

A Correlation of



Integrated Mathematics, ©2019



To the
**North Carolina
Standard Course of Study 2019
North Carolina Math 1**

**A Correlation of enVision Integrated Mathematics, ©2019
to the North Carolina Standard Course of Study - North Carolina Math 1**

Table of Contents

Standards for Mathematical Practice	1
Number and Quantity	3
Algebra	4
Functions	8
Geometry	12
Statistics and Probability	12

**A Correlation of enVision Integrated Mathematics, ©2019
to the North Carolina Standard Course of Study - North Carolina Math 1**

North Carolina Standard Course of Study 2019 North Carolina Math 1	enVision Integrated Mathematics, ©2019
Standards for Mathematical Practice	
1. Make sense of problems and persevere in solving them.	<p>Mathematical practices are referenced throughout the enVision Integrated Mathematics series. The following citations are sample references.</p> <p>Mathematics I SE/TE: 8, 31, 47, 57, 68, 72, 76, 88, 111, 152 TE: 24A-24B, 32, 37A, 59, 84, 137B, 147, 158B, 191B, 200</p> <p>Mathematics II SE/TE: 5, 10, 17, 25, 33, 54, 62, 68, 73-74, 81 TE: 18A, 34B, 55A, 75B, 83B, 111, 120, 151B, 164B, 191B</p>
2. Reason abstractly and quantitatively.	<p>Mathematical practices are referenced throughout the enVision Integrated Mathematics series. The following citations are sample references.</p> <p>Mathematics I SE/TE: 23, 27, 63, 86, 105, 111, 118, 131-133, 141, 145 TE: 12A, 63A, 83A, 104A, 112A, 137A, 144A, 151B, 219A, 236A</p> <p>Mathematics II SE/TE: 10, 31, 54, 62, 86, 88, 99, 109, 301, 352 TE: 47A, 83A, 89A, 205B, 212A, 229A-229B, 297A, 311A-311B, 319B, 328</p>
3. Construct viable arguments and critique the reasoning of others.	<p>Mathematical practices are referenced throughout the enVision Integrated Mathematics series. The following citations are sample references.</p> <p>Mathematics I SE/TE: 11, 17, 28, 56, 67, 102, 116, 120, 170, 182 TE: 12, 18B, 24A, 53, 57A, 63A, 89B, 177A, 184A, 195</p> <p>Mathematics II SE/TE: 9, 15-16, 23-24, 31, 38, 52-53, 60, 66, 341, 482 TE: 5B, 11A, 47A, 69B, 117A, 145A, 191B, 205A, 374A, 391A</p>

**A Correlation of enVision Integrated Mathematics, ©2019
to the North Carolina Standard Course of Study - North Carolina Math 1**

<p align="center">North Carolina Standard Course of Study 2019 North Carolina Math 1</p>	<p align="center">enVision Integrated Mathematics, ©2019</p>
<p>4. Model with mathematics.</p>	<p>Mathematical practices are referenced throughout the enVision Integrated Mathematics series. The following citations are sample references.</p> <p>Mathematics I SE/TE: 44, 62, 68, 77, 88, 91, 128, 133, 157, 171-172 TE: 30, 51A, 69, 89A, 96A, 103-103B, 164-164B, 165A, 191A, 212-212B</p> <p>Mathematics II SE/TE: 26, 82, 131, 176, 190, 236, 327, 364, 444, 498 TE: 26-26B, 82-82B, 131-131B, 176-176B, 190-190B, 236-236B, 327-327B, 364-364B, 444-444B, 498-498B</p>
<p>5. Use appropriate tools strategically.</p>	<p>Mathematical practices are referenced throughout the enVision Integrated Mathematics series. The following citations are sample references.</p> <p>Mathematics I SE/TE: 23, 144, 148, 156, 168, 183, 197, 204, 210, 234 TE: 85, 98, 112B, 120A, 139, 160, 185, 224, 228A, 236B</p> <p>Mathematics II SE/TE: 17, 30, 32, 39, 60-61, 65, 76, 80, 147, 168 TE: 27A, 37, 64, 70, 75A, 84, 118, 170B, 237B, 283</p>
<p>6. Attend to precision.</p>	<p>Mathematical practices are referenced throughout the enVision Integrated Mathematics series. The following citations are sample references.</p> <p>Mathematics I SE/TE: 10-11, 21, 54, 66, 87, 93, 109, 117, 142, 412-413 TE: 31A, 33, 57A, 89A, 104A, 250A, 319A, 335A, 363A, 396A</p> <p>Mathematics II SE/TE: 8, 15, 23-24, 33, 40, 43, 52, 79, 107, 121 TE: 13, 27A, 28, 51, 55B, 65, 89B, 126, 132B, 146</p>

