Support for Texas Math Standards, grades 4-8

Hello, Texas middle school math teachers!

I hope you enjoy this little guide, designed to help you quickly and easily find support for some of the math expectations you are required to teach your students. My hope is that you find my techniques in *Math Doesn't Suck* and *Kiss My Math* to be fun and effective ways to teach these topics – especially for problem students needing intervention.

And don't read only your grade level – there may be help and support for you in the lower grades' expectations, too. Check out some lower grades for previously misunderstood expectations that may be holding your students back, and clear up those topics for them once and for all!

Most of all, I would love to hear what's working and what suggestions you might have for this guide, or for any other ways I can make *Math Doesn't Suck* and *Kiss My Math* the most useful to teachers like yourself.

Go math!

Danica

For grade levels 4-8, here are the expectations supported either in part or fully within *Math Doesn't Suck* and *Kiss My Math*. For each expectation, just look to the right-hand column for the chapter(s) you need.

Got an expectation that's giving your class trouble? Find a new way of approaching the topic here!

Mathematics Content Standards for Texas – by grade expectation

4th Grade

TEKS Math Standard	Description	Where to find support!
4.1	**Number, operation, and quantitative reasoning.** The student uses place value to represent whole numbers and decimals.	*Math Doesn't Suck*, chapter 10
4.1 (B)	use place value to read, write, compare, and order decimals involving tenths and hundredths, including money, using concrete objects and pictorial models.	*Math Doesn't Suck*, chapter 10
4.2	**Number, operation, and quantitative reasoning.** The student describes and compares fractional parts of whole objects or sets of objects.	*Math Doesn't Suck*, chapter 4
4.2 (A)	Use concrete objects and pictorial models to generate equivalent fractions;	*Math Doesn't Suck*, chapter 4
4.2 (B)	model fraction quantities greater than one using concrete objects and pictorial models;	*Math Doesn't Suck*, chapter 4
4.2 (C)	compare and order fractions using concrete objects and pictorial models; and	*Math Doesn't Suck*, chapter 4

4.2 (D)	relate decimals to fractions that name tenths and hundredths using concrete objects and pictorial models.	*Math Doesn't Suck*, chapters 11 and 12
4.3	**Number, operation, and quantitative reasoning.** The student adds and subtracts to solve meaningful problems involving whole numbers and decimals.	*Math Doesn't Suck*, chapter 10
4.3 (B)	add and subtract decimals to the hundredths place using concrete objects and pictorial models.	*Math Doesn't Suck*, chapter 10
4.4 (C)	recall and apply multiplication facts through 12 x 12;	*Math Doesn't Suck*, Appendix
4.4 (E)	use division to solve problems (no more than one-digit divisors and three-digit dividends without technology).	*Math Doesn't Suck*, website See "division" PDF at mathdoesntsuck.com/extras
4.6	**Patterns, relationships, and algebraic thinking.** The student uses patterns in multiplication and division.	*Math Doesn't Suck*, chapter 10 and Appendix
4.6 (A)	use patterns and relationships to develop strategies to remember basic multiplication and division facts (such as the patterns in related multiplication and division number sentences (fact families) such as 9 x 9 = 81 and 81 ÷ 9 = 9); and	*Math Doesn't Suck*, Appendix
4.6 (B)	use patterns to multiply by 10 and 100.	*Math Doesn't Suck*, chapter 10
4.7	**Patterns, relationships, and algebraic thinking.** The student uses organizational structures to analyze and describe patterns and relationships.	*Kiss My Math*, chapter 17

4.7 (A)	The student is expected to describe the relationship between two sets of related data such as ordered pairs in a table.	*Kiss My Math*, chapter 17
4.10	**Geometry and spatial reasoning**. The student recognizes the connection between numbers and their properties and points on a line.	*Kiss My Math*, Appendix
4.14	**Underlying processes and mathematical tools.** The student applies Grade 4 mathematics to solve problems connected to everyday experiences and activities in and outside of school.	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout
4.14 (A)	identify the mathematics in everyday situations;	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout
4.14 (B)	solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;	*Math Doesn't Suck*, chapter 15 *Kiss My Math*, chapters 11, 13
4.14 (C)	select or develop an appropriate problem-solving plan or strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem; and	*Math Doesn't Suck*, chapter 15 *Kiss My Math*, chapter 11, 13
4.15	**Underlying processes and mathematical tools.** The student communicates about Grade 4 mathematics using informal language.	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout
4.15 (B)	relate informal language to mathematical language and symbols.	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout

