Math 6+: Algebraic Concepts Expressions

Numerical Expressions

Students	Learning Continuum Statements:
Students:	 RIT 171-180: Evaluates numerical expressions involving addition and subtraction with whole numbers and parantheses
	parentneses
Students:	RIT 181-190:
	Evaluates numerical expressions involving addition and subtraction with whole numbers and parentheses
Students:	RIT 191-200:
	 Evaluates numerical expressions involving addition and subtraction with whole numbers and parentheses Evaluates numerical expressions involving multiple operations with whole numbers and parentheses
Students:	RIT 201-210:
	 Evaluates numerical expressions involving multiple operations with whole numbers and parentheses Represents descriptions of calculations with numerical expressions or equations that include parentheses
Students:	RIT 211-220:
	 Applies the order of operations, with grouping symbols and excluding exponents, to simplify numerical expressions involving both positive and negative rational numbers Applies the order of operations, with grouping symbols and excluding exponents, to simplify numerical expressions involving positive rational numbers Evaluates numerical expressions involving addition and subtraction with whole numbers, no parentheses Evaluates numerical expressions involving multiple operations with whole numbers and nested grouping symbols Evaluates numerical expressions involving multiple operations with whole numbers and parentheses Evaluates numerical expressions involving multiple operations with whole numbers, no parentheses Evaluates numerical expressions involving multiple operations with whole numbers and parentheses Evaluates numerical expressions involving multiple operations with whole numbers, no parentheses Evaluates numerical expressions involving multiple operations with whole numbers and parentheses Evaluates numerical expressions involving multiple operations with whole numbers, no parentheses Represents descriptions of calculations with numerical expressions or equations that include parentheses Represents real-world problems involving the addition and subtraction of integers with numerical expressions

	Uses properties of exponents to simplify numerical expressions involving whole-number exponents only
Students:	 RIT 221-230: Applies the order of operations, with grouping symbols and excluding exponents, to simplify numerical expressions involving both positive and negative rational numbers Applies the order of operations, with grouping symbols and excluding exponents, to simplify numerical expressions involving positive rational numbers Applies the order of operations, with grouping symbols and with whole-number exponents, to simplify numerical expressions consisting of positive rational numbers Applies the order of operations, without grouping symbols and with whole-number exponents, to simplify numerical expressions consisting of positive rational numbers
	 Applies the order of operations, without grouping symbols or whole-number exponents, to simplify numerical expressions involving both positive and negative rational numbers Evaluates numerical expressions involving multiple operations with whole numbers and nested grouping symbols Evaluates numerical expressions involving multiple operations with whole numbers and parentheses Evaluates numerical expressions involving multiple operations with whole numbers, no parenthesis Represents descriptions of calculations with numerical expressions or equations that include parentheses Rewrites the sum of two whole numbers as a product of a common factor and the sum of two whole numbers Uses properties of exponents to simplify numerical expressions involving whole-number exponents only
Students:	 RIT 231-240: Applies the order of operations, with grouping symbols and excluding exponents, to simplify numerical expressions involving both positive and negative rational numbers Applies the order of operations, with grouping symbols and whole-number exponents, to simplify numerical expressions involving both positive and negative rational numbers Applies the order of operations, with grouping symbols and with whole-number exponents, to simplify numerical expressions consisting of positive rational numbers Applies the order of operations, without grouping symbols and with whole-number exponents, to simplify numerical expressions consisting of positive rational numbers Applies the order of operations, without grouping symbols or whole-number exponents, to simplify numerical expressions involving positive rational numbers Applies the order of operations, without grouping symbols or whole-number exponents, to simplify numerical expressions involving positive rational numbers Applies the order of operations, without grouping symbols or whole-number exponents, to simplify numerical expressions involving positive rational numbers Describes a situation that can be represented by a given numerical equation involving positive and negative numbers Evaluates numerical expressions involving multiple operations with whole numbers and nested grouping symbols Evaluates numerical expressions involving multiple operations with whole numbers and parentheses Evaluates numerical expressions involving multiple operations with whole numbers, no parenthesis Rewrites the sum of two whole numbers as a product of a common factor and the sum of two whole numbers

	 Uses properties of exponents to simplify numerical expressions involving negative integer exponents, including zero Uses properties of exponents to simplify numerical expressions involving whole-number exponents only
Students:	 RIT 241-250: Applies the order of operations, with grouping symbols and whole-number exponents, to simplify numerical expressions involving both positive and negative rational numbers Applies the order of operations, with grouping symbols and with whole-number exponents, to simplify numerical expressions consisting of positive rational numbers Applies the order of operations, with whole-number exponents and excluding grouping symbols, to simplify numerical expressions involving both positive and negative rational numbers Applies the order of operations, without grouping symbols and with whole-number exponents, to simplify numerical expressions consisting of positive rational numbers Applies the order of operations, without grouping symbols and with whole-number exponents, to simplify numerical expressions consisting of positive rational numbers Applies the order of operations, without grouping symbols or whole-number exponents, to simplify numerical expressions involving positive rational numbers Applies the order of operations, without grouping symbols or whole-number exponents, to simplify numerical expressions involving multiple operations with whole numbers and nested grouping symbols Rewrites the sum of two whole numbers as a product of a common factor and the sum of two whole numbers Uses properties of exponents to simplify numerical expressions involving negative integer exponents, including zero Uses properties of exponents to simplify numerical expressions involving whole-number
Students:	 RIT 251-260: Applies the order of operations, with grouping symbols and whole-number exponents, to simplify numerical expressions involving both positive and negative rational numbers Applies the order of operations, with whole-number exponents and excluding grouping symbols, to simplify numerical expressions involving both positive and negative rational numbers Represents descriptions of exponential growth with numerical expressions Rewrites the sum of two whole numbers as a product of a common factor and the sum of two whole numbers Uses properties of exponents to simplify numerical expressions involving negative integer exponents, including zero Uses properties of exponents to simplify numerical expressions involving whole-number exponents only
Students:	 RIT 261-270: Applies the order of operations, with grouping symbols and whole-number exponents, to simplify numerical expressions involving both positive and negative rational numbers Uses properties of exponents to simplify numerical expressions involving negative integer exponents, including zero Uses properties of exponents to simplify numerical expressions involving whole-number exponents only

• Uses properties of logarithms to transform logarithmic expressions

Students:	RIT 271-280:
	 Uses properties of exponents to simplify numerical expressions involving negative integer exponents, including zero Uses properties of logarithms to transform logarithmic expressions
Students:	 RIT 281-290: Uses properties of logarithms to transform logarithmic expressions