**A Correlation of enVision Integrated Mathematics, ©2019
to the North Carolina Standard Course of Study - North Carolina Math 1**

North Carolina Standard Course of Study 2019 North Carolina Math 1	enVision Integrated Mathematics, ©2019
7. Look for and make use of structure.	<p>Mathematical practices are referenced throughout the enVision Integrated Mathematics series. The following citations are sample references.</p> <p>Mathematics I SE/TE: 42, 46, 55, 66-67, 75-76, 83, 89, 95, 100, 104 TE: 19, 26, 51A, 70A, 96A, 187, 207, 265B, 319B, 329</p> <p>Mathematics II SE/TE: 17, 51, 123, 125, 135, 174, 218, 267, 352, 363 TE: 47B, 69A, 83A, 89A, 103A, 120, 216, 330, 383, 521B</p>
8. Look for and express regularity in repeated reasoning.	<p>Mathematical practices are referenced throughout the enVision Integrated Mathematics series. The following citations are sample references.</p> <p>Mathematics I SE/TE: 16, 35, 60, 62, 127, 156, 162, 172, 197, 202-203 TE: 31A, 70A, 83A, 120A, 151A, 158A, 177A, 199A, 242A, 285A</p> <p>Mathematics II SE/TE: 11, 35, 57, 63, 67, 108, 137, 149, 155, 188 TE: 18B-18, 20, 22, 34A, 63A, 103A, 132A, 183A, 304A, 422A</p>
Number and Quantity	
The Real Number System	
Extend the properties of exponents to rational exponents.	
NC.M1.N-RN.2 Rewrite algebraic expressions with integer exponents using the properties of exponents.	<p>Mathematics I SE: 177-183 TE: 177A-183B</p> <p>Mathematics II SE: 11-17 TE: 11A-17B</p>

**A Correlation of enVision Integrated Mathematics, ©2019
to the North Carolina Standard Course of Study - North Carolina Math 1**

North Carolina Standard Course of Study 2019 North Carolina Math 1	enVision Integrated Mathematics, ©2019
Algebra	
Seeing Structure in Expressions	
Interpret the structure of expressions.	
NC.M1.A-SSE.1 Interpret expressions that represent a quantity in terms of its context.	<p>Mathematics I SE/TE: 6-8, 14, 19, 22-23, 26, 29, 30, 31, 33, 38 TE: 7, 18B, 20, 24B, 30-30B, 31, 37B, 69-69B, 103-103B</p> <p>Mathematics II SE/TE: 51, 54, 59, 61, 74, 81, 88, 105, 109, 113 TE: 83B, 88B, 130A, 132B, 170B, 175B, 197B, 204A, 255A, 26-262B</p>
NC.M1.A-SSE.1a Identify and interpret parts of a linear, exponential, or quadratic expression, including terms, factors, coefficients, and exponents.	<p>Mathematics I SE/TE: 9, 13-15, 19, 25, 27, 51, 53-54, 74, 99-102, 130 TE: 18A, 23B, 31A, 51A-51B, 70, 102B, 157A, 184, 198B, 272B</p> <p>Mathematics II SE/TE: 30, 47, 49, 52, 71, 75, 195, 199, 203, 215 TE: 47B, 54B, 55B, 69A, 83B, 89A-89B, 151B, 158A, 170A-170B, 249A</p>
NC.M1.A-SSE.1b Interpret a linear, exponential, or quadratic expression made of multiple parts as a combination of entities to give meaning to an expression.	<p>Mathematics I SE: 191-198 TE: 191A-198B</p> <p>Mathematics II SE: 18-25, 27-33, 47-54, 55-62, 63-68, 110-116, 117-123, 229-235, 237-242, 275-280 TE: 18A-25B, 27A-33B, 47A-54B, 55A-62B, 63A-68B, 110A-116B, 117A-123B, 229A-235B, 237A-242B, 275A-280B</p>
Seeing Structure in Expressions	
Write expressions in equivalent forms to solve problems.	
NC.M1.A-SSE.3 Write an equivalent form of a quadratic expression ax^2+bx+c , where a is an integer, by factoring to reveal the solutions of the equation or the zeros of the function the expression defines.	<p>Mathematics II SE: 69-74, 75-81, 83-88, 89-94, 151-157 TE: 69A-74B, 75A-81B, 83A-88B, 89A-94B, 151A-157B</p>