4.16	**Underlying processes and mathematical tools.** The student uses logical reasoning.	*Math Doesn't Suck*, chapter 15 *Kiss My Math*, chapters 11, 13
4.16 (B)	justify why an answer is reasonable and explain the solution process.	*Math Doesn't Suck*, chapter 15 *Kiss My Math*, chapters 11, 13

5th Grade

TEKS Math Standard	Description	Where to find support!
5.1	**Number, operation, and quantitative reasoning.** The student uses place value to represent whole numbers and decimals.	*Math Doesn't Suck*, chapter 10
5.1 (B)	use place value to read, write, compare, and order decimals through the thousandths place.	*Math Doesn't Suck*, chapter 10
5.2	**Number, operation, and quantitative reasoning.** The student uses fractions in problem-solving situations.	*Math Doesn't Suck*, chapter 4
5.2 (A)	generate a fraction equivalent to a given fraction such as 1/2 and 3/6 or 4/12 and 1/3;	*Math Doesn't Suck*, chapter 6
5.2 (B)	generate a mixed number equivalent to a given improper fraction or generate an improper fraction equivalent to a given mixed number;	*Math Doesn't Suck*, chapter 4
5.2 (C)	compare two fractional quantities in problem-solving situations using a variety of methods, including common denominators; and	*Math Doesn't Suck*, chapter 7

5.2 (D)	use models to relate decimals to fractions that name tenths, hundredths, and thousandths.	*Math Doesn't Suck*, chapters 11, 12
5.3	**Number, operation, and quantitative reasoning.** The student adds, subtracts, multiplies, and divides to solve meaningful problems.	*Math Doesn't Suck*, chapter 10
5.3 (A)	use addition and subtraction to solve problems involving whole numbers and decimals;	*Math Doesn't Suck*, chapter 10
5.3 (C)	use division to solve problems involving whole numbers (no more than two-digit divisors and three-digit dividends without technology), including interpreting the remainder within a given context;	*Math Doesn't Suck*, website See "division" PDF at: Mathdoesntsuck.com/extras
5.3 (D)	identify common factors of a set of whole numbers; and	*Math Doesn't Suck*, chapters 1, 2
5.3 (E)	model situations using addition and/or subtraction involving fractions with like denominators using concrete objects, pictures, words, and numbers.	*Math Doesn't Suck*, chapters 4, 8
5.5	**Patterns, relationships, and algebraic thinking.** The student makes generalizations based on observed patterns and relationships.	*Math Doesn't Suck*, chapter 1 *Kiss My Math*, chapters 5, 17, 18
5.5 (A)	describe the relationship between sets of data in graphic organizers such as lists, tables, charts, and diagrams; and	*Kiss My Math*, chapters 5, 17, 18
5.5 (B)	identify prime and composite numbers using concrete objects, pictorial models, and patterns in factor pairs.	*Math Doesn't Suck*, chapter 1
5.6	**Patterns, relationships,**	*Math Doesn't Suck*, chapters 15, 21

