeral and written name for whole numbers 101 to 999 (e.g., 342 is three hundred forty-two, and vice versa) Identifies the numeral and written name for whole numbers to 1000 to	Identifies whole numbers over 999 using base-10 blocks Identifies the numeral and written name for whole numbers with a zero
 (e.g., 62 is sixty-two, and vice versa) Identifies the numeral and written name for whole numbers 101 to 999 (e.g., 342 is three hundred forty-two, and vice versa) Identifies missing numbers in a series through 100 Counts backwards from a given number (given number greater than 10) Recognizes and generates equivalent forms for the same number using physical models for whole numbers 11 to 20 Compares sets of objects and identifies which is equal to, more than, or less than the other (1 to 10 objects) Compares whole numbers through 999 Counts objects that are grouped into tens and ones Identifies the place value and value of each digit in whole numbers through the tens place 	Identifies the numeral and written name for whole numbers to 1000 to 9999 (e.g., 3456 is three thousand, four hundred fifty-six, and vice versa) Identifies the numeral and written name for whole numbers 10,000 to 100,000 Compares whole numbers through 999 Rounds 2- and 3- digit whole numbers to the nearest ten Rounds 3-digit whole numbers to the nearest hundred Counts objects that are grouped into tens and ones Identifies whole numbers under 100 given place value terms (e.g., 3 tens and 4 ones = 34) Identifies the place value and value of each digit in whole numbers through the tens place Identifies the place value and value of each digit in whole numbers through the hundreds place Identifies the place value and value of each digit in whole numbers	between digits to the ten thousands place · Identifies the numeral and written name for whole numbers 10,000 to 100,000 · Identifies the numeral and written name for whole numbers over 100,000 · Compares whole numbers to 100, using the symbols for 'less than', 'equal to', or 'greater than' (<, =, >) · Compares whole numbers through the thousands using the symbols <, >, or = · Rounds 2- and 3- digit whole numbers to the nearest ten · Rounds 3-digit whole numbers to the nearest hundred · Identifies whole numbers under 100 given place value terms (e.g., 3 tens and 4 ones = 34) · Identifies the place value and value of each digit in whole numbers through the thousands
	through the thousands Identifies the place value and value of each digit in whole numbers through the hundred thousands Compares and orders decimals to the hundredths place (same number of digits after decimal)	Identifies the place value and value of each digit in whole numbers through the hundred thousands Writes whole numbers in standard and expanded form through the hundreds Writes whole numbers in standard and expanded form through the thousands
Number and Operations in Base Ten	Number and Operations in Base Ten	Number and Operations in Base Ten
Uses models to calculate whole number sums through 999 Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds two or three 2-digit number with regrouping Adds 1- and/or 2-digit numbers with sums under 100 Adds 3-digit numbers with no regrouping Adds 3-digit numbers, with regrouping, with sums under 1000 Subtracts a 2-digit number from a 2-digit number, with no regrouping Subtracts 2- and/or 3-digit numbers with no regrouping	Adds two or three 2-digit number with regrouping Adds 3-digit numbers, with regrouping, with sums under 1000 Performs mental computation with 2, 3, or 4 addends Adds two 3- and/or 4-digit numbers, with regrouping, with sums over 1000 Adds multiple-digit numbers, with regrouping, with sums over 1000 Uses models to calculate differences through 100 (whole numbers) Subtracts a 2-digit number from a 2-digit number, with regrouping Uses strategies for sums and differences with 2-digit numbers (e.g., decomposing, compatible, compensation, partial sums, counting on) Subtracts 2- and/or 3-digit numbers with no regrouping Subtracts 3- or 4-digit numbers with regrouping Performs mental subtraction with numbers under 1000 Subtracts multiple-digit numbers with no regrouping Multiplies a 2-digit number by a 1-digit number with no regrouping	Uses rounding to estimate answers to addition and subtraction problems (whole numbers only) Adds two 3- and/or 4-digit numbers, with regrouping, with sums over 1000 Adds multiple-digit numbers, with regrouping, with sums over 1000 Adds multiple-digit numbers with sums under 1000 Subtracts 1-digit number from a 2-digit number with regrouping Subtracts a 2-digit number from a 2-digit number, with regrouping Uses strategies for sums and differences with 2-digit numbers (e.g., decomposing, compatible, compensation, partial sums, counting on) Subtracts a 2-digit number from a 3-digit number with a single regrouping Subtracts 3- or 4-digit numbers with regrouping Performs mental subtraction with numbers under 1000 Subtracts multiple-digit numbers with no regrouping Multiplies a 2- or 3-digit number by a 1-digit number with no regrouping

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Explanatory Notes

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5



Mathematics

Goal: Number and Operations

RIT Score Range: 181 - 190 Statements Last Updated: Sep 23, 2013

Skills and Concepts to Enhance (73% Probability*) 171 - 180	Skills and Concepts to Develop (50% Probability*) 181 - 190	Skills and Concepts to Introduce (27% Probability*) 191 - 200
Number and Operations in Base Ten	Number and Operations in Base Ten	Number and Operations in Base Ten
	Adds decimals to the hundredths place (same number of digits)	Multiplies a 2-digit number by a 1-digit number with regrouping
	· Identifies the number that is 1 less than a given number	Multiplies a 3- or 4-digit number by a 1-digit number
	Compares whole numbers through 9999	Multiplies a 2-digit number by a 2-digit number with no regrouping
		Performs mental computation with multiplication
		Divides a 2-digit number by a 1-digit number with no remainder
		Adds decimals to the hundredths place (same number of digits)
		Adds decimals to the hundredths place in vertical format (not same number of digits)
		Adds decimals to the thousandths place vertically with and without regrouping
		Subtracts decimals to the hundredths place (same number of digits) with regrouping
		Multiplies a decimal by whole number
Number and Operations - Fractions	Number and Operations - Fractions	Number and Operations - Fractions
Represents 1/2 with a diagram or model Represents 1/4 with a diagram or model	Represents 3/4 with a diagram or model Identifies 1/2 from a region or set	Uses models to add and subtract fractions and connect the actions to algorithms
Identifies one-half from a region or set	Identifies one-half from a region or set	Subtracts fractions with like denominators without reducing
administration a region of col	• Identifies 1/4 from a region or set	Solves real-world 1-step problems involving addition and subtraction of fractions with like denominators
	 Identifies 2/4, 3/4, or 4/4 from a region or set Identifies 2/3 or 3/3 from a region or set 	Solves real-world 1-step problems involving multiplication or division of a whole number by a fraction
	Identifies tenths from a region or set	• Represents 1/3 with a diagram or model
	 Identifies eighths from a region or set Identifies a fraction (denominators other than 2, 3, 4, 8, 10) from a 	Represents fractions with denominators other than 2, 3, 4 with a diagram or model
	region or set	• Identifies 1/4 from a region or set
		• Identifies 1/3 from a region or set
		• Identifies 2/3 or 3/3 from a region or set
		Identifies tenths from a region or set
		• Identifies a fraction (denominators other than 2, 3, 4, 8, 10) from a region or set
		 Identifies equivalent fractions using visual representations
		Matches numeric and visual representation of equivalent fractions
		 Explains different interpretations of fractions (e.g., parts of a whole, parts of a set, and division of whole numbers by whole numbers)
		Writes the missing number in a proportion using basic facts
New Vocabulary: fourth, hundred, thirds, thousand New Signs and Symbols: None	New Vocabulary: closest, digit, hundreds, million, nearest, one, ten thousand	New Vocabulary: billion, hundred million, quintillion, standard numeral, trillion
ivew oigns and cynnodis. None	New Signs and Symbols: { } set notation, \$ dollar sign, - subtraction	New Signs and Symbols: °F degrees Fahrenheit, > greater than, < less than, long division symbol, R remainder

