B.E.S.T. Standards for Mathematics Appendices Correlation

Algebra 1, Amplify Desmos Math Florida, Algebra 1

Situations Involving Operations with Numbers	Operation of Focus	Connecting Benchmark(s)	Integrated Operations within Student and Teacher Materials
Unit 1, Lesson 8: Whale Growth Rates - In this lesson, students use equations in a real-world context as they compare the growth rates of various whales species.	addition, subtraction, multiplication (integers)	MA.912.AR.2.3	See Problems 2 and 5 of Activity 1, Problem 6 of Activity 2, and Problems 9 and 10 in the Student Edition on pages 57-60. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 57-60.
Unit 2, Lesson 8: How Big? - In this lesson, students use results from a survey and proportional reasoning to estimate populations in real world contexts such as the total number of students in a school.	multiplication, division, percentages (positive rational numbers)	MA.912.DP.1.4	See Problems 1-3 of the Warm-Up, Problem 9 of Activity 1, and Problems 12-14 of Activity 2 in the Student Edition on pages 206-208. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 206-208.
Unit 3, Lesson 7: Plane, Train, and Automobile - In this lesson, students calculate the average rate of change over a specified intervals of time to compare different modes of transportation in distance-time graphs.	subtraction, division (positive rational numbers)	MA.912.F.1.3, MA.912.F.1.5	See Problem 8 of Activity 2 and Problem 10 of Activity 3 in the Student Edition on pages 335-336. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 335-336.
Unit 4, Lesson 2: Process of Elimination - In this lesson, students analyze visuals of student work examples for solving systems of equations by elimination.	addition, subtraction, multiplication, division (positive and negative rational numbers)	MA.912.AR.9.1	See Problem 2 of the Warm-Up, Problem 7 of Activity 1, Problem 8 of Activity 2, and Problem 11 of Activity 3 in the Student Edition on pages 396-400. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 396-400.

Unit 4, Lesson 3: Solution by Substitution - In this lesson, students use the visual scales showing the weights of foxes and alligators to solve systems of equations using substitutions.	addition, subtraction, multiplication, division (integers)	MA.912.AR.9.1	See Problems 4, 5, and 7 of Activity 1 and Problem 9 of Activity 2 in the Student Edition on pages 405-407. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 405-407.
Unit 5 Lesson 8: Thinking Rationally - In this lesson, students write equivalent expressions using radicals and rational exponents as the explore and analyze visuals of student work examples.	rational exponents, Laws of Exponents	MA.912.NSO.1.1, MA.912.NSO.1.4	See Problems 1-4 of the Warm-Up, Problems 5-8 of Activity 1, Problems 9-11 of Activity 2, and Problems 12 and 13 of Activity 3 in the Student Edition on pages 523-528. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 523-528.
Unit 5 Lesson 9: Writing Radicals - In this lesson, students explore rational exponents with numerators other than 1 by analyzing visuals of student work examples.	rational exponents, Laws of Exponents	MA.912.NSO.1.1, MA.912.NSO.1.2, MA.912.NSO.1.4	See Problems 1-4 of the Warm-Up and Problems 2-6 of Activity 1 in the Student Edition on pages 532-533. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 532-533.
Unit 5, Lesson 10: Rule the Roots - In this lesson, students perform multiplication and division with radicals as they analyze visuals of student work and explain their mathematical thinking.	multiplication, division (radicals)	MA.912.NSO.1.1, MA.912.NSO.1.2, MA.912.NSO.1.4	See Problems 5-8 of Activity 1 and Problems 9-13 of Activity 2 in the Student Edition on pages 540-542. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 540-542.
Unit 5, Lesson 11: Tame the Terms - In this lesson, students analyze visual of students work of addition and subtraction with radicals by discussing notices and wonders.	addition, subtraction (radicals)	MA.912.NSO.1.1, MA.912.NSO.1.2, MA.912.NSO.1.4	See Problems 2-8 of Activity 1 and Problems 9-11 of Activity 2 in the Student Edition on pages 548-550. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 548-550.

Unit 6, Lesson 8: What's My Graph? - In this lesson, students collaborate to explore strategies for graphing quadratic functions by hand using a table of values.	addition, subtraction, multiplication, squaring (integers)	MA.912.AR.3.7, MA.912.F.1.2	See Problem 1 of the Warm-Up and Problems 4-5 of Activity 1 in the Student Edition on pages 647-648. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 647-648.
Unit 7, Lesson 17: Formula Fluency - In this lesson, students build their fluency with the quadratic formula by solving problems given various equations, including error analysis and predicting error spots in using the formula accurately.	addition, subtraction, multiplication, division, squaring, and taking the square root	MA.912.AR.3.1, MA.912.NSO.1.4	See Problem 2 of Activity 1 in the Student Edition on page 840. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on page 840.

