

South Dakota Curriculum Standards Correlated to Merit Software Math Programs

Elementary Math

Standard	Expectations	Merit Software
<p>Develop understanding of fractions as parts of unit wholes, as parts of a collection, as locations on number lines, and as divisions of whole numbers.</p>	<ol style="list-style-type: none"> 1. Describe fractional parts of a unit or a group of objects ($1/100$, $1/10$, $1/8$, $1/6$, $1/5$, $1/4$, $1/3$, and $1/2$). 2. Locate points on a number line corresponding to a unit fraction and its multiples between 0 and 1. 3. Name and write mixed numbers and improper fractions shown in concrete and pictorial models. 4. Explain the relationship between fractions and division. 	<p>Fraction Shape-Up</p>
<p>Use models, benchmarks, and equivalent forms to judge the size of fractions.</p>	<ol style="list-style-type: none"> 1. Relate the size of fractions to the benchmark fractions of 0, $1/2$, and 1. 2. Compare concrete or pictorial models of fractions 	<p>Fraction Shape-Up</p>
<p>Use visual models, benchmarks, and equivalent forms to add and subtract commonly used fractions and decimals.</p>	<ol style="list-style-type: none"> 1. Add and subtract decimals through hundredths using concrete and pictorial models. 2. Multiply commonly used fractions (including decimals) using area models. 3. Relate connections between products of fractions and products of decimals using area models. 	<p>Fraction Shape-Up</p>

Pre-Algebra/ Basic Algebra Math

Standard	Expectations	Merit Software
Develop an initial conceptual understanding of different uses of variables.	<ol style="list-style-type: none"> 1. Use order of operations to evaluate numerical expressions. 2. Explain the use of a variable as a quantity that can change its value, as a quantity on which other values depend, and as generalization of patterns 3. Evaluate simple algebraic expressions for given values of variables by using the substitution principle and the rules for order of operations. 	<p>Pre-Algebra Shape-Up</p> <p>Basic Algebra Shape-Up</p>
Use symbolic algebra to represent situations and to solve problems, especially those that involve linear relationships.	<ol style="list-style-type: none"> 1. Use variables to describe numerical expressions and relationships. 	<p>Pre-Algebra Shape-Up</p>
Recognize and generate equivalent forms for simple algebraic expressions and solve linear equations.	<ol style="list-style-type: none"> 1. Use commutative, associative, and distributive properties to examine equivalence of a variety of simple algebraic expressions 2. Recognize and apply the additive and multiplicative inverses 3. Use models and numbers to solve one-step linear equations and inequalities in one variable. 4. Simplify a variety of algebraic expressions using properties of real numbers and rules for order of operations 5. Using strategies that involve inverse operations, solve one- and two-step linear equations and inequalities in one 	<p>Basic Algebra Shape-Up</p>

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