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Explanatory Notes

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Mathematics

Goal: Number and Operations

RIT Score Range: 191 - 200 Statements Last Updated: Sep 23, 2013

Skills and Concepts to Enhance (73% Probability*) 181 - 190	Skills and Concepts to Develop (50% Probability*) 191 - 200	Skills and Concepts to Introduce (27% Probability*) 201 - 210
Understand Place Value, Counting, and Cardinality	Understand Place Value, Counting, and Cardinality	Understand Place Value, Counting, and Cardinality
• Identifies the numeral and written name for whole numbers 101 to 999	Identifies whole numbers over 999 using base-10 blocks	Identifies whole numbers over 999 using base-10 blocks
(e.g., 342 is three hundred forty-two, and vice versa) • Identifies the numeral and written name for whole numbers to 1000 to	Identifies the numeral and written name for whole numbers with a zero between digits to the ten thousands place	Identifies the numeral and written name for whole numbers with a zero between digits to the ten thousands place
9999 (e.g., 3456 is three thousand, four hundred fifty-six, and vice versa) • Identifies the numeral and written name for whole numbers 10,000 to	Identifies the numeral and written name for whole numbers 10,000 to 100,000	Identifies the numeral and written name for whole numbers over 100,000
100,000 Compares whole numbers through 999	Identifies the numeral and written name for whole numbers over 100.000	• Compares whole numbers through the billions using the symbols <, >, or =
Rounds 2- and 3- digit whole numbers to the nearest ten	Compares whole numbers to 100, using the symbols for 'less than',	Orders whole numbers a million or greater using < or > symbols
Rounds 3-digit whole numbers to the nearest hundred	'equal to', or 'greater than' (<, =, >)	• Rounds 4-, 5-, and 6-digit whole numbers to the nearest ten
Counts objects that are grouped into tens and ones	• Compares whole numbers through the thousands using the symbols <,	• Rounds 4-, 5-, and 6-digit whole numbers to the nearest hundred
Identifies whole numbers under 100 given place value terms (e.g., 3)	>, or =	• Rounds 4-, 5-, and 6-digit whole numbers to the nearest thousand
tens and 4 ones = 34)	Rounds 2- and 3- digit whole numbers to the nearest ten	Rounds whole numbers to the nearest hundred thousand
Identifies the place value and value of each digit in whole numbers	Rounds 3-digit whole numbers to the nearest hundred	
through the tens place	• Identifies whole numbers under 100 given place value terms (e.g., 3	Rounds wholes numbers to the nearest billion Final size the makes for rounding.
• Identifies the place value and value of each digit in whole numbers	tens and 4 ones = 34)	• Explains the rules for rounding
through the hundreds place • Identifies the place value and value of each digit in whole numbers	Identifies the place value and value of each digit in whole numbers through the thousands	• Writes equivalent forms of whole numbers using place value (e.g., 54 = 4 tens and 14 ones)
through the thousands	Identifies the place value and value of each digit in whole numbers through the hundred thousands	Identifies the place value and value of each digit in whole numbers through the billions
 Identifies the place value and value of each digit in whole numbers through the hundred thousands 	Writes whole numbers in standard and expanded form through the hundreds	Writes whole numbers in standard and expanded form through the hundred thousands
 Compares and orders decimals to the hundredths place (same number of digits after decimal) 	Writes whole numbers in standard and expanded form through the thousands	Applies base ten place value concepts with whole numbers to solve problems
		Writes whole numbers using place value terms and vice versa
		Rounds decimals to the nearest whole number
Number and Operations in Base Ten	Number and Operations in Base Ten	Number and Operations in Base Ten
Adds two or three 2-digit number with regrouping	Uses rounding to estimate answers to addition and subtraction	Uses rounding to estimate answers to addition and subtraction
Adds 3-digit numbers, with regrouping, with sums under 1000	problems (whole numbers only)	problems (whole numbers only)
• Performs mental computation with 2, 3, or 4 addends	• Adds two 3- and/or 4-digit numbers, with regrouping, with sums over	Adds multiple-digit numbers, with regrouping, with sums over 1000
• Adds two 3- and/or 4-digit numbers, with regrouping, with sums over	1000	Adds multiple-digit numbers with sums under 1000
1000	Adds multiple-digit numbers, with regrouping, with sums over 1000	Performs mental computation with more than 4 addends
Adds multiple-digit numbers, with regrouping, with sums over 1000	Adds multiple-digit numbers with sums under 1000	Subtracts 3- or 4-digit numbers with regrouping
Uses models to calculate differences through 100 (whole numbers)	Subtracts 1-digit number from a 2-digit number with regrouping	Subtracts numbers with 5 digits or more with regrouping
Subtracts a 2-digit number from a 2-digit number, with regrouping	Subtracts a 2-digit number from a 2-digit number, with regrouping	Instantly recalls basic multiplication and division facts in a table
 Uses strategies for sums and differences with 2-digit numbers (e.g., decomposing, compatible, compensation, partial sums, counting on) 	Uses strategies for sums and differences with 2-digit numbers (e.g., decomposing, compatible, compensation, partial sums, counting on)	Multiplies a 2-digit number by a 1-digit number with regrouping Multiplies a 3- or 4-digit number by a 1-digit number
Subtracts 2- and/or 3-digit numbers with no regrouping	Subtracts a 2-digit number from a 3-digit number with a single	Multiplies a 3-01 4-digit number by a 1-digit number Multiplies multiple 1-digit numbers
Subtracts 3- or 4-digit numbers with regrouping	regrouping	Multiplies multiple 1-digit numbers Multiplies a 2-digit number by a 2-digit number with regrouping
Performs mental subtraction with numbers under 1000	Subtracts 3- or 4-digit numbers with regrouping	Multiplies a 3-digit number by a 2-digit number with regrouping Multiplies a 3-digit number by a 2-digit number with regrouping
	Performs mental subtraction with numbers under 1000	r inighted a degree humber by a zeulgit humber with regrouping

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Explanatory Notes

* At the range mid-point, this is the probability students would correctly answer items measuring these concepts and skills. Both data from test items and review by NWEA curriculum specialists are used to place Learning Continuum statements into appropriate RIT ranges. Blank cells indicate data are limited or unavailable for this range or document version.