**A Correlation of enVision Integrated Mathematics, ©2019
to the North Carolina Standard Course of Study - North Carolina Math 1**

North Carolina Standard Course of Study 2019 North Carolina Math 1	enVision Integrated Mathematics, ©2019
Arithmetic with Polynomial Expressions	
Perform arithmetic operations on polynomials.	
NC.M1.A-APR.1 Build an understanding that operations with polynomials are comparable to operations with integers by adding and subtracting quadratic expressions and by adding, subtracting, and multiplying linear expressions.	Mathematics II SE: 47-54, 55-62, 63-68 TE: 47A-54B, 55A-62B, 63A-68B
Arithmetic with Polynomial Expressions	
Understand the relationship between zeros and factors of polynomials.	
NC.M1.A-APR.3 Understand the relationships among the factors of a quadratic expression, the solutions of a quadratic equation, and the zeros of a quadratic function.	Mathematics II SE: 69-74, 75-81, 83-88, 89-94, 103-109, 110-116, 117-123, 145-150, 151-157 TE: 69A-74B, 75A-81B, 83A-88B, 89A-94B, 103A-109B, 110A-116B, 117A-123B, 145A-150B, 151A-157B
Creating Equations	
Create equations that describe numbers or relationships.	
NC.M1.A-CED.1 Create equations and inequalities in one variable that represent linear, exponential, and quadratic relationships and use them to solve problems.	Mathematics I SE/TE: 5-11, 12-17, 24-29, 31-36, 89-95, 184-190, 191-198 TE: 5A-11B, 12A-17B, 24A-29B, 31A-36B, 89A-95B, 184A-190B, 191A-198B Mathematics II SE: 145-150, 151-157, 164-169, 191-197, 198-204 TE: 145A-150B, 151A-157B, 164A-169B, 191A-197B, 198A-204B
NC.M1.A-CED.2 Create and graph equations in two variables to represent linear, exponential, and quadratic relationships between quantities.	Mathematics I SE: 18-23, 51-56, 57-62, 63-68, 70-76, 89-95, 96-102, 184-190, 191-198, 206-211 TE: 18A-23B, 51A-56B, 57A-62B, 63A-68B, 70A-76B, 89A-95B, 96A-102B, 184A-190B, 191A-198B, 206A-211B Mathematics II SE: 18-25, 27-33, 34-40, 103-109, 110-116, 117-123, 124-130, 229-235, 237-242, 243-248 TE: 18A-25B, 27A-33B, 34A-40B, 103A-109B, 110A-116B, 117A-123B, 124A-130B, 229A-235B, 237A-242B, 243A-248B

**A Correlation of enVision Integrated Mathematics, ©2019
to the North Carolina Standard Course of Study - North Carolina Math 1**