	and algebraic thinking. The student describes relationships mathematically.	*Kiss My Math*, chapters 11, 13
5.9	**Geometry and spatial reasoning.** The student recognizes the connection between ordered pairs of numbers and locations of points on a plane.	*Kiss My Math*, chapter 18
5.9 (A)	The student is expected to locate and name points on a coordinate grid using ordered pairs of whole numbers.	*Kiss My Math*, chapter 18
5.10 (A)	**Measurement.** perform simple conversions within the same measurement system (SI (metric) or customary);	*Math Doesn't Suck*, chapter 19
5.13	**Probability and statistics.** The student solves problems by collecting, organizing, displaying, and interpreting sets of data.	*Kiss My Math*, chapters 5, 17, 18
5.13 (A)	use tables of related number pairs to make line graphs;	*Kiss My Math*, chapters 17, 18
5.13 (B)	describe characteristics of data presented in tables and graphs including median, mode, and range; and	*Kiss My Math*, chapter 5
5.13 (C)	graph a given set of data using an appropriate graphical representation such as a picture or line graph.	*Kiss My Math*, chapter 18
5.14	**Underlying processes and mathematical tools.** The student applies Grade 5 mathematics to solve problems connected to everyday experiences and activities in and outside of school.	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout
5.14 (A)	identify the mathematics in	*Math Doesn't Suck*, throughout

	everyday situations;	*Kiss My Math*, throughout
5.14 (B)	solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;	*Math Doesn't Suck*, chapter 15 *Kiss My Math*, chapters 11, 13
5.14 (C)	select or develop an appropriate problem solving plan or strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem; and	*Math Doesn't Suck*, chapter 5 *Kiss My Math*, chapters 11, 13
5.15	**Underlying processes and mathematical tools.** The student communicates about Grade 5 mathematics using informal language.	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout
5.15 (A)	explain and record observations using objects, words, pictures, numbers, and technology; and	*Math Doesn't Suck*, chapter 4
5.15 (B)	relate informal language to mathematical language and symbols.	*Math Doesn't Suck*, chapter 15 *Kiss My Math*, chapter 11
5.16	**Underlying processes and mathematical tools.** The student uses logical reasoning.	*Math Doesn't Suck*, chapter 15 *Kiss My Math*, chapters 11, 13
5.16 (A)	make generalizations from patterns or sets of examples and nonexamples; and	*Math Doesn't Suck*, chapter 15 *Kiss My Math*, chapters 11, 13
5.16 (B)	justify why an answer is reasonable and explain the solution process.	*Math Doesn't Suck*, chapter 15 *Kiss My Math*, chapters 11, 13

6th Grade

TEKS Math Standard	Description	Where to find support!
6.1	**Number, operation, and quantitative reasoning.** The student represents and uses rational numbers in a variety of equivalent forms.	*Math Doesn't Suck*, chapter 4, 6, 7, 11, 12
6.1 (A)	compare and order non-negative rational numbers;	*Math Doesn't Suck*, chapter 7
6.1 (B)	Generate equivalent forms of rational numbers including whole numbers, fractions, and decimals;	*Math Doesn't Suck*, chapters 4, 6, 11, 12
6.1 (C)	use integers to represent real-life situations;	*Kiss My Math*, chapter 1
6.1 (E)	identify factors of a positive integer, common factors, and the greatest common factor of a set of positive integers; and	*Math Doesn't Suck*, chapter 1, 2
6.1 (F)	identify multiples of a positive integer and common multiples and the least common multiple of a set of positive integers.	*Math Doesn't Suck*, chapter 3
6.2	**Number, operation, and quantitative reasoning.** The student adds, subtracts, multiplies, and divides to solve problems and justify solutions.	*Math Doesn't Suck*, chapters 4, 8, 10, 16, 17 *Kiss My Math*, chapters 1, 3
6.2 (A)	model addition and subtraction situations involving fractions with objects, pictures, words, and numbers;	*Math Doesn't Suck*, chapters 4, 8
6.2 (B)	use addition and subtraction to solve problems involving fractions and decimals;	*Math Doesn't Suck*, chapters 8, 10
6.2 (C)	use multiplication and division of whole numbers	*Math Doesn't Suck*, chapters 16, 17