Mathematics

Goal: Number and Operations

RIT Score Range: 191 - 200 Statements Last Updated: Sep 23, 2013

Skills and Concepts to Enhance (73% Probability*) 181 - 190	Skills and Concepts to Develop (50% Probability*) 191 - 200	Skills and Concepts to Introduce (27% Probability*) 201 - 210
Number and Operations in Base Ten	Number and Operations in Base Ten	Number and Operations in Base Ten
Multiplies a 2-digit number by a 1-digit number with regrouping	Subtracts multiple-digit numbers with no regrouping	Multiplies a 2- or 3-digit number by multiples of 10 or 100
Multiplies a 2-digit number by a 2-digit number with no regrouping	Multiplies a 2- or 3-digit number by a 1-digit number with no regrouping	Multiplies a 3-digit number by a 3-digit number
Adds decimals to the hundredths place (same number of digits)	Multiplies a 2-digit number by a 1-digit number with regrouping	Divides a 2-digit number by a 1-digit number with no remainder
 Identifies the number that is 1 less than a given number Compares whole numbers through 9999 	Multiplies a 3- or 4-digit number by a 1-digit number Multiplies a 2-digit number by a 2-digit number with no regrouping	Divides a 2-digit number or a 3-digit number by a 1-digit number with a remainder
- Compares whole numbers through 9999	Performs mental computation with multiplication	Divides a 3-digit number by a 1-digit number with no remainder
	Divides a 2-digit number by a 1-digit number with no remainder	Divides a 4-digit number by a 1-digit number with no remainder
	Adds decimals to the hundredths place (same number of digits)	Divides a 3-digit number by a multiple of 10
	Adds decimals to the hundredths place (same humber of digits) Adds decimals to the hundredths place in vertical format (not same	Divides a 4-digit number by a 2-digit number
	number of digits)	Adds decimals to the thousandths place horizontally with and without regrouping
	Adds decimals to the thousandths place vertically with and without regrouping	Subtracts decimals to the hundredths place (same number of digits)
	Subtracts decimals to the hundredths place (same number of digits)	with regrouping
	with regrouping	Multiplies a decimal by whole number
	Multiplies a decimal by whole number	Divides decimal by a whole number
Number and Operations - Fractions	Number and Operations - Fractions	Number and Operations - Fractions
Represents 3/4 with a diagram or model	Uses models to add and subtract fractions and connect the actions to algorithms	Adds fractions with like denominators without reducing
• Identifies 1/2 from a region or set	Subtracts fractions with like denominators without reducing	Adds whole numbers and fractions
Identifies one-half from a region or set	Solves real-world 1-step problems involving addition and subtraction of	 Uses models to add and subtract fractions and connect the actions to algorithms
• Identifies 1/4 from a region or set	fractions with like denominators	Subtracts fractions with like denominators without reducing
 Identifies 2/4, 3/4, or 4/4 from a region or set Identifies 2/3 or 3/3 from a region or set 	Solves real-world 1-step problems involving multiplication or division of a whole number by a fraction	Subtracts mixed fractions with like denominators with no regrouping
Identifies tenths from a region or set	Represents 1/3 with a diagram or model	Solves real-world 1-step problems involving addition and subtraction of fractions with like denominators
 Identifies eighths from a region or set Identifies a fraction (denominators other than 2, 3, 4, 8, 10) from a 	Represents fractions with denominators other than 2, 3, 4 with a diagram or model	Multiplies a fraction by a fraction without reducing to simplest form (simple problem)
region or set	Identifies 1/4 from a region or set	Identifies halves of a region using nonadjacent parts
	Identifies 1/3 from a region or set	Identifies equivalent fractions using visual representations
	• Identifies 2/3 or 3/3 from a region or set	• Expresses 1 in many different ways (e.g., 3/3, 4/4)
	Identifies tenths from a region or set	• Converts a basic fractional numeral to lowest terms (e.g., halves,
	• Identifies a fraction (denominators other than 2, 3, 4, 8, 10) from a	thirds, quarters)
	region or set Identifies equivalent fractions using visual representations	Writes mixed numbers as improper fractions and improper fractions as mixed numbers
	Matches numeric and visual representation of equivalent fractions	Compares fractions (e.g., common denominator, 1 in the numerator,
	Explains different interpretations of fractions (e.g., parts of a whole,	denominator is 2, 3, 4, 6, 8, 10)
	parts of a set, and division of whole numbers by whole numbers)	Orders fractions on a number line
	Writes the missing number in a proportion using basic facts	Explains different interpretations of fractions (e.g., parts of a whole, parts of a set, and division of whole numbers by whole numbers)
		<u> </u>

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Explanatory Notes

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8



Mathematics

Goal: Number and Operations

RIT Score Range: 191 - 200 Statements Last Updated: Sep 23, 2013

Skills and Concepts to Enhance (73% Probability*) 181 - 190	Skills and Concepts to Develop (50% Probability*) 191 - 200	Skills and Concepts to Introduce (27% Probability*) 201 - 210
Number and Operations - Fractions	Number and Operations - Fractions	Number and Operations - Fractions
		Expresses the equivalent form of a fraction, decimal, and/or percent (simple fraction)
		Writes the missing number in a proportion using basic facts
New Vocabulary: closest, digit, hundreds, million, nearest, one, ten	New Vocabulary: billion, hundred million, quintillion, standard numeral,	New Vocabulary: biggest, expanded numeral
thousand	trillion	New Signs and Symbols: ¢ cent sign
New Signs and Symbols: { } set notation, \$ dollar sign, - subtraction	New Signs and Symbols: °F degrees Fahrenheit, > greater than, < less than, long division symbol, R remainder	

Explanatory Notes

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Mathematics

Goal: Number and Operations

RIT Score Range: 201 - 210 Statements Last Updated: Sep 23, 2013

Skills and Concepts to Enhance (73% Probability*) 191 - 200	Skills and Concepts to Develop (50% Probability*) 201 - 210	Skills and Concepts to Introduce (27% Probability*) 211 - 220
Understand Place Value, Counting, and Cardinality	Understand Place Value, Counting, and Cardinality	Understand Place Value, Counting, and Cardinality
 Identifies whole numbers over 999 using base-10 blocks Identifies the numeral and written name for whole numbers with a zero between digits to the ten thousands place Identifies the numeral and written name for whole numbers 10,000 to 100,000 Identifies the numeral and written name for whole numbers over 100,000 Compares whole numbers to 100, using the symbols for 'less than', 'equal to', or 'greater than' (<, =, >) Compares whole numbers through the thousands using the symbols <, >, or = Rounds 2- and 3- digit whole numbers to the nearest ten Rounds 3-digit whole numbers to the nearest hundred Identifies whole numbers under 100 given place value terms (e.g., 3 tens and 4 ones = 34) Identifies the place value and value of each digit in whole numbers through the thousands 	 Understand Place Value, Counting, and Cardinality Identifies whole numbers over 999 using base-10 blocks Identifies the numeral and written name for whole numbers with a zero between digits to the ten thousands place Identifies the numeral and written name for whole numbers over 100,000 Compares whole numbers through the billions using the symbols <, >, or = Orders whole numbers a million or greater using < or > symbols Rounds 4-, 5-, and 6-digit whole numbers to the nearest ten Rounds 4-, 5-, and 6-digit whole numbers to the nearest hundred Rounds 4-, 5-, and 6-digit whole numbers to the nearest thousand Rounds whole numbers to the nearest hundred thousand Rounds wholes numbers to the nearest billion Explains the rules for rounding Writes equivalent forms of whole numbers using place value (e.g., 54 = 4 tens and 14 ones) Identifies the place value and value of each digit in whole numbers 	Predicts the relative size of the answer when computing with 10's, 100's, 1000's Rounds 4-, 5-, and 6-digit whole numbers to the nearest hundred Rounds 4-, 5-, and 6-digit whole numbers to the nearest thousand Rounds 4-, 5-, and 6-digit whole numbers to the nearest ten thousand Rounds wholes numbers to the nearest billion Writes whole numbers in standard and expanded form through the hundred thousands Represents a decimal to the hundredths place (e.g., three hundredths = 0.03) Compares and orders decimals past the thousandths place Rounds decimals to the nearest whole number Rounds decimals to the nearest tenth Applies base ten place value concepts to solve problems using decimals
 Identifies the place value and value of each digit in whole numbers through the hundred thousands Writes whole numbers in standard and expanded form through the hundreds Writes whole numbers in standard and expanded form through the thousands 	through the billions Writes whole numbers in standard and expanded form through the hundred thousands Applies base ten place value concepts with whole numbers to solve problems Writes whole numbers using place value terms and vice versa Rounds decimals to the nearest whole number	
Number and Operations in Base Ten	Number and Operations in Base Ten	Number and Operations in Base Ten
Uses rounding to estimate answers to addition and subtraction problems (whole numbers only) Adds two 3- and/or 4-digit numbers, with regrouping, with sums over 1000 Adds multiple-digit numbers, with regrouping, with sums over 1000 Adds multiple-digit numbers with sums under 1000 Subtracts 1-digit number from a 2-digit number with regrouping Subtracts a 2-digit number from a 2-digit number, with regrouping Uses strategies for sums and differences with 2-digit numbers (e.g., decomposing, compatible, compensation, partial sums, counting on) Subtracts a 2-digit number from a 3-digit number with a single regrouping Subtracts 3- or 4-digit numbers with regrouping Performs mental subtraction with numbers under 1000	Uses rounding to estimate answers to addition and subtraction problems (whole numbers only) Adds multiple-digit numbers, with regrouping, with sums over 1000 Adds multiple-digit numbers with sums under 1000 Performs mental computation with more than 4 addends Subtracts 3- or 4-digit numbers with regrouping Subtracts numbers with 5 digits or more with regrouping Instantly recalls basic multiplication and division facts in a table Multiplies a 2-digit number by a 1-digit number with regrouping Multiplies multiple 1-digit numbers Multiplies a 2-digit number by a 2-digit number with regrouping Multiplies a 3-digit number by a 2-digit number with regrouping Performs mental computation with multiplication	Uses rounding to estimate answers to difficult multiplication and division problems (whole numbers only) Subtracts numbers with 5 digits or more with regrouping Instantly recalls basic multiplication and division facts in a table Multiplies a 2-digit number by a 2-digit number with regrouping Multiplies a 3-digit number by a 2-digit number with regrouping Performs mental computation with multiplication Uses multiplication strategies to explain computation (e.g., doubles, 9-patterns, decomposing, partial products) Multiplies a 3-digit number by a 3-digit number Multiplies a 4- or more digit number by multiples of 100 or 1000 Multiplies multiple-digit numbers Divides a 2-digit number or a 3-digit number by a 1-digit number with a remainder