North Carolina Standard Course of Study 2019 North Carolina Math 1	enVision Integrated Mathematics, ©2019
NC.M1.A-CED.3 Create systems of linear equations and inequalities to model situations in context.	<p>Mathematics I SE: 5-11, 12-17, 24-29, 31-36, 37-43, 137-143, 144-150, 151-157, 158-163, 165-170 TE: 5A-11B, 12A-17B, 24A-29B, 31A-36B, 37A-43B, 137A-143B, 144A-150B, 151A-157B, 158A-163B, 165A-170B</p> <p>Mathematics II SE: 145-150, 151-157, 164-169, 170-175, 191-197, 198-204, 205-211 TE: 145A-150B, 151A-157B, 164A-169B, 170A-175B, 191A-197B, 198A-204B, 205A-211B</p>
NC.M1.A-CED.4 Solve for a quantity of interest in formulas used in science and mathematics using the same reasoning as in solving equations.	<p>Mathematics I SE: 18-23 TE: 18A-23B</p> <p>Mathematics II SE/TE: 50</p>
Reasoning with Equations and Inequalities	
Understand solving equations as a process of reasoning and explain the reasoning.	
NC.M1.A-REI.1 Justify a chosen solution method and each step of the solving process for linear and quadratic equations using mathematical reasoning.	<p>Mathematics I SE: 5-11, 12-17, 37-39, 41-42, 178-183 TE: 5A-11B, 12A-17B, 37A-39, 43A-43B, 178-183B</p> <p>Mathematics II SE: 145-150, 151-157, 164-169, 183, 186-189, 191-197, 198-204 TE: 145A-150B, 151A-157B, 164A-169B, 183A-189B, 191A-197B, 198A-204B</p>
Reasoning with Equations and Inequalities	
Solve equations and inequalities in one variable.	
NC.M1.A-REI.3 Solve linear equations and inequalities in one variable.	<p>Mathematics I SE: 5-11, 12-17, 18-23, 24-29, 31-36 TE: 5A-11B, 12A-17B, 18A-23B, 24A-29B, 31A-36B</p>
NC.M1.A-REI.4 Solve for the real solutions of quadratic equations in one variable by taking square roots and factoring.	<p>Mathematics II SE: 145-150, 151-157, 164-169, 191-197, 198-204 TE: 145A-150B, 151A-157B, 164A-169B, 191A-197B, 198A-204B</p>

**A Correlation of enVision Integrated Mathematics, ©2019
to the North Carolina Standard Course of Study - North Carolina Math 1**

North Carolina Standard Course of Study 2019 North Carolina Math 1	enVision Integrated Mathematics, ©2019
Reasoning with Equations and Inequalities	
Solve systems of equations.	
NC.M1.A-REI.5 Explain why replacing one equation in a system of linear equations by the sum of that equation and a multiple of the other produces a system with the same solutions.	<p>Mathematics I SE: 144-150, 151-157 TE: 144A-150B, 151A-157B</p> <p>Mathematics II SE: 170-175, 205-211 TE: 170A-175B, 205A-211B</p>
NC.M1.A-REI.6 Use tables, graphs, or algebraic methods (substitution and elimination) to find approximate or exact solutions to systems of linear equations and interpret solutions in terms of a context.	<p>Mathematics I SE: 137-143, 144-150, 151-157 TE: 137A-143B, 144A-150B, 151A-157B</p> <p>Mathematics II SE: 170-175, 205-211 TE: 170A-175B, 205A-211B</p>
Reasoning with Equations and Inequalities	
Represent and solve equations and inequalities graphically	
NC.M1.A-REI.10 Understand that the graph of a two variable equation represents the set of all solutions to the equation.	<p>Mathematics I SE: 51-56, 57-62, 63-68, 70-76, 137-143 TE: 51A-56B, 57A-62B, 63A-68B, 70A-76B, 137A-143B</p> <p>Mathematics II SE: 27-33, 34-40, 103-109, 110-116, 117-123, 124-130, 229-235, 256-262, 263-268, 269-274 TE: 27A-33B, 34A-40B, 103A-109B, 110A-116B, 117A-123B, 124A-130B, 229A-235B, 256A-262B, 263A-268B, 269A-274B</p>
NC.M1.A-REI.11 Build an understanding of why the x-coordinates of the points where the graphs of two linear, exponential, and/or quadratic equations $y=(x)$ and $y=g(x)$ intersect are the solutions of the equation $f(x)=g(x)$ and approximate solutions using graphing technology or successive approximations with a table of values.	<p>Mathematics I SE:137-143 TE: 137A-143B</p> <p>Mathematics II SE: 170-175 TE: 170A-175B</p>
NC.M1.A-REI.12 Represent the solutions of a linear inequality or a system of linear inequalities graphically as a region of the plane.	<p>Mathematics I SE: 158-163, 165-170 TE: 158A-163B, 165A-170B</p> <p>Mathematics II SE/TE: 207-208</p>