	to solve problems including situations involving equivalent ratios and rates;	
6.2 (E)	use order of operations to simplify whole number expressions (without exponents) in problem solving situations.	*Math Doesn't Suck*, chapter 9 *Kiss My Math*, chapter 1
6.3	**Patterns, relationships, and algebraic thinking.** The student solves problems involving direct proportional relationships.	*Math Doesn't Suck*, chapter 18
6.3 (A)	use ratios to describe proportional situations;	*Math Doesn't Suck*, chapter 16, 18
6.3 (B)	represent ratios and percents with concrete models, fractions, and decimals; and	*Math Doesn't Suck*, chapters 13, 14, 16
6.3 (C)	use ratios to make predictions in proportional situations.	*Math Doesn't Suck*, chapter 16, 18
6.4	**Patterns, relationships, and algebraic thinking.** The student uses letters as variables in mathematical expressions to describe how one quantity changes when a related quantity changes.	*Math Doesn't Suck*, chapter 20, 21 *Kiss My Math*, chapters 6, 11
6.4 (A)	use tables and symbols to represent and describe proportional and other relationships such as those involving conversions, arithmetic sequences (with a constant rate of change), perimeter and area; and	*Math Doesn't Suck*, chapter 18, 19 *Kiss My Math*, chapter 17
6.5	**Patterns, relationships, and algebraic thinking.** The student uses letters to represent an unknown in an equation.	*Math Doesn't Suck*, chapters 20, 21 *Kiss My Math*, chapters 6, 11
6.5 (A)	The student is expected to formulate equations from problem situations	*Math Doesn't Suck*, chapter 20 *Kiss My Math*, chapters 11, 13

	described by linear relationships.	
6.7	**Geometry and spatial reasoning.** The student uses coordinate geometry to identify location in two dimensions.	*Kiss My Math*, chapter 18
6.7 (A)	The student is expected to locate and name points on a coordinate plane using ordered pairs of non-negative rational numbers.	*Kiss My Math*, chapter 18
6.11	**Underlying processes and mathematical tools.** The student applies Grade 6 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school.	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout
6.11 (A)	identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics;	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout
6.11 (B)	use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;	*Math Doesn't Suck*, chapter 15 *Kiss My Math*, chapters 11, 13
6.11 (C)	select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem; and	*Math Doesn't Suck*, chapter 15 *Kiss My Math*, chapters 11, 13
6.11 (D)	select tools such as real	*Math Doesn't Suck*, throughout

	objects, manipulatives, paper/pencil, and technology or techniques such as mental math, estimation, and number sense to solve problems.	*Kiss My Math*, throughout, and chapter 10 (see Danica's Diary)
6.12	**Underlying processes and mathematical tools.** The student communicates about Grade 6 mathematics through informal and mathematical language, representations, and models.	*Math Doesn't Suck*, throughout, esp. 15 *Kiss My Math*, throughout, esp. 11 & 13
6.12 (A)	Communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematic models; and	*Math Doesn't Suck*, chapter 15 *Kiss My Math*, chapters 11, 13
6.12 (B)	evaluate the effectiveness of different representations to communicate ideas.	*Kiss My Math*, Appendix
6.13	**Underlying processes and mathematical tools.** The student uses logical reasoning to make conjectures and verify conclusions.	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout

7th Grade

TEKS Math Standard	Description	Where to find support!
7.1	**Number, operation, and quantitative reasoning.** The student represents and uses numbers in a variety of equivalent forms.	*Math Doesn't Suck*, chapters 11, 12
7.1 (A)	compare and order integers	*Math Doesn't Suck*, chapter 7

	and positive rational numbers;	*Kiss My Math*, chapter 1
7.1 (B)	convert between fractions, decimals, whole numbers, and percents mentally, on paper, or with a calculator; and	*Math Doesn't Suck*, chapters 11, 12, 13, 14 *Kiss My Math*, chapter
7.2	**Number, operation, and quantitative reasoning.** The student adds, subtracts, multiplies, or divides to solve problems and justify solutions.	*Math Doesn't Suck*, chapters 4, 8, 10, 16, 17 *Kiss My Math*, chapters 1, 3
7.2 (A)	represent multiplication and division situations involving fractions and decimals with models, including concrete objects, pictures, words, and numbers;	*Math Doesn't Suck*, chapter 5
7.2 (B)	use addition, subtraction, multiplication, and division to solve problems involving fractions and decimals;	*Math Doesn't Suck*, chapters 5, 8, 10 *Kiss My Math*, chapter
7.2 (C)	use models, such as concrete objects, pictorial models, and number lines, to add, subtract, multiply, and divide integers and connect the actions to algorithms;	*Kiss My Math*, chapters 1, 3
7.2 (D)	use division to find unit rates and ratios in proportional relationships such as speed, density, price, recipes, and student-teacher ratio;	*Math Doesn't Suck*, chapter 16, 17, 18
7.2 (E)	simplify numerical expressions involving order of operations and exponents;	*Kiss My Math*, chapter 1, 15
7.2 (F)	select and use appropriate operations to solve problems and justify the selections; and	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout
7.2 (G)	determine the reasonableness of a solution	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout