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Explanatory Notes

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Mathematics

Goal: Number and Operations

RIT Score Range: 201 - 210 Statements Last Updated: Sep 23, 2013

Skills and Concepts to Enhance (73% Probability*) 191 - 200	Skills and Concepts to Develop (50% Probability*) 201 - 210	Skills and Concepts to Introduce (27% Probability*) 211 - 220
Number and Operations in Base Ten	Number and Operations in Base Ten	Number and Operations in Base Ten
 Subtracts multiple-digit numbers with no regrouping 	Multiplies a 2- or 3-digit number by multiples of 10 or 100	Divides a 4-digit number by a 1-digit number with no remainder
• Multiplies a 2- or 3-digit number by a 1-digit number with no regrouping	Multiplies a 3-digit number by a 3-digit number	Divides a 3-digit number by a 2-digit number
 Multiplies a 2-digit number by a 1-digit number with regrouping 	Divides a 2-digit number by a 1-digit number with no remainder	Divides a 4-digit number by a 2-digit number
 Multiplies a 3- or 4-digit number by a 1-digit number Multiplies a 2-digit number by a 2-digit number with no regrouping 	Divides a 2-digit number or a 3-digit number by a 1-digit number with a remainder	 Adds decimals to the hundredths place in horizontal format (not same number of digits)
Performs mental computation with multiplication	Divides a 3-digit number by a 1-digit number with no remainder	Adds decimals to the thousandths place horizontally with and without regrouping
 Divides a 2-digit number by a 1-digit number with no remainder 	Divides a 4-digit number by a 1-digit number with no remainder	Adds decimals through the hundred-thousandths place
 Adds decimals to the hundredths place (same number of digits) 	Divides a 3-digit number by a multiple of 10	Multiplies a decimal by a decimal, vertical form (factors to tenths or
 Adds decimals to the hundredths place in vertical format (not same number of digits) 	Divides a 4-digit number by a 2-digit number Adds decimals to the thousandths place horizontally with and without	hundredths)
Adds decimals to the thousandths place vertically with and without	regrouping	Multiplies a decimal by a decimal (factors to hundredths)
regrouping • Subtracts decimals to the hundredths place (same number of digits)	Subtracts decimals to the hundredths place (same number of digits) with regrouping	Divides decimal by a whole number
with regrouping	Multiplies a decimal by whole number	
Multiplies a decimal by whole number	Divides decimal by a whole number	
Number and Operations - Fractions	Number and Operations - Fractions	Number and Operations - Fractions
• Uses models to add and subtract fractions and connect the actions to	Adds fractions with like denominators without reducing	Adds fractions with like denominators without reducing
algorithms	Adds whole numbers and fractions	Adds fractions with like denominators with reducing or converting to a
 Subtracts fractions with like denominators without reducing 	Uses models to add and subtract fractions and connect the actions to	mixed fraction
Solves real-world 1-step problems involving addition and subtraction of fractions with like denominators.	algorithms	Adds fractions with unlike denominators without reducing
fractions with like denominators	Subtracts fractions with like denominators without reducing	Adds simple mixed fractions with unlike denominators (e.g., halves,
 Solves real-world 1-step problems involving multiplication or division of a whole number by a fraction 	Subtracts mixed fractions with like denominators with no regrouping	thirds, fourths, eighths) • Subtracts simple fractions with unlike denominators without reducing
Represents 1/3 with a diagram or model	Solves real-world 1-step problems involving addition and subtraction of fractions with like denominators	(e.g., halves, quarters, thirds, eighths)
Represents fractions with denominators other than 2, 3, 4 with a	Multiplies a fraction by a fraction without reducing to simplest form	Subtracts fractions with unlike denominators without reducing
diagram or model	(simple problem)	Subtracts mixed fractions with like denominators with no regrouping
• Identifies 1/4 from a region or set	Identifies halves of a region using nonadjacent parts	Subtracts mixed fractions with unlike denominators with no regrouping
• Identifies 1/3 from a region or set	Identifies equivalent fractions using visual representations	Solves real-world problems involving addition and subtraction of
• Identifies 2/3 or 3/3 from a region or set	• Expresses 1 in many different ways (e.g., 3/3, 4/4)	fractions where converting one denominator is necessary
Identifies tenths from a region or set	Converts a basic fractional numeral to lowest terms (e.g., halves,	 Uses models to multiply and divide fractions and connect the actions to algorithms
 Identifies a fraction (denominators other than 2, 3, 4, 8, 10) from a region or set 	thirds, quarters) • Writes mixed numbers as improper fractions and improper fractions as	Multiplies a fraction by a fraction where reducing to simplest form is
 Identifies equivalent fractions using visual representations 	mixed numbers	necessary
Matches numeric and visual representation of equivalent fractions	• Compares fractions (e.g., common denominator, 1 in the numerator,	Multiplies a fraction by a whole number Solves 1 step real world problems involving fractions with
 Explains different interpretations of fractions (e.g., parts of a whole, parts of a set, and division of whole numbers by whole numbers) 	denominator is 2, 3, 4, 6, 8, 10) • Orders fractions on a number line	 Solves 1-step real-world problems involving fractions with multiplication and division
Writes the missing number in a proportion using basic facts	Explains different interpretations of fractions (e.g., parts of a whole,	Solves 1-step problems involving proportions
	parts of a set, and division of whole numbers by whole numbers)	Identifies equivalent fractions using visual representations
	Writes a terminating decimal as a fraction or mixed number	Identifies a fractions in lowest terms from a region or set

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Explanatory Notes

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Mathematics RIT Score Range: 201 - 210 Statements Last Updated: Sep 23, 2013 Goal: Number and Operations

Skills and Concepts to Enhance (73% Probability*) 191 - 200	Skills and Concepts to Develop (50% Probability*) 201 - 210	Skills and Concepts to Introduce (27% Probability*) 211 - 220
Number and Operations - Fractions	Number and Operations - Fractions	Number and Operations - Fractions
	Expresses the equivalent form of a fraction, decimal, and/or percent (simple fraction) Writes the missing number in a proportion using basic facts	Identifies eighths, reduced to lowest terms, from a region or set Determines simple equivalent fractions using multiples Converts fractions to lowest terms Writes mixed numbers as improper fractions and improper fractions as mixed numbers Compares fractions on a number line Compares fractions greater than or less than a given fraction using visual representations Compares fractions and mixed numbers Compares fractions and mixed numbers Compares fractions and mixed numbers using symbols Orders fractions on a number line Explains different interpretations of fractions (e.g., parts of a whole, parts of a set, and division of whole numbers by whole numbers) Expresses a simple fraction as a decimal Writes a fraction or mixed number as a decimal when the denominator is a multiple of 10 Expresses the equivalent form of a fraction, decimal, and/or percent (simple fraction)
New Vocabulary: billion, hundred million, quintillion, standard numeral, trillion	New Vocabulary: biggest, expanded numeral New Signs and Symbols: ¢ cent sign	New Vocabulary: lowest term, lowest terms, reduce, triple New Signs and Symbols: ≠ not equal to
New Signs and Symbols: °F degrees Fahrenheit, > greater than, < less than, long division symbol, R remainder	- Ivew Signs and Symbols. & Cent Sign	New Signs and Symbolis. # Hot equal to