**A Correlation of enVision Integrated Mathematics, ©2019
to the North Carolina Standard Course of Study - North Carolina Math 1**

North Carolina Standard Course of Study 2019 North Carolina Math 1	enVision Integrated Mathematics, ©2019
Functions	
Interpreting Functions	
Understand the concept of a function and use function notation.	
<p>NC.M1.F-IF.1 Build an understanding that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range by recognizing that:</p> <ul style="list-style-type: none"> • if f is a function and x is an element of its domain, then $f(x)$ denotes the output of f corresponding to the input x. • the graph of f is the graph of the equation $y = f(x)$. 	<p>Mathematics I SE: 83-88, 89-95, 184-190 TE: 83A-88B, 89A-95B, 184A-190B</p> <p>Mathematics II SE: 18-25, 27-33, 34-40, 103-109, 110-116, 117-123, 124-130, 229-235, 237-242, 243-248, 249-255, 263-268 TE: 18A-25B, 27A-33B, 34A-40B, 103A-109B, 110A-116B, 117A-123B, 124A-130B, 229A-235B, 237A-242B, 243A-248B, 249A-255B, 263A-268B</p>
<p>NC.M1.F-IF.2 Use function notation to evaluate linear, quadratic, and exponential functions for inputs in their domains, and interpret statements that use function notation in terms of a context.</p>	<p>Mathematics I SE: 83-88, 89-95, 96-102, 184-190, 206-211 TE: 83A-88B, 89A-95B, 96A-102B, 184A-190B, 206A-211B</p> <p>Mathematics II SE: 249-255, 263-268, 422-428 TE: 249A-255B, 263A-268B, 422A-428B</p>
<p>NC.M1.F-IF.3 Recognize that recursively and explicitly defined sequences are functions whose domain is a subset of the integers, the terms of an arithmetic sequence are a subset of the range of a linear function, and the terms of a geometric sequence are a subset of the range of an exponential function.</p>	<p>Mathematics I SE: 104-111, 199-205 TE: 104A-111B, 199A-205B</p> <p>Mathematics II SE/TE: 439 TE: 460B, 576B, 593B</p>
Interpreting Functions	
Interpret functions that arise in applications in terms of the context.	
<p>NC.M1.F-IF.4 Interpret key features of graphs, tables, and verbal descriptions in context to describe functions that arise in applications relating two quantities, including: intercepts; intervals where the function is increasing, decreasing, positive, or negative; and maximums and minimums.</p>	<p>Mathematics I SE: 83-88, 89-95, 96-102, 184-190, 206-211 TE: 83A-88B, 89A-95B, 96A-102B, 184A-190B, 206A-211B</p> <p>Mathematics II SE: 18-25, 27-33, 34-40, 103-109, 110-116, 117-123, 124-130, 229-235, 237-242, 243-248 TE: 18A-25B, 27A-33B, 34A-40B, 103A-109B, 110A-116B, 117A-123B, 124A-130B, 229A-235B, 237A-242B, 243A-248B</p>

**A Correlation of enVision Integrated Mathematics, ©2019
to the North Carolina Standard Course of Study - North Carolina Math 1**