	to a problem.	
7.3	**Patterns, relationships, and algebraic thinking.** The student solves problems involving direct proportional relationships.	*Math Doesn't Suck*, chapter 18 *Kiss My Math*, chapter 13
7.3 (A)	estimate and find solutions to application problems involving percent; and	*Math Doesn't Suck*, chapters 13, 14, 15
7.3 (B)	estimate and find solutions to application problems involving proportional relationships such as similarity, scaling, unit costs, and related measurement units.	*Math Doesn't Suck*, chapters 17, 18, 19 *Kiss My Math*, chapters 11, 12, 13
7.4	**Patterns, relationships, and algebraic thinking.** The student represents a relationship in numerical, geometric, verbal, and symbolic form.	*Math Doesn't Suck*, chapters 20, 21 *Kiss My Math*, chapter 11
7.4 (A)	generate formulas involving unit conversions, perimeter, area, circumference, volume, and scaling;	*Math Doesn't Suck*, chapter 19 *Kiss My Math*, chapters 11, 13
7.4 (B)	graph data to demonstrate relationships in familiar concepts such as conversions, perimeter, area, circumference, volume, and scaling; and	*Kiss My Math*, chapters 17, 18
7.5	**Patterns, relationships, and algebraic thinking.** The student uses equations to solve problems.	*Kiss My Math*, chapters 11, 12, 13
7.5 (B)	formulate problem situations when given a simple equation and formulate an equation when given a problem situation.	*Math Doesn't Suck*, chapter 15 *Kiss My Math*, chapter 11, 13
7.7	**Geometry and spatial reasoning.** The student uses coordinate geometry to describe location on a plane.	*Kiss My Math*, chapter 18

7.7 (A)	locate and name points on a coordinate plane using ordered pairs of integers; and	*Kiss My Math*, chapter 18
7.12 (A)	**Probability and statistics.** describe a set of data using mean, median, mode, and range; and	*Kiss My Math*, chapter 5
7.12 (B)	choose among mean, median, mode, or range to describe a set of data and justify the choice for a particular situation.	*Kiss My Math*, chapter 5
7.13	**Underlying processes and mathematical tools.** The student applies Grade 7 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school.	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout
7.13 (A)	identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics;	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout
7.13 (B)	use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;	*Kiss My Math*, chapters 11, 13
7.13 (C)	select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem; and	*Kiss My Math*, chapters 11, 13

7.13 (D)	select tools such as real objects, manipulatives, paper/pencil, and technology or techniques such as mental math, estimation, and number sense to solve problems.	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout (See Danica's Diary in Chapter 10)
7.14	**Underlying processes and mathematical tools.** The student communicates about Grade 7 mathematics through informal and mathematical language, representations, and models.	*Math Doesn't Suck*, throughout, esp. 15 *Kiss My Math*, throughout, esp. 11 & 13
7.14 (A)	communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematical models; and	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout
7.14 (B)	evaluate the effectiveness of different representations to communicate ideas.	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout
7.15	**Underlying processes and mathematical tools.** The student uses logical reasoning to make conjectures and verify conclusions.	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout
7.15 (A)	make conjectures from patterns or sets of examples and nonexamples; and	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout
7.15 (B)	validate his/her conclusions using mathematical properties and relationships.	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout

8th Grade

TEKS Math Standard	Description	Where to find support!
8.1	**Number, operation, and quantitative reasoning.** The student understands that different forms of numbers are appropriate for different situations.	*Math Doesn't Suck*, chapter 13 *Kiss My Math*, Appendix
8.1 (A)	compare and order rational numbers in various forms including integers, percents, and positive and negative fractions and decimals;	*Math Doesn't Suck*, chapters 7, 10, 13 *Kiss My Math*, chapter 1
8.1 (B)	select and use appropriate forms of rational numbers to solve real-life problems including those involving proportional relationships;	*Math Doesn't Suck*, chapter 15, 16, 17, 18 *Kiss My Math*, Appendix
8.2	**Number, operation, and quantitative reasoning.** The student selects and uses appropriate operations to solve problems and justify solutions.	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout
8.2 (A)	select appropriate operations to solve problems involving rational numbers and justify the selections;	*Math Doesn't Suck*, throughout, esp. 15 *Kiss My Math*, throughout, esp. 11 & 13
8.2 (B)	use appropriate operations to solve problems involving rational numbers in problem situations;	*Math Doesn't Suck*, throughout, esp. 15 *Kiss My Math*, throughout, esp. 11 & 13
8.2 (C)	evaluate a solution for reasonableness; and	*Math Doesn't Suck*, throughout, esp. 15 *Kiss My Math*, throughout, esp. 11 & 13
8.2 (D)	use multiplication by a constant factor (unit rate) to represent proportional relationships.	*Math Doesn't Suck*, chapter 18
8.3	**Patterns, relationships, and algebraic thinking**. The student identifies	*Math Doesn't Suck*, chapter 18 *Kiss My Math*, chapters 11, 12, 13

	proportional or non-proportional linear relationships in problem situations and solves problems.	
8.3 (A)	compare and contrast proportional and non-proportional linear relationships; and	*Math Doesn't Suck*, chapter 18
8.3 (B)	estimate and find solutions to application problems involving percents and other proportional relationships such as similarity and rates.	*Math Doesn't Suck*, chapters 15, 17, 18, 19
8.4	**Patterns, relationships, and algebraic thinking.** The student makes connections among various representations of a numerical relationship.	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout
8.4 (A)	The student is expected to generate a different representation of data given another representation of data (such as a table, graph, equation, or verbal description).	*Kiss My Math*, chapters 17, 18
8.5 (A)	predict, find, and justify solutions to application problems using appropriate tables, graphs, and algebraic equations; and	*Math Doesn't Suck*, chapter 15 *Kiss My Math*, chapter 11, 12, 13, 14
8.7 (D)	locate and name points on a coordinate plane using ordered pairs of rational numbers.	*Kiss My Math*, chapter 18
8.14	**Underlying processes and mathematical tools.** The student applies Grade 8 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school.	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout

8.14 (A)	identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics;	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout
8.14 (B)	use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;	*Math Doesn't Suck*, chapter 15 *Kiss My Math*, chapters 11, 13
8.14 (C)	select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem; and	*Math Doesn't Suck*, chapter 15 *Kiss My Math*, chapters 11, 13
8.14 (D)	select tools such as real objects, manipulatives, paper/pencil, and technology or techniques such as mental math, estimation, and number sense to solve problems.	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout, esp. see Danica's Diary in Ch.10
8.15	**Underlying process and mathematical tools.** The student communicates about Grade 8 mathematics through informal and mathematical language, representations, and models.	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout
8.15 (A)	communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematical models; and	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout
8.15 (B)	evaluate the effectiveness of	*Math Doesn't Suck*, throughout

	different representations to communicate ideas.	*Kiss My Math*, throughout
8.16	Underlying processes and mathematical tools. The student uses logical reasoning to make conjectures and verify conclusions.	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout
8.16 (A)	Make conjectures from patterns or sets of examples and nonexamples; and	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout
8.16 (B)	Validate his/her conclusions using mathematical properties and relationships.	*Math Doesn't Suck*, throughout *Kiss My Math*, throughout