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Explanatory Notes

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Mathematics

Goal: Number and Operations

RIT Score Range: 211 - 220 Statements Last Updated: Sep 23, 2013

Skills and Concepts to Enhance (73% Probability*) 201 - 210	Skills and Concepts to Develop (50% Probability*) 211 - 220	Skills and Concepts to Introduce (27% Probability*) 221 - 230
Understand Place Value, Counting, and Cardinality	Understand Place Value, Counting, and Cardinality	Understand Place Value, Counting, and Cardinality
 Identifies whole numbers over 999 using base-10 blocks 	Predicts the relative size of the answer when computing with 10's,	Multiplies a decimal by 10, 100, 1000
• Identifies the numeral and written name for whole numbers with a zero	100's, 1000's	 Divides a decimal by 10, 100, 1000
between digits to the ten thousands place	Rounds 4-, 5-, and 6-digit whole numbers to the nearest hundred	Determines the relative magnitude of whole numbers
Identifies the numeral and written name for whole numbers over	 Rounds 4-, 5-, and 6-digit whole numbers to the nearest thousand 	Rounds whole numbers to the nearest million
100,000	 Rounds 4-, 5-, and 6-digit whole numbers to the nearest ten thousand 	Writes equivalent forms of whole numbers using place value (numbers
 Compares whole numbers through the billions using the symbols <, >, or = 	Rounds wholes numbers to the nearest billion	100 or greater) (e.g., 253 = 2 hundreds, 5 tens, and 3 ones)
 Orders whole numbers a million or greater using < or > symbols 	Writes whole numbers in standard and expanded form through the hundred thousands	Writes whole numbers in standard and exponential form
 Rounds 4-, 5-, and 6-digit whole numbers to the nearest ten 		• Represents a decimal to thousandths place (e.g., three thousandths =
 Rounds 4-, 5-, and 6-digit whole numbers to the nearest hundred 	 Represents a decimal to the hundredths place (e.g., three hundredths = 0.03) 	0.003)
• Rounds 4-, 5-, and 6-digit whole numbers to the nearest thousand	Compares and orders decimals past the thousandths place	 Represents a decimal to the hundred thousandths place - (e.g., three hundred thousandths = 0. 00003)
 Rounds whole numbers to the nearest hundred thousand 	Rounds decimals to the nearest whole number	Compares and orders decimals to the hundredths place (not same
 Rounds wholes numbers to the nearest billion 	Rounds decimals to the nearest tenth	number of digits after decimal)
• Explains the rules for rounding	Applies base ten place value concepts to solve problems using decimals	 Compares and orders decimals to the thousandths place (not same number of digits after decimal)
 Writes equivalent forms of whole numbers using place value (e.g., 54 = 4 tens and 14 ones) 		Compares and orders decimals past the thousandths place
Identifies the place value and value of each digit in whole numbers		Rounds decimals to the nearest hundredth
through the billions		Rounds decimals to nearest thousandth
 Writes whole numbers in standard and expanded form through the hundred thousands 		 Identifies the place value and value of each digit to the hundredths and thousandths
 Applies base ten place value concepts with whole numbers to solve problems 		 Applies base ten place value concepts to solve problems using decimals
Writes whole numbers using place value terms and vice versa		
Rounds decimals to the nearest whole number		
Number and Operations in Base Ten	Number and Operations in Base Ten	Number and Operations in Base Ten
Uses rounding to estimate answers to addition and subtraction	Uses rounding to estimate answers to difficult multiplication and	Multiplies multiple-digit numbers
problems (whole numbers only)	division problems (whole numbers only)	Divides a 4-digit number by a 2-digit number
 Adds multiple-digit numbers, with regrouping, with sums over 1000 	Subtracts numbers with 5 digits or more with regrouping	Adds decimals to the hundredths place in horizontal format (not same)
 Adds multiple-digit numbers with sums under 1000 	Instantly recalls basic multiplication and division facts in a table	number of digits)
 Performs mental computation with more than 4 addends 	Multiplies a 2-digit number by a 2-digit number with regrouping	Adds decimals through the hundred-thousandths place
 Subtracts 3- or 4-digit numbers with regrouping 	Multiplies a 3-digit number by a 2-digit number with regrouping	Subtracts decimals to the hundredths place (not same number of
 Subtracts numbers with 5 digits or more with regrouping 	Performs mental computation with multiplication	digits)
 Instantly recalls basic multiplication and division facts in a table 	Uses multiplication strategies to explain computation (e.g., doubles, 9-	Subtracts a decimal from a whole number, horizontally
 Multiplies a 2-digit number by a 1-digit number with regrouping 	patterns, decomposing, partial products)	Multiplies a decimal by a decimal, vertical form (factors to tenths or hundredths)
 Multiplies a 3- or 4-digit number by a 1-digit number 	Multiplies a 3-digit number by a 3-digit number	Multiplies a decimal by a decimal (factors to hundredths)
Multiplies multiple 1-digit numbers	Multiplies a 4- or more digit number by multiples of 100 or 1000	Multiplies a decimal by a decimal (factors to fluid eduts) Multiplies a decimal by a decimal (factors to thousandths)
 Multiplies a 2-digit number by a 2-digit number with regrouping 	Multiplies multiple-digit numbers	Divides a decimal by a decimal
Multiplies a 3-digit number by a 2-digit number with regroupingPerforms mental computation with multiplication	 Divides a 2-digit number or a 3-digit number by a 1-digit number with a remainder 	Divides a decimal by a decimal
Explanatory Notes		

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Explanatory Notes

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Mathematics

Goal: Number and Operations

RIT Score Range: 211 - 220 Statements Last Updated: Sep 23, 2013

Skills and Concepts to Enhance (73% Probability*) 201 - 210	Skills and Concepts to Develop (50% Probability*) 211 - 220	Skills and Concepts to Introduce (27% Probability*) 221 - 230
Number and Operations in Base Ten	Number and Operations in Base Ten	Number and Operations in Base Ten
 Multiplies a 2- or 3-digit number by multiples of 10 or 100 	Divides a 4-digit number by a 1-digit number with no remainder	
Multiplies a 3-digit number by a 3-digit number	Divides a 3-digit number by a 2-digit number	
Divides a 2-digit number by a 1-digit number with no remainder	Divides a 4-digit number by a 2-digit number	
Divides a 2-digit number or a 3-digit number by a 1-digit number with a remainder	Adds decimals to the hundredths place in horizontal format (not same number of digits)	
Divides a 3-digit number by a 1-digit number with no remainder Divides a 4-digit number by a 1-digit number with no remainder.	Adds decimals to the thousandths place horizontally with and without regrouping	
Divides a 4-digit number by a 1-digit number with no remainder Divides a 3 digit number by a multiple of 10.	Adds decimals through the hundred-thousandths place	
Divides a 3-digit number by a multiple of 10 Divides a 4-digit number by a Pulliple of 10 Output Divides a 3-digit number by a multiple of 10 Divides a 3-digit number by a multiple of 10 Divides a 3-digit number by a multiple of 10 Divides a 3-digit number by a multiple of 10 Divides a 3-digit number by a multiple of 10 Divides a 3-digit number by a multiple of 10 Divides a 3-digit number by a multiple of 10	Multiplies a decimal by a decimal, vertical form (factors to tenths or	
Divides a 4-digit number by a 2-digit number	hundredths)	
 Adds decimals to the thousandths place horizontally with and without regrouping 	Multiplies a decimal by a decimal (factors to hundredths)	
Subtracts decimals to the hundredths place (same number of digits) with regrouping	Divides decimal by a whole number	
Multiplies a decimal by whole number		
Divides decimal by a whole number		
Number and Operations - Fractions	Number and Operations - Fractions	Number and Operations - Fractions
Adds fractions with like denominators without reducing	Adds fractions with like denominators without reducing	Adds fractions with like denominators with reducing or converting to a
Adds whole numbers and fractions	Adds fractions with like denominators with reducing or converting to a	mixed fraction
Uses models to add and subtract fractions and connect the actions to	mixed fraction	Adds fractions with unlike denominators without reducing
algorithms	Adds fractions with unlike denominators without reducing	Adds fractions with unlike denominators with reducing or converting to a mixed fraction
Subtracts fractions with like denominators without reducing	Adds simple mixed fractions with unlike denominators (e.g., halves, thirds, fourths, eighths)	Adds simple mixed fractions with unlike denominators (e.g., halves,
Subtracts mixed fractions with like denominators with no regrouping Solves real world 1 step problems involving addition and subtraction of	Subtracts simple fractions with unlike denominators without reducing	thirds, fourths, eighths)
 Solves real-world 1-step problems involving addition and subtraction of fractions with like denominators 	(e.g., halves, quarters, thirds, eighths)	Adds mixed fractions where converting from improper fractions is
Multiplies a fraction by a fraction without reducing to simplest form	Subtracts fractions with unlike denominators without reducing	necessary Cubtracta fractions with like departmentary with reducing
(simple problem)	Subtracts mixed fractions with like denominators with no regrouping	Subtracts fractions with like denominators with reducing Subtracts fractions with unlike denominators with out radiusing
 Identifies halves of a region using nonadjacent parts 	Subtracts mixed fractions with unlike denominators with no regrouping	Subtracts fractions with unlike denominators without reducing
 Identifies equivalent fractions using visual representations 	Solves real-world problems involving addition and subtraction of	Subtracts fractions with unlike denominators with reducing
 Expresses 1 in many different ways (e.g., 3/3, 4/4) 	fractions where converting one denominator is necessary	• Subtracts mixed fractions with unlike denominators with no regrouping
 Converts a basic fractional numeral to lowest terms (e.g., halves, thirds, quarters) 	Uses models to multiply and divide fractions and connect the actions to algorithms	Subtracts whole numbers, fractions, and mixed fractions Subtracts whole numbers, fractions, and mixed fractions with
 Writes mixed numbers as improper fractions and improper fractions as mixed numbers 	Multiplies a fraction by a fraction where reducing to simplest form is necessary	regrouping Solves real-world problems involving addition and subtraction of
• Compares fractions (e.g., common denominator, 1 in the numerator,	Multiplies a fraction by a whole number	fractions where converting one denominator is necessary
denominator is 2, 3, 4, 6, 8, 10)	Solves 1-step real-world problems involving fractions with multiplication and division	Uses models to multiply and divide fractions and connect the actions to algorithms
Orders fractions on a number line	Solves 1-step problems involving proportions	Multiplies a fraction by a fraction without reducing to simplest form
 Explains different interpretations of fractions (e.g., parts of a whole, parts of a set, and division of whole numbers by whole numbers) 	Identifies equivalent fractions using visual representations	(complex problem)
Writes a terminating decimal as a fraction or mixed number	Identifies a fractions in lowest terms from a region or set	Multiplies a fraction by a fraction where reducing to simplest form is necessary

