

**Content Standard A3
Eighth Grade Level
Estimation and Computation**

*A student should understand mathematical facts, concepts, principles, and theories.
They perform basic arithmetic functions and make reasoned estimates, selecting and using appropriate methods
including estimation, mental arithmetic, paper and pencil, calculator and computer.*

State Mathematics Performance Standards 6 th -8 th	KGBSD Performance Standards	State Grade Level Expectations (GLE's)
<p>M3.3.1 Apply, explain, and assess the appropriateness of a variety of estimation strategies including truncating and rounding to compatible numbers.</p> <p>M3.3.2 Apply basic operations efficiently and accurately, using estimation to check the reasonableness of results.</p> <p>M3.3.3 Add and subtract fractions, decimals, and percents.</p> <p>M3.3.4 Multiply and divide rational numbers in various forms including fractions, decimals, and percents.</p>	<p>1.1 Apply, explain and assess estimation strategies including truncating and rounding to compatible numbers</p> <p>2.1 Develop an understanding of the procedures used to compute numbers and apply basic, operations using estimation to check the reasonableness of results</p> <p>3.1 Add and subtract whole numbers, decimals, and fractions, percents and integers, apply skills to practical situations</p> <p>4.1 Multiply or divide rational numbers including fractions, decimals, and percents</p>	<p><u>Estimation and Computation: Estimation</u> The student solves problems (including real-world situations) using estimation by</p> <p>[8] E&C-1 [applying and assessing the appropriateness of a variety of estimation strategies L] (M3.3.1)</p> <p><u>Estimation and Computation: Computation</u> The student accurately solves problems (including real-world situations) involving</p> <p>[8] E&C-2 adding, subtracting, multiplying or dividing integers or positive rational numbers (M3.3.3 & M3.3.4)</p> <p>[8] E&C-3 percents and percentages (e.g., tax, discount) (M3.3.3 & M3.3.4)</p> <p>[8] E&C-4 converting between equivalent fractions, decimals, or percents (M3.3.5)</p> <p>[8] E&C-5 <u>ratio</u> and proportion (M3.3.6)</p>

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State Mathematics Performance Standards 6th-8th	KGBSD Performance Standards	State Grade Level Expectations (GLE's)
<p>M3.3.5 Convert between equivalent fractions, decimals, percents, and proportions. Convert from exact to decimal representations of irrational numbers.</p> <p>M3.3.6 Solve problems using ratios and proportions.</p>	<p>5.1 Convert between equivalent fractions, decimals, percents and ratios and between standard and exponential forms</p> <p>5.2 Convert from exact to decimal representations of irrational numbers</p> <p>6.1 Solve problems involving proportional relationships including percent</p>	