North Carolina Standard Course of Study 2019 North Carolina Math 1	enVision Integrated Mathematics, ©2019
NC.M1.F-IF.5 Interpret a function in terms of the context by relating its domain and range to its graph and, where applicable, to the quantitative relationship it describes.	<p>Mathematics I SE/TE: 83-88, 89-95, 96-102, 184-190, 206-211 TE: 83A-88B, 89A-95B, 96A-102B, 184A-190B, 206A-211B</p> <p>Mathematics II SE: 18-25, 27-33, 34-40, 103-109, 110-116, 117-123, 124-130, 229-235, 237-242, 243-248 TE: 18A-25B, 27A-33B, 34A-40B, 103A-109B, 110A-116B, 117A-123B, 124A-130B, 229A-235B, 237A-242B, 243A-248B</p>
NC.M1.F-IF.6 Calculate and interpret the average rate of change over a specified interval for a function presented numerically, graphically, and/or symbolically.	<p>Mathematics I SE: 83-88, 89-95, 96-102, 184-190, 206-211 TE: 83A-88B, 89A-95B, 96A-102B, 184A-190B, 206A-211B</p> <p>Mathematics II SE: 27-33, 34-40, 103-109, 242, 248 TE: 27A-33B, 34A-40B, 103A-109B, 243A, 248A-248B, 270</p>
<p>Interpreting Functions Analyze functions using different representations.</p>	
NC.M1.F-IF.7 Analyze linear, exponential, and quadratic functions by generating different representations, by hand in simple cases and using technology for more complicated cases, to show key features, including: domain and range; rate of change; intercepts; intervals where the function is increasing, decreasing, positive, or negative; maximums and minimums; and end behavior.	<p>Mathematics I SE: 83-88, 89-95, 96-102, 184-190, 206-211 TE: 83A-88B, 89A-95B, 96A-102B, 184A-190B, 206A-211B</p> <p>Mathematics II SE: 18-25, 27-33, 34-40, 103-109, 110-116, 117-123, 124-130, 229-235, 237-242, 243-248 TE: 18A-25B, 27A-33B, 34A-40B, 103A-109B, 110A-116B, 117A-123B, 124A-130B, 229A-235B, 237A-242B, 243A-248B</p>
NC.M1.F-IF.8 Use equivalent expressions to reveal and explain different properties of a function.	<p>Mathematics I SE: 51-56, 57-62, 63-68, 70-76 TE: 51A-56B, 57A-62B, 63A-68B, 70A-76B</p> <p>Mathematics II SE: 18-25, 76-83, 92-99, 103-109, 110-116, 117-123 TE: 18A-25B, 76A-83B, 92A-99B, 103A-109B, 110A-116B, 117A-123B</p>

**A Correlation of enVision Integrated Mathematics, ©2019
to the North Carolina Standard Course of Study - North Carolina Math 1**

North Carolina Standard Course of Study 2019 North Carolina Math 1	enVision Integrated Mathematics, ©2019
NC.M1.F-IF.8a Rewrite a quadratic function to reveal and explain different key features of the function	Mathematics II SE: 69-74, 75-81, 83-88, 89-94, 151-157, 191-197 TE: 69A-74B, 75A-81B, 83A-88B, 89A-94B, 151A-157B, 191A-197B
NC.M1.F-IF.8b Interpret and explain growth and decay rates for an exponential function.	Mathematics I SE: 184-190, 191-198, 199-205, 206-211 TE: 184A-190B, 191A-198B, 199A-205B, 206A-211B Mathematics II SE: 18-25 TE: 18A-25B
NC.M1.F-IF.9 Compare key features of two functions (linear, quadratic, or exponential) each with a different representation (symbolically, graphically, numerically in tables, or by verbal descriptions).	Mathematics I SE/TE: 186, 209, 211 TE: 174F, 206A Mathematics II SE/TE: 30 TE: 124B, 131-131B
Building Functions	
Build a function that models a relationship between two quantities.	
NC.M1.F-BF.1 Write a function that describes a relationship between two quantities.	Mathematics I SE: 89-95, 96-102, 103, 104-111, 112-119, 120-128, 184-190, 191-198, 206-211, 212 TE: 89A-95B, 96A-102B, 103-103B, 104A-111B, 112A-119B, 120A-128B, 184A-190B, 191A-198B, 206A-211B, 212-212B Mathematics II SE: 18-25, 27-33, 34-40, 103-109, 110-116, 117-123, 124-130, 229-235, 237-242, 243-248 TE: 18A-25B, 27A-33B, 34A-40B, 103A-109B, 110A-116B, 117A-123B, 124A-130B, 229A-235B, 237A-242B, 243A-248B
NC.M1.F-BF.1a Build linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two ordered pairs (include reading these from a table).	Mathematics I SE: 89-95, 96-102, 103, 104-111, 112-119, 120-128, 184-190, 191-198, 199-205, 206-211, 212 TE: 89A-95B, 96A-102B, 103-103B, 104A-111B, 112A-119B, 120A-128B, 184A-190B, 191A-198B, 199A-205B, 206A-211B, 212-212B, 248B Mathematics II SE/TE: 188 TE: 183A