Generated 10/2/13, 9:40:10 AM

Explanatory Notes
* At the range mid-point, this is the probability students would correctly answer items measuring these concepts and skills. Both data from test items and review by NWEA curriculum specialists are used to place Learning Continuum statements into appropriate RIT ranges. Blank cells indicate data are limited or unavailable for this range or document version.



Mathematics RIT Score Range: 211 - 220 Statements Last Updated: Sep 23, 2013 Goal: Number and Operations

Skills and Concepts to Enhance (73% Probability*) 201 - 210	Skills and Concepts to Develop (50% Probability*) 211 - 220	Skills and Concepts to Introduce (27% Probability*) 221 - 230
Number and Operations - Fractions	Number and Operations - Fractions	Number and Operations - Fractions
• Expresses the equivalent form of a fraction, decimal, and/or percent	Identifies eighths, reduced to lowest terms, from a region or set	Multiplies a fraction by a whole number
(simple fraction)	Determines simple equivalent fractions using multiples	Multiplies mixed fractions
 Writes the missing number in a proportion using basic facts 	Converts fractions to lowest terms	Divides a mixed fraction by a fraction
	Writes mixed numbers as improper fractions and improper fractions as mixed numbers	Solves 1-step real-world problems involving fractions with multiplication and division
	Compares fractions on a number line	Solves 2- or more step real-world problems involving fractions with
	Compares fractions greater than or less than a given fraction using	multiplication and division
	visual representations	Solves problems involving fractions (e.g., multiple operations,
	Compares fractions and mixed numbers	conversions)
	Compares fractions and mixed numbers using symbols	Solves 1-step problems involving proportions
	Orders fractions on a number line	Identifies a fractions in lowest terms from a region or set
	• Explains different interpretations of fractions (e.g., parts of a whole,	Determines simple equivalent fractions using multiples
	parts of a set, and division of whole numbers by whole numbers)	Determines equivalent fractions using multiples
	Expresses a simple fraction as a decimal	Compares fractions (e.g., comparing numerators and denominators)
	Writes a fraction or mixed number as a decimal when the denominator is a multiple of 10	Uses alternative algorithms to explain the meaning of fraction
		Writes a decimal for a shaded region to the hundredths place
	Expresses the equivalent form of a fraction, decimal, and/or percent (simple fraction)	Writes a fraction or mixed number as a decimal when the denominator is a multiple of 10
New Vocabulary: biggest, expanded numeral	New Vocabulary: lowest term, lowest terms, reduce, triple	New Vocabulary: short, ten million
New Signs and Symbols: ¢ cent sign	New Signs and Symbols: ≠ not equal to	New Signs and Symbols: None

Generated 10/2/13, 9:40:10 AM



Mathematics

Goal: Number and Operations

RIT Score Range: 221 - 230 Statements Last Updated: Sep 23, 2013

Skills and Concepts to Enhance (73% Probability*) 211 - 220	Skills and Concepts to Develop (50% Probability*) 221 - 230	Skills and Concepts to Introduce (27% Probability*) 231 - 240
Understand Place Value, Counting, and Cardinality	Understand Place Value, Counting, and Cardinality	Understand Place Value, Counting, and Cardinality
Predicts the relative size of the answer when computing with 10's,	Multiplies a decimal by 10, 100, 1000	Divides numbers by powers of 10
100's, 1000's	• Divides a decimal by 10, 100, 1000	Multiplies a decimal by 10, 100, 1000
• Rounds 4-, 5-, and 6-digit whole numbers to the nearest hundred	Determines the relative magnitude of whole numbers	• Divides a decimal by 10, 100, 1000
• Rounds 4-, 5-, and 6-digit whole numbers to the nearest thousand	Rounds whole numbers to the nearest million	Determines the relative magnitude of whole numbers
• Rounds 4-, 5-, and 6-digit whole numbers to the nearest ten thousand	Writes equivalent forms of whole numbers using place value (numbers)	Writes whole numbers in standard and exponential form
Rounds wholes numbers to the nearest billion	100 or greater) (e.g., 253 = 2 hundreds, 5 tens, and 3 ones)	Rounds decimals to the nearest hundredth
Writes whole numbers in standard and expanded form through the	Writes whole numbers in standard and exponential form	
hundred thousands • Represents a decimal to the hundredths place (e.g., three hundredths	• Represents a decimal to thousandths place (e.g., three thousandths = 0.003)	
= 0.03)Compares and orders decimals past the thousandths place	Represents a decimal to the hundred thousandths place - (e.g., three hundred thousandths = 0. 00003)	
Rounds decimals to the nearest whole number Rounds decimals to the nearest tenth	Compares and orders decimals to the hundredths place (not same number of digits after decimal)	
Applies base ten place value concepts to solve problems using decimals	Compares and orders decimals to the thousandths place (not same number of digits after decimal)	
decimais	Compares and orders decimals past the thousandths place	
	Rounds decimals to the nearest hundredth	
	Rounds decimals to nearest thousandth	
	Identifies the place value and value of each digit to the hundredths and thousandths	
	Applies base ten place value concepts to solve problems using decimals	
Number and Operations in Base Ten	Number and Operations in Base Ten	Number and Operations in Base Ten
Uses rounding to estimate answers to difficult multiplication and	Multiplies multiple-digit numbers	Subtracts a decimal from a whole number, horizontally
division problems (whole numbers only)	Divides a 4-digit number by a 2-digit number	Divides a whole number by a decimal
 Subtracts numbers with 5 digits or more with regrouping Instantly recalls basic multiplication and division facts in a table 	Adds decimals to the hundredths place in horizontal format (not same number of digits)	Divides a decimal by a decimal
Multiplies a 2-digit number by a 2-digit number with regrouping	Adds decimals through the hundred-thousandths place	
Multiplies a 3-digit number by a 2-digit number with regrouping Performs mental computation with multiplication	Subtracts decimals to the hundredths place (not same number of digits)	
Uses multiplication strategies to explain computation (e.g., doubles, 9-	Subtracts a decimal from a whole number, horizontally	
patterns, decomposing, partial products)	Multiplies a decimal by a decimal, vertical form (factors to tenths or	
Multiplies a 3-digit number by a 3-digit number	hundredths)	
Multiplies a 4- or more digit number by multiples of 100 or 1000	Multiplies a decimal by a decimal (factors to hundredths)	
Multiplies multiple-digit numbers	• Multiplies a decimal by a decimal (factors to thousandths)	
Divides a 2-digit number or a 3-digit number by a 1-digit number with a remainder	Divides a decimal by a decimal	
Divides a 4-digit number by a 1-digit number with no remainder		
Divides a 3-digit number by a 2-digit number		