Fluency and Automaticity	Arithmetic Operation of Focus	Connecting Benchmark(s)	Integrated Basic Arithmetic Facts within Student and Teacher Materials
Unit 1, Lesson 8: Whale Growth Rates - In this lesson, students use equations in a real-world context as they compare the growth rates of various whales species.	addition, subtraction, multiplication (integers)	MA.912.AR.2.3	See Problems 2 and 5 of Activity 1, Problem 6 of Activity 2, and Problems 9 and 10 in the Student Edition on pages 57-60. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 57-60.
Unit 4, Lesson 2: Process of Elimination - In this lesson, students analyze visuals of student work examples for solving systems of equations by elimination.	addition, subtraction, multiplication, division (positive and negative rational numbers)	MA.912.AR.9.1	See Problem 2 of the Warm-Up, Problem 7 of Activity 1, Problem 8 of Activity 2, and Problem 11 of Activity 3 in the Student Edition on pages 396-400. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 396-400.
Unit 4, Lesson 3: Solution by Substitution - In this lesson, students use the visual scales showing the weights of foxes and alligators to solve systems of equations using substitutions.	addition, subtraction, multiplication, division (integers)	MA.912.AR.9.1	See Problems 4, 5, and 7 of Activity 1 and Problem 9 of Activity 2 in the Student Edition on pages 405-407. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 405-407.
Unit 5 Lesson 8: Thinking Rationally - In this lesson, students write equivalent expressions using radicals and rational exponents as the explore and analyze visuals of student work examples.	Laws of Exponents	MA.912.NSO.1.1, MA.912.NSO.1.4	See Problems 1-4 of the Warm-Up, Problems 9 and 10 of Activity 2, and Problems 12 and 13 of Activity 3 in the Student Edition on pages 523, 526, and 528. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 523, 526, and 528.
Unit 5, Lesson 10: Rule the Roots - In this lesson, students perform multiplication and division with radicals as they analyze visuals of student work and explain their mathematical thinking.	multiplication, division (radicals)	MA.912.NSO.1.1, MA.912.NSO.1.2, MA.912.NSO.1.4	See Problems 5-8 of Activity 1 and Problems 9-13 of Activity 2 in the Student Edition on pages 540-542. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 540-542.

Unit 5, Lesson 11: Tame the Terms - In this lesson, students analyze visual of students work of addition and subtraction with radicals by discussing notices and wonders.	addition, subtraction (radicals)	MA.912.NSO.1.1, MA.912.NSO.1.2, MA.912.NSO.1.4	See Problems 2-8 of Activity 1 and Problems 9-11 of Activity 2 in the Student Edition on pages 548-550. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 548-550.
Unit 6, Lesson 8: What's My Graph? - In this lesson, students collaborate to explore strategies for graphing quadratic functions by hand using a table of values.	addition, subtraction, multiplication, squaring (integers)	MA.912.AR.3.7, MA.912.F.1.2	See Problem 1 of the Warm-Up and Problems 4-5 of Activity 1 in the Student Edition on pages 647-648. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 647-648.
Unit 7, Lesson 17: Formula Fluency - In this lesson, students build their fluency with the quadratic formula by solving problems given various equations, including error analysis and predicting error spots in using the formula accurately.	addition, subtraction, multiplication, division, squaring, and taking the square root	MA.912.AR.3.1, MA.912.NSO.1.4	See Problem 2 of Activity 1 in the Student Edition on page 840. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on page 840.

K-12 Mathematics Glossary	Term of Focus	Connecting Benchmark(s)	Integrated Terms within Student and Teacher Materials
The Student Edition and Teacher Editions both include an English-Spanish glossary located in the back of each volume. It can be reviewed using the ebook on the program reviewer site. When a term is defined for the first time in the Student Edition, is it shown in bold type. In the Teacher Edition, the first lesson page includes a vocabulary section and indicates new vocabulary and review vocabulary to facilitate instruction. The Lesson Practice Summary box includes all of the new terms of the lesson with their definitions and visual support as appropriate.	solution	MA.912.AR.2.1	In Unit 1, Lesson 1: Working Backwards, see Problem 3 of Activity 1 in the Student Edition on page 4. See also the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 4 and 5

