

DesCartes: A Continuum of Learning®

Mathematics

Goal: Operations and Algebraic Thinking

RIT Score Range:161 - 170Statements 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
Represent and Solve Problems	Represent and Solve Problems	Represent and Solve Problems
 Uses models to construct whole number addition facts with addends through 10 	Uses a number line to construct addition facts with sums through 20 (whole numbers)	Uses a number line to construct addition facts with sums through 20 (whole numbers)
 Adds two 1-digit numbers with sums to 10 in horizontal format 	 Adds two 1-digit numbers with sums to 10 in horizontal format 	Solves real-world whole number addition problems with sums to 20
	Adds two 1-digit numbers with sums between 10 and 19 in horizontal	(result unknown)
	format	Solves real-world whole number addition problems with sums to 20 (start unknown)
	Adds two 1-digit numbers with sums between 10 and 19 in vertical format	• Solves real-world whole number addition problems with sums to 100
	Solves real-world whole number addition problems with sums to 20 (result unknown)	(result unknown)
		Represents a basic facts addition problem with a number sentence
	• 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 that is less than 20 (whole numbers only)
	Subtracts two 1-digit numbers vertically Instantly recalls basic multiplication facts where one factor is 0-5 and numbers under	Solves real-world whole number problems involving subtraction with
		numbers under 20
	the other factor is 0-12	Instantly recalls basic multiplication facts where one factor is 0-5 and the other factor is 0-12
	Solves basic-facts open sentences - addition and subtraction	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
		Solves basic-facts open sentences - addition and subtraction
		Solves basic facts open sentences - multiplication and division
		Determines the operation needed from a simple problem
		Writes a number sentence for a simple problem solving situation
		Counts by 2's to 100
		• Writes equivalent forms of whole number expressions (e.g., 15 + 5 = 10 + 10)
Analyze Patterns and Relationships	Analyze Patterns and Relationships	Analyze Patterns and Relationships
		Extends a growing arithmetic pattern, defined by numbers
		Analyzes a growing, arithmetic pattern with numbers to determine the rule
New Vocabulary: None	New Vocabulary: None	New Vocabulary: fact family
New Signs and Symbols: None	New Signs and Symbols: + addition, = is equal to, × multiplication, - subtraction, variable	New Signs and Symbols: () order of operations, tally mark

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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