Generated 10/2/13, 9:40:10 AM



Mathematics

Goal: Number and Operations

RIT Score Range: 221 - 230 Statements Last Updated: Sep 23, 2013

Skills and Concepts to Enhance (73% Probability*) 211 - 220	Skills and Concepts to Develop (50% Probability*) 221 - 230	Skills and Concepts to Introduce (27% Probability*) 231 - 240
Number and Operations in Base Ten	Number and Operations in Base Ten	Number and Operations in Base Ten
Divides a 4-digit number by a 2-digit number		
 Adds decimals to the hundredths place in horizontal format (not same number of digits) 		
 Adds decimals to the thousandths place horizontally with and without regrouping 		
 Adds decimals through the hundred-thousandths place 		
 Multiplies a decimal by a decimal, vertical form (factors to tenths or hundredths) 		
 Multiplies a decimal by a decimal (factors to hundredths) 		
Divides decimal by a whole number		
Number and Operations - Fractions	Number and Operations - Fractions	Number and Operations - Fractions
Adds fractions with like denominators without reducing	Adds fractions with like denominators with reducing or converting to a	Adds fractions with unlike denominators with reducing or converting to
Adds fractions with like denominators with reducing or converting to a	mixed fraction	a mixed fraction
mixed fraction	Adds fractions with unlike denominators without reducing	Adds simple mixed fractions with unlike denominators (e.g., halves,
 Adds fractions with unlike denominators without reducing 	Adds fractions with unlike denominators with reducing or converting to	thirds, fourths, eighths)
 Adds simple mixed fractions with unlike denominators (e.g., halves, thirds, fourths, eighths) 	a mixed fraction Adds simple mixed fractions with unlike denominators (e.g., halves,	Adds mixed fractions where converting from improper fractions is necessary
Subtracts simple fractions with unlike denominators without reducing	thirds, fourths, eighths)	Subtracts whole numbers, fractions, and mixed fractions
(e.g., halves, quarters, thirds, eighths)	Adds mixed fractions where converting from improper fractions is necessary	Subtracts whole numbers, fractions, and mixed fractions with regrouping
Subtracts fractions with unlike denominators without reducing	Subtracts fractions with like denominators with reducing	Solves real-world problems involving addition and subtraction of
Subtracts mixed fractions with like denominators with no regrouping	Subtracts fractions with unlike denominators without reducing	fractions where converting both denominators is necessary
Subtracts mixed fractions with unlike denominators with no regrouping	Subtracts fractions with unlike denominators with reducing	Uses models to multiply and divide fractions and connect the actions
Solves real-world problems involving addition and subtraction of fractions where converting one denominator is necessary	Subtracts mixed fractions with unlike denominators with no regrouping	to algorithms
Uses models to multiply and divide fractions and connect the actions to	Subtracts whole numbers, fractions, and mixed fractions	Multiplies mixed fractions
algorithms	Subtracts whole numbers, fractions, and mixed fractions with	 Uses models to multiply and divide fractions and mixed fractions and connect the actions to algorithms
Multiplies a fraction by a fraction where reducing to simplest form is	regrouping	Divides a fraction by a whole number
necessary	Solves real-world problems involving addition and subtraction of	Divides a maction by a whole number Divides a whole number by a fraction
Multiplies a fraction by a whole number	fractions where converting one denominator is necessary	Divides a whole humber by a fraction Divides a mixed fraction by a fraction
Solves 1-step real-world problems involving fractions with multiplication and division	Uses models to multiply and divide fractions and connect the actions to algorithms	Solves 2- or more step real-world problems involving fractions with
Solves 1-step problems involving proportions	Multiplies a fraction by a fraction without reducing to simplest form	multiplication and division
Identifies equivalent fractions using visual representations	(complex problem)	Solves problems involving fractions (e.g., multiple operations,
Identifies a fractions in lowest terms from a region or set	Multiplies a fraction by a fraction where reducing to simplest form is	conversions)
Identifies eighths, reduced to lowest terms, from a region or set	necessary	Compares fractions (e.g., comparing numerators and denominators)
Determines simple equivalent fractions using multiples	Multiplies a fraction by a whole number	Writes a fraction as a decimal and vice versa
Converts fractions to lowest terms	Multiplies mixed fractions	Compares and orders decimal and fractional coordinates on a number
Writes mixed numbers as improper fractions and improper fractions as	Divides a mixed fraction by a fraction	line
mixed numbers	Solves 1-step real-world problems involving fractions with multiplication and division	

Generated 10/2/13, 9:40:10 AM



Mathematics

Goal: Number and Operations

RIT Score Range: 221 - 230 Statements Last Updated: Sep 23, 2013

Skills and Concepts to Enhance (73% Probability*) 211 - 220	Skills and Concepts to Develop (50% Probability*) 221 - 230	Skills and Concepts to Introduce (27% Probability*) 231 - 240
Number and Operations - Fractions	Number and Operations - Fractions	Number and Operations - Fractions
Compares fractions on a number line	Solves 2- or more step real-world problems involving fractions with	
Compares fractions greater than or less than a given fraction using	multiplication and division	
visual representations	Solves problems involving fractions (e.g., multiple operations,	
Compares fractions and mixed numbers	conversions)	
Compares fractions and mixed numbers using symbols	Solves 1-step problems involving proportions	
Orders fractions on a number line	Identifies a fractions in lowest terms from a region or set	
 Explains different interpretations of fractions (e.g., parts of a whole, 	Determines simple equivalent fractions using multiples	
parts of a set, and division of whole numbers by whole numbers)	Determines equivalent fractions using multiples	
Expresses a simple fraction as a decimal	Compares fractions (e.g., comparing numerators and denominators)	
Writes a fraction or mixed number as a decimal when the denominator	Uses alternative algorithms to explain the meaning of fraction	
is a multiple of 10	Writes a decimal for a shaded region to the hundredths place	
• Expresses the equivalent form of a fraction, decimal, and/or percent (simple fraction)	Writes a fraction or mixed number as a decimal when the denominator is a multiple of 10	
New Vocabulary: lowest term, lowest terms, reduce, triple	New Vocabulary: short, ten million	New Vocabulary: None
lew Signs and Symbols: ≠ not equal to	New Signs and Symbols: None	New Signs and Symbols: ÷ division

