

**Content Standard A3  
Seventh 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 <sup>th</sup> -8 <sup>th</sup>	KGBSD Performance Standards	State Grade Level Expectations (GLE's)
M3.3.1 Apply, explain, and assess the appropriateness of a variety of estimation strategies including truncating and rounding to compatible numbers.	1.1 Apply and explain the use of estimation strategies including truncating and rounding to compatible numbers	<b><u>Estimation and Computation: Estimation</u></b> <b>The student solves problems (including real-world situations) using estimation by</b>  [7] E&C-1 using [a variety of L] strategies, including truncating, rounding, front-end estimation, compatible numbers, to check for reasonableness of solutions (M3.3.1)  [7] E&C-2 [comparing results of different strategies L] (M3.3.1)
M3.3.2 Apply basic operations efficiently and accurately, using estimation to check the reasonableness of results.	2.1 Use estimation to decide if an answer is reasonable	<b><u>Estimation and Computation: Computation</u></b> <b>The student accurately solves problems (including real-world situations) involving</b>
M3.3.3 Add and subtract fractions, decimals, and percents.	3.1 Add and subtract decimals, fractions and mixed numbers	[7] E&C-3 adding or subtracting fractions or mixed numbers with unlike denominators, or decimals to the thousandths place (M3.3.3)
M3.3.4 Multiply and divide rational numbers in various forms including fractions, decimals, and percents.	4.1 Multiply and divide decimals, fractions and mixed numbers; and by powers of 10	[7] E&C-4 multiplying or dividing decimals to hundredths, or multiplying or dividing by powers of ten (M3.3.4)
M3.3.5 Convert between equivalent fractions, decimals, percents, and proportions. Convert from exact to decimal representations of irrational numbers.	5.1 Translate between equivalent fractions, terminating decimals, and percents	[7] E&C-5 converting between equivalent fractions, terminating decimals, or percents ( $10\% = 1/10 = 0.1$ ) (M3.3.5)
M3.3.6 Solve problems using ratios and proportions.	6.1 Solve problems involving proportional relationships	[7] E&C-6 solving proportions using a given scale (M3.3.6)