Properties of Operations, Equality and Inequality	Property of Focus	Connecting Benchmark(s)	Integrated Properties within Student and Teacher Materials
Unit 1, Lesson 1: Working Backwards - In this lesson, students relate the working backwards strategy to the operation of a machine.	properties of equality, inverse operations	MA.912.AR.2.1, MA.8.AR.2.1	See Problems 2 and 3 of Activity 1 in the Student Edition on page 4. See the Notes in the Teacher Edition to Launch, Monitor and Differentiate the learning on page 4.
Unit 1, Lesson 2: Solving Strategies - In this lesson, students make choices on solving strategies based on analysis of the given conditions and solving preferences.	properties of equality, inverse operations	MA.912.AR.2.1, MA.8.AR.2.1	See Problem 1 of the Warm Up in the Student Edition on page 10 and Problems 2-5 of Activity 1 in the Student Edition on page 11. See the Notes in the Teacher Edition to Launch, Monitor and Differentiate the learning on pages 10 and 11.
Unit 1, Lesson 3: Same Position - In this lesson, students solve linear equations to determine when vehicles will meet on the same road.	properties of equality, inverse operations	MA.912.AR.2.1, MA.8.AR.2.1	See Problems 2-4 of Activity 1 in the Student Edition on page 18. See the Notes in the Teacher Edition to Launch, Monitor and Differentiate the learning on page 18.
Unit 1, Lesson 10: Pizza Delivery - In this lesson, students apply linear inequalities to contexts involving distance, time, and budget constraints.	properties of equality and inequality, inverse operations	MA.912.AR.2.6, MA.8.AR.2.8	See Problems 2-7 of Activity 1 in the Student Edition on pages 74-75. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 74-75.
Unit 1, Lesson 12: Solutions and Sheep - In this lesson, students apply their understanding of inequalities to describe the behavior of sheep eating grass.	properties of equality and inequality, inverse operations	MA.912.AR.2.6, MA.8.AR.2.8	See Problem 1 of the Warm Up in the Student Edition on page 88 and Problems 5 and 6 of Activity 1 in the Student Edition on page 90. See the Notes in the Teacher Edition to Launch, Monitor and Differentiate the learning on pages 88 and 90.

Unit 1, Lesson 13: Tick Tock - In this lesson, students use inequality statements and graphs to describe real-world behavior of sleep.	properties of equality and inequality, inverse operations	MA.912.AR.2.6, MA.8.AR.2.8	See Problems 1-4 of the Warm Up in the Student Edition on page 96 and Problems 5-8 of Activity 1 in the Student Edition on page 97. See the Notes in the Teacher Edition to Launch, Monitor, Differentiate and Connect the learning on pages 96 and 97.
Unit 1, Lesson 14: Absolute Value Solutions - In this lesson, students apply their fluency with equations and inequalities as they explore absolute value relationships.	distributive property, properties of equality and inequality, inverse operations	MA.912.AR.4.1	See Problem 7 of Activity 2 in the Student Edition on page 108. See the Notes in the Teacher Edition to Launch, Monitor, Differentiate and Connect the learning on page 108.
Unit 4, Lesson 1: Eliminating Shapes - In this lesson, students solve systems of equations using elimination with visuals of heart and star shapes representing the variables.	opposites, zero pairs, additive inverses	MA.912.AR.9.1	See Problems 1-4 of the Warm Up in the Student Edition on page 387. See the Notes in the Teacher Edition to Launch and Connect the learning on page 387.
Unit 4, Lesson 3: Solution by Substitution - In this lesson, students use the visual scales showing the weights of foxes and alligators to solve systems of equations using substitutions.	distributive property, properties of equality, inverse operations	MA.912.AR.9.1	See Problem 6 of Activity 1 in the Student Edition on page 406. See the Notes in the Teacher Edition to Connect the learning on page 406.
Unit 5 Lesson 8: Thinking Rationally - In this lesson, students write equivalent expressions using radicals and rational exponents as the explore and analyze visuals of student work examples.	rational exponents, Laws of Exponents	MA.912.NSO.1.1, MA.912.NSO.1.4	See Problems 1-4 of the Warm-Up, Problems 5-8 of Activity 1, Problems 9-11 of Activity 2, and Problems 12 and 13 of Activity 3 in the Student Edition on pages 523-528. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 523-528.
Unit 5 Lesson 9: Writing Radicals - In this lesson, students explore rational exponents with numerators other than 1 by analyzing visuals of student work examples.	rational exponents, Laws of Exponents	MA.912.NSO.1.1, MA.912.NSO.1.2, MA.912.NSO.1.4	See Problems 1-4 of the Warm-Up and Problems 2-6 of Activity 1 in the Student Edition on pages 532-533. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 532-533.