Generated 10/2/13, 9:40:10 AM



Mathematics

Goal: Number and Operations

RIT Score Range: 231 - 240 Statements Last Updated: Sep 23, 2013

Skills and Concepts to Enhance (73% Probability*) 221 - 230	Skills and Concepts to Develop (50% Probability*) 231 - 240	Skills and Concepts to Introduce (27% Probability*) > 240
Understand Place Value, Counting, and Cardinality	Understand Place Value, Counting, and Cardinality	Understand Place Value, Counting, and Cardinality
Multiplies a decimal by 10, 100, 1000	Divides numbers by powers of 10	
• Divides a decimal by 10, 100, 1000	Multiplies a decimal by 10, 100, 1000	
Determines the relative magnitude of whole numbers	Divides a decimal by 10, 100, 1000	
Rounds whole numbers to the nearest million	Determines the relative magnitude of whole numbers	
• Writes equivalent forms of whole numbers using place value (numbers 100 or greater) (e.g., 253 = 2 hundreds, 5 tens, and 3 ones)	Writes whole numbers in standard and exponential form Rounds decimals to the nearest hundredth	
 Writes whole numbers in standard and exponential form 		
\bullet Represents a decimal to thousandths place (e.g., three thousandths = 0.003)		
\bullet Represents a decimal to the hundred thousandths place - (e.g., three hundred thousandths = 0. 00003)		
 Compares and orders decimals to the hundredths place (not same number of digits after decimal) 		
 Compares and orders decimals to the thousandths place (not same number of digits after decimal) 		
· Compares and orders decimals past the thousandths place		
 Rounds decimals to the nearest hundredth 		
 Rounds decimals to nearest thousandth 		
 Identifies the place value and value of each digit to the hundredths and thousandths 		
 Applies base ten place value concepts to solve problems using decimals 		
Number and Operations in Base Ten	Number and Operations in Base Ten	Number and Operations in Base Ten
Multiplies multiple-digit numbers	Subtracts a decimal from a whole number, horizontally	
Divides a 4-digit number by a 2-digit number	Divides a whole number by a decimal	
 Adds decimals to the hundredths place in horizontal format (not same number of digits) 	Divides a decimal by a decimal	
 Adds decimals through the hundred-thousandths place 		
• Subtracts decimals to the hundredths place (not same number of digits)		
 Subtracts a decimal from a whole number, horizontally 		
 Multiplies a decimal by a decimal, vertical form (factors to tenths or hundredths) 		
 Multiplies a decimal by a decimal (factors to hundredths) 		
 Multiplies a decimal by a decimal (factors to thousandths) 		
Divides a decimal by a decimal		
Number and Operations - Fractions	Number and Operations - Fractions	Number and Operations - Fractions
Adds fractions with like denominators with reducing or converting to a	Adds fractions with unlike denominators with reducing or converting to a mixed fraction	Solves open sentences with fractions
mixed fraction	a mixed fraction	 Identifies the least common multiple of whole numbers

Generated 10/2/13, 9:40:10 AM



Mathematics

Goal: Number and Operations

RIT Score Range: 231 - 240 Statements Last Updated: Sep 23, 2013

Skills and Concepts to Enhance (73% Probability*) 221 - 230	Skills and Concepts to Develop (50% Probability*) 231 - 240	Skills and Concepts to Introduce (27% Probability*) > 240
Number and Operations - Fractions	Number and Operations - Fractions	Number and Operations - Fractions
 Adds fractions with unlike denominators with reducing or converting to a mixed fraction 	 Adds simple mixed fractions with unlike denominators (e.g., halves, thirds, fourths, eighths) 	
 Adds simple mixed fractions with unlike denominators (e.g., halves, thirds, fourths, eighths) 	 Adds mixed fractions where converting from improper fractions is necessary 	
 Adds mixed fractions where converting from improper fractions is necessary 	Subtracts whole numbers, fractions, and mixed fractions Subtracts whole numbers, fractions, and mixed fractions with	
Subtracts fractions with like denominators with reducing	regrouping	
Subtracts fractions with unlike denominators without reducing	Solves real-world problems involving addition and subtraction of	
 Subtracts fractions with unlike denominators with reducing 	fractions where converting both denominators is necessary	
Subtracts mixed fractions with unlike denominators with no regrouping	Uses models to multiply and divide fractions and connect the actions to elegations.	
 Subtracts whole numbers, fractions, and mixed fractions 	to algorithms • Multiplies mixed fractions	
 Subtracts whole numbers, fractions, and mixed fractions with regrouping 	Uses models to multiply and divide fractions and mixed fractions and	
Solves real-world problems involving addition and subtraction of fractions where converting one denominator is necessary	connect the actions to algorithms • Divides a fraction by a whole number	
Uses models to multiply and divide fractions and connect the actions to	Divides a whole number by a fraction	
algorithms	Divides a mixed fraction by a fraction	
 Multiplies a fraction by a fraction without reducing to simplest form (complex problem) 	 Solves 2- or more step real-world problems involving fractions with multiplication and division 	
 Multiplies a fraction by a fraction where reducing to simplest form is necessary 	 Solves problems involving fractions (e.g., multiple operations, conversions) 	
 Multiplies a fraction by a whole number 	Compares fractions (e.g., comparing numerators and denominators)	
Multiplies mixed fractions	Writes a fraction as a decimal and vice versa	
Divides a mixed fraction by a fraction	Compares and orders decimal and fractional coordinates on a number	
 Solves 1-step real-world problems involving fractions with multiplication and division 	line	
 Solves 2- or more step real-world problems involving fractions with multiplication and division 		
 Solves problems involving fractions (e.g., multiple operations, conversions) 		
 Solves 1-step problems involving proportions 		
· Identifies a fractions in lowest terms from a region or set		
 Determines simple equivalent fractions using multiples 		
Determines equivalent fractions using multiples		
 Compares fractions (e.g., comparing numerators and denominators) 		
Uses alternative algorithms to explain the meaning of fraction		
 Writes a decimal for a shaded region to the hundredths place 		
\bullet Writes a fraction or mixed number as a decimal when the denominator is a multiple of 10		

Explanatory Notes

* At the range mid-point, this is the probability students would correctly answer items measuring these concepts and skills. Both data from test items and review by NWEA curriculum specialists are used to place Learning Continuum statements into



Mathematics RIT Score Range: 231 - 240 Statements Last Updated: Sep 23, 2013 Goal: Number and Operations

Skills and Concepts to Enhance (73% Probability*) 221 - 230	Skills and Concepts to Develop (50% Probability*) 231 - 240	Skills and Concepts to Introduce (27% Probability*) > 240
New Vocabulary: short, ten million	New Vocabulary: None	New Vocabulary: None
New Signs and Symbols: None	New Signs and Symbols: ÷ division	New Signs and Symbols: None

Generated 10/2/13, 9:40:10 AM



Mathematics

Goal: Number and Operations

RIT Score Range: > 240 Statements Last Updated: Sep 23, 2013

Skills and Concepts to Enhance (73% Probability*) 231 - 240	Skills and Concepts to Develop (50% Probability*) > 240
Number and Operations in Base Ten	Number and Operations in Base Ten
Subtracts a decimal from a whole number, horizontally	
Divides a whole number by a decimal	
Divides a decimal by a decimal	
Number and Operations - Fractions	Number and Operations - Fractions
 Adds fractions with unlike denominators with reducing or converting to a mixed fraction 	Solves open sentences with fractions Identifies the least common multiple of whole numbers
 Adds simple mixed fractions with unlike denominators (e.g., halves, thirds, fourths, eighths) 	·
 Adds mixed fractions where converting from improper fractions is necessary 	
Subtracts whole numbers, fractions, and mixed fractions	
 Subtracts whole numbers, fractions, and mixed fractions with regrouping 	
 Solves real-world problems involving addition and subtraction of fractions where converting both denominators is necessary 	
 Uses models to multiply and divide fractions and connect the actions to algorithms 	
Multiplies mixed fractions	
 Uses models to multiply and divide fractions and mixed fractions and connect the actions to algorithms 	
Divides a fraction by a whole number	
Divides a whole number by a fraction	
Divides a mixed fraction by a fraction	
 Solves 2- or more step real-world problems involving fractions with multiplication and division 	
 Solves problems involving fractions (e.g., multiple operations, conversions) 	
Compares fractions (e.g., comparing numerators and denominators)	
Writes a fraction as a decimal and vice versa	
Compares and orders decimal and fractional coordinates on a number line	
New Vocabulary: None	New Vocabulary: None
New Signs and Symbols: ÷ division	New Signs and Symbols: None

Generated 10/2/13, 9:40:10 AM