DesCartes: A Continuum of Learning®

Mathematics

Goal: The Real and Complex Number Systems

RIT Score Range: 161 - 170
Statements Last Updated: Mar 10, 2014

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
Ratios and Proportional Relationships	Ratios and Proportional Relationships	Ratios and Proportional Relationships
	• Completes a growing arithmetic pattern by naming missing members	• Completes a growing arithmetic pattern by naming missing members • Computes simple conversions among units of time (minutes in an hour, half hour, quarter hour)
Perform Operations	Perform Operations	Perform Operations
• Uses models to construct whole number addition facts with addends through 10 • Uses models to calculate whole number sums through 99 • Adds two 1-digit numbers with sums to 10 in horizontal format • Adds 1-digit to multiple-digit number with no regrouping • Adds 1-digit to multiple-digit number with regrouping	• Uses a number line to construct addition facts with sums through 20 (whole numbers) • Uses models to calculate whole number sums through 99 • Adds two 1-digit numbers with sums to 10 in horizontal format • Adds two 1-digit numbers with sums between 10 and 19 in horizontal format • Adds two 1-digit numbers with sums between 10 and 19 in vertical format • 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 • Solves real-world whole number addition problems with sums to 20 (result unknown) • Subtracts two 1-digit numbers horizontally • Subtracts a 1-digit number from a 2-digit number that is less than 20 (whole numbers only) • Subtracts two 1-digit numbers vertically • Subtracts a 2-digit number from a 2-digit number, with no regrouping • Instantly recalls basic multiplication facts where one factor is 0-5 and the other factor is 0-12 • Tells time to the nearest hour • Tells time to the nearest half hour	• Uses a number line to construct addition facts with sums through 20 (whole numbers) • 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 • Solves real-world whole number addition problems with sums to 20 (result unknown) • Solves real-world whole number addition problems with sums to 20 (start unknown) • Solves real-world whole number addition problems with sums to 100 (result unknown) • Subtracts a 1-digit number from a 2-digit number that is less than 20 (whole numbers only) • Subtracts a 1-digit number from a 2-digit number with no regrouping, vertically • Subtracts a 2-digit number from a 2-digit number, with no regrouping • Subtracts 2- and/or 3-digit numbers with no regrouping • Solves real-world whole number problems involving subtraction with numbers under 20 • Instantly recalls basic multiplication facts where one factor is 0-5 and the other factor is 0-12 • Multiplies basic facts to 10 x 10 vertically • Adds 1-digit numbers with sums to 18 (with parentheses) • Recognizes addition and subtraction fact families through 18 • Identifies the value of a collection of coins to $1.00 (with pictures of coins) • Identifies the value of a collection of coins and bills to $10.00 by counting on (with picture of money) • Tells time to the nearest hour • Tells time to the nearest half hour • Tells time to the nearest 5 minutes • Connects money with place value

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.

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Perform Operations	Perform Operations	Perform Operations
		• Determines the operation needed from a simple problem
Extend and Use Properties	Extend and Use Properties	Extend and Use Properties
• 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 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) • 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 whole numbers 100 - 999 using base-10 blocks • 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 by 2's to 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 • Represents 1/2 with a diagram or model • Represents 1/4 with a diagram or model • Identifies one-half from a region or set
New Vocabulary: None	*New Vocabulary:* None	*New Vocabulary:* fact family, fourth, hundred, morning, thirds, thousand
New Signs and Symbols: None	*New Signs and Symbols:* + addition, = is equal to, × multiplication, - subtraction, : used with time, variable	*New Signs and Symbols:* ( ) order of operations, a.m., ¢ cent sign, $ dollar sign, p.m., | tally mark

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