**A Correlation of enVision Integrated Mathematics, ©2019
to the North Carolina Standard Course of Study - North Carolina Math 1**

North Carolina Standard Course of Study 2019 North Carolina Math 1	enVision Integrated Mathematics, ©2019
NC.M1.F-BF.1b Build a function that models a relationship between two quantities by combining linear, exponential, or quadratic functions with addition and subtraction or two linear functions with multiplication.	<p>Mathematics I SE: 96-102, 206-211 TE: 96A-102B, 206A-211B</p> <p>Mathematics II SE: 275-280 TE: 275A-280B</p>
NC.M1.F-BF.2 Translate between explicit and recursive forms of arithmetic and geometric sequences and use both to model situations.	<p>Mathematics I SE: 104-111, 199-205 TE: 104A-111B, 199A-205B, 248B</p>
Linear, Quadratic, and Exponential Models	
Construct and compare linear and exponential models and solve problems.	
NC.M1.F-LE.1 Identify situations that can be modeled with linear and exponential functions, and justify the most appropriate model for a situation based on the rate of change over equal intervals.	<p>Mathematics I SE: 89-95, 96-102, 103, 184-190, 191-198, 206-211, 212 TE: 89A-95B, 96A-102B, 103-103B, 104A-111B, 184A-190B, 191A-198B, 206A-211B, 212-212B</p> <p>Mathematics II SE: 18-25, 26, 132-139 TE: 18A-25B, 26-26B, 132A-139B</p>
NC.M1.F-LE.3 Compare the end behavior of linear, exponential, and quadratic functions using graphs and tables to show that a quantity increasing exponentially eventually exceeds a quantity increasing linearly or quadratically.	<p>Mathematics I SE/TE: 187, 189-190, 192 TE: 184A-184B</p> <p>Mathematics II SE: 18-25, 26, 132-139 TE: 18A-25B, 26-26B, 132A-139B</p>
Linear, Quadratic, and Exponential Models	
Interpret expressions for functions in terms of the situation they model.	
NC.M1.F-LE.5 Interpret the parameters a and b in a linear function $(x)=ax+b$ or an exponential function $g(x)=ab^x$ in terms of a context.	<p>Mathematics I SE: 89-95, 96-102, 103, 120-128, 184-190, 191-198, 206-211, 212 TE: 89A-95B, 96A-102B, 103-103B, 104A-111B, 120A-128B, 184A-190B, 191A-198B, 206A-211B, 212-212B</p> <p>Mathematics II SE: 18-25, 26, 132-139 TE: 18A-25B, 26-26B, 132A-139B</p>

**A Correlation of enVision Integrated Mathematics, ©2019
to the North Carolina Standard Course of Study - North Carolina Math 1**