K-12 Formulas	Formula of Focus	Connecting Benchmark(s)	Integrated Formulas within Student and Teacher Materials
Unit 1, Lesson 9: House Design - In this lesson, students use equations in a real-world context as they examine different views of a house and evaluate the costs to hire a contractor.	Slope formula, slope-intercept form	MA.912.AR.2.3	See Problems 2 and 3 of Activity 1 in the Student Edition on pages 65-66. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 65-66.
Unit 1, Lesson 16: Bracelet Budgets - In this lesson, students use two-variable linear inequalities to design a bracelet within constraints of inventory and price.	Standard form, point-slope form, slope-intercept form	MA.912.AR.2.7	See Problems 12-14 of Activity 3 in the Student Edition on page 128. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on page 128.
Unit 2, Lesson 14: City Slopes - In this lesson, students extend their understanding of interpreting the slope and y-intercept of a linear function to make predictions about temperatures in different cities.	Slope formula, slope-intercept form	MA.912.DP.2.4 , MA.912.DP.2.6	See Problems 2-4 of Activity 1 in the Student Edition on page 251. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on page 251.
Unit 3, Lesson 7: Plane, Train, and Automobile - In this lesson, students calculate the average rate of change over a specified intervals of time to compare different modes of transportation in distance-time graphs.	Average rate of change formula	MA.912.F.1.3, MA.912.F.1.5	See Problem 5 of Activity 1, Problem 8 of Activity 2, and Problem 10 of Activity 3 in the Student Edition on pages 333, 335-336. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 333, 335-336.
Unit 5, Lesson 8: Thinking Rationally - In this lesson, students write equivalent expressions using radicals and rational exponents as the explore and analyze visuals of student work examples.	rational exponents, Laws of Exponents	MA.912.NSO.1.1, MA.912.NSO.1.4	See Problems 12 and 13 of Activity 3 in the Student Edition on page 528. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on page 528.
Unit 5, Lesson 9: Writing Radicals - In this lesson, students explore rational exponents with numerators other than 1 by analyzing visuals of student work examples.	rational exponents, Laws of Exponents	MA.912.NSO.1.1, MA.912.NSO.1.4	See Problems 2-6 of Activity 1 in the Student Edition on page 533. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on page 533.

Unit 5, Lesson 12: Bank Accounts - In this lesson, students model situations involving simple and compound interest through visual representations for two accounts earning interest.	Simple interest formula, compound interest formula	MA.912.FL.3.2, MA.912.FL.3.4, MA.912.F.1.6, MA.912.F.1.8	See Problems 3-7 of Activity 1, Problems 8-10 of Activity 2, and the Summary in the Student Edition on pages 556-560. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on pages 556-560.
Unit 5, Lesson 13: Payday Loan - In this lesson, students analyze exponential functions that represent different compound interest scenarios through payday loans and credit card offers.	Compound interest formula	MA.912.FL.3.2, MA.912.FL.3.4, MA.912.NSO.1.1, MA.912.NSO.1.2	See Problems 2-7 of Activity 1 in the Student Edition on pages 564-565. See the Notes in the Teacher Edition to Launch, Monitor, Differentiate and Connect the learning on pages 564-565.
Unit 5, Lesson 14: Credit Card Compounding - In this lesson, students explore how credit card debt and its compounding interest demonstrates exponential growth and how it can significantly impact personal finances.	Compound interest formula	MA.912.FL.3.2, MA.912.FL.3.4, MA.912.NSO.1.1, MA.912.NSO.1.2	See Problems 1-9 of Activities 1-3 in the Student Edition on pages 572-575. See the Notes in the Teacher Edition to Launch, Monitor, Differentiate and Connect the learning on pages 572-575.
Unit 5, Lesson 15 :Exploring Interest - In this lesson, students compare the relationships between different types of interest and different types of functions through simple interest savings accounts.	Compound interest formula, including compounding continuously	MA.912.FL.3.4	See Problem 3 of Activity 1 and Problems 5-8 of Activity 2 in the Student Edition on pages 581-583. See the Notes in the Teacher Edition to Launch and Connect the learning on pages 581-583.
Unit 7, Lesson 16: Formula Foundations - In this lesson, students apply their understanding of completing the square to derive the quadratic formula through a series of guided activities.	Quadratic formula	MA.912.AR.1.2, MA.912.AR.3.1, MA.912.NSO.1.4	See Problems 2 and 3 of Activity 1 in the Student Edition on page 832. See the Notes in the Teacher Edition to Launch, Monitor and Connect the learning on page 832.
Unit 7, Lesson 17: Formula Fluency - In this lesson, students build their fluency with the quadratic formula by solving problems given various equations, including error analysis and predicting error spots in using the formula accurately.	Quadratic formula	MA.912.AR.3.1, MA.912.NSO.1.4	See Problems 2 and 3 of Activity 1 in the Student Edition on page 840. See the Notes in the Teacher Edition to Launch, Monitor, Differentiate and Connect the learning on page 840.