North Carolina Standard Course of Study 2019 North Carolina Math 1	enVision Integrated Mathematics, ©2019
Geometry	
Expressing Geometric Properties with Equations	
Use coordinates to prove simple geometric theorems algebraically.	
NC.M1.G-GPE.4 Use coordinates to solve geometric problems involving polygons algebraically • Use coordinates to compute perimeters of polygons and areas of triangles and rectangles. • Use coordinates to verify algebraically that a given set of points produces a particular type of triangle or quadrilateral.	Mathematics I SE: 408-414 TE: 408A-414B Mathematics II SE: 543-549 TE: 543A-549B
NC.M1.G-GPE.5 Use coordinates to prove the slope criteria for parallel and perpendicular lines and use them to solve problems. • Determine if two lines are parallel, perpendicular, or neither. • Find the equation of a line parallel or perpendicular to a given line that passes through a given point.	Mathematics I SE: 306-312 TE: 306A-312B Mathematics II SE: 466-472 TE: 466A-472B
NC.M1.G-GPE.6 Use coordinates to find the midpoint or endpoint of a line segment.	This standard is taught in enVision Mathematics, Integrated Mathematics III. Please see: SE/TE: 488-490 For related content in enVision Mathematics, Integrated Mathematics II, please see: SE/TE: 319-321, 445-446, 448, 451 TE: 445B, 451B
Statistics and Probability	
Interpreting Categorical and Quantitative Data	
Summarize, represent, and interpret data on a single count or measurement variable.	
NC.M1.S-ID.1 Use technology to represent data with plots on the real number line (histograms, and box plots).	Mathematics I SE: 431-437, 438-445, 446-452 TE: 431A-437B, 438A-445B, 446A-452B
NC.M1.S-ID.2 Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. Interpret differences in shape, center, and spread in the context of the data sets.	Mathematics I SE: 438-445, 446-452, 453-460 TE: 438A-445B, 446A-452B, 453A-460B
NC.M1.S-ID.3 Examine the effects of extreme data points (outliers) on shape, center, and/or spread.	Mathematics I SE: 438-445, 446-452, 453-460, 467 TE: 438A-445B, 446A-452B, 453A-460B, 467-467B

**A Correlation of enVision Integrated Mathematics, ©2019
to the North Carolina Standard Course of Study - North Carolina Math 1**

North Carolina Standard Course of Study 2019 North Carolina Math 1	enVision Integrated Mathematics, ©2019
Interpreting Categorical and Quantitative Data	
Summarize, represent, and interpret data on two categorical and quantitative variables.	
NC.M1.S-ID.6 Represent data on two quantitative variables on a scatter plot, and describe how the variables are related.	Mathematics I SE: 112-119, 120-128 TE: 112A-119B, 120A-128B Mathematics II SE: 22, 132-139 TE: 132-139B
NC.M1.S-ID.6a Fit a least squares regression line to linear data using technology. Use the fitted function to solve problems.	Mathematics I SE: 112-119, 120-128 TE: 112A-119B, 120A-128B Mathematics II SE: 22, 132-139 TE: 132-139B
NC.M1.S-ID.6b Assess the fit of a linear function by analyzing residuals.	Mathematics I SE: 120-128 TE: 120A-128B Mathematics II SE: 22, 132-139 TE: 132-139B
NC.M1.S-ID.6c Fit a function to exponential data using technology. Use the fitted function to solve problems.	Mathematics I SE: 112A-119B, 120A-128B TE: 112A-119B, 120A-128B Mathematics II SE: 22, 132-139 TE: 132-139B
Interpreting Categorical and Quantitative Data	
Interpret linear models.	
NC.M1.S-ID.7 Interpret in context the rate of change and the intercept of a linear model. Use the linear model to interpolate and extrapolate predicted values. Assess the validity of a predicted value.	Mathematics I SE: 112-119, 120-128 TE: 112A-119B, 120A-128B

**A Correlation of enVision Integrated Mathematics, ©2019
to the North Carolina Standard Course of Study - North Carolina Math 1**

<p align="center">North Carolina Standard Course of Study 2019 North Carolina Math 1</p>	<p align="center">enVision Integrated Mathematics, ©2019</p>
<p>NC.M1.S-ID.8 Analyze patterns and describe relationships between two variables in context. Using technology, determine the correlation coefficient of bivariate data and interpret it as a measure of the strength and direction of a linear relationship. Use a scatter plot, correlation coefficient, and a residual plot to determine the appropriateness of using a linear function to model a relationship between two variables.</p>	<p>Mathematics I SE: 112-119, 120-128 TE: 112A-119B, 120A-128B</p> <p>Mathematics II SE: 22, 132-139 TE: 22, 132A-139B</p>
<p>NC.M1.S-ID.9 Distinguish between association and causation.</p>	<p>Mathematics I SE: 112-119, 120-128 TE: 112A-119B, 120A-128B</p> <p>Mathematics II SE/TE: 138 TE: 17B</p>

©2021 Savvas Learning Company, LLC