Louisiana Guide to Implementing Eureka Math Squared
Algebra I

To assist teachers with the implementation of the Eureka Math Squared curriculum for Algebra I, this document provides multiple layers of guidance regarding how Eureka Math Squared lessons correlate with the Louisiana Student Standards for Mathematics (LSSM). Eureka Math Squared is a focused, coherent math curriculum that provides ample instructional guidance for teachers. This Louisiana Guide to Implementing Eureka Math Squared goes a step further to point out places in which teachers may need to make strategic decisions considering student needs and time availability by offering a suggested pacing calendar, highlighting the prerequisite standards and grade level standards by unit, detailing standards by lesson, and showcasing the alignment to the Louisiana Student Standards for Mathematics.

Unlike the implementation guides for the original Eureka Math, we are not suggesting the prioritization of lessons. Instead, it is recommended that the lessons be taught in the intended order, especially in the early years of implementing this new curriculum.

The guidance document is considered a “living” document. We believe that educators will find ways to make improvements to the guidance document as they use it. Please send feedback to STEM@la.gov.

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Algebra I Suggested Implementation Calendar

Algebra I	Module	Approximate Number of Days	Number of Lessons
Weeks 1-5	Module 1: Expressions, Equations, and Inequalities in One Variable	27 Days	23 Lessons
Weeks 6-10	Module 2: Equations and Inequalities in Two Variables	28 Days	24 Lessons
Weeks 11-15	Module 3: Functions and Their Representations	24 Days	23 Lessons
Weeks 15-20	Module 4: Quadratic Functions	31 Days	27 Lessons
Weeks 20-24	Module 5: Linear and Exponential Functions	28 Days	24 Lessons
Weeks 25-26	Module 6: Modeling with Functions	9 Days	7 Lessons

Alignment to Louisiana Student Standards for Mathematics

Focus in the Standards

Not all content at given grades is emphasized equally in the standards. Some clusters require greater emphasis than others based on the depth of ideas, the time that they take to master, and/or their importance to future mathematics or the demands of college and career readiness. More time in these areas is also necessary for students to meet the Louisiana Standards for Mathematical Practices. To say that some things have greater emphasis is not to say that anything in the standards can safely be neglected in instruction. Neglecting material will leave gaps in student skill and understanding and may leave students unprepared for the challenges of a later grade. Students should spend the large majority of their time on the major work on the grade (■). Supporting work (◘) and, where appropriate, additional work (○) can engage students in the major work of the grade.

Grade 9: Standards by Module					
Module 1	**Module 2**	**Module 3**	**Module 4**	**Module 5**	**Module 6**
A1.A-SSE.A.2	A1.A-CED.A.2	A1.F-IF.A.1	A1.F-IF.B.4	A1.F-IF.A.2	A1.A-CED.A.3
A1.A-APR.A.1	A1.A-CED.A.3	A1.F-IF.A.2	A1.F-IF.B.5	A1.F-IF.A.3	A1.A-REI.D.12
A1.A-REI.A.1	A1.A-REI.D.10	A1.F-IF.B.4	A1.F-IF.B.6	A1.F-IF.B.6	A1.N-Q.A.1
A1.A-REI.B.3	A1.A-REI.D.12	A1.F-IF.B.5	A1.A-SSE.A.1a	A1.A-SSE.A.1b	A1.N-Q.A.2
A1.A-CED.A.1	A1.A-ID.C.7	A1.A-REI.D.11	A1.A-SSE.A.2	A1.A-SSE.A.2	A1.F-LE.A.1
A1.A-CED.A.3	A1.A-ID.C.8	A1.F-BF.B.3	A1.A-REI.B.4a	A1.A-REI.D.11	A1.F-LE.A.2
A1.A-CED.A.4	A1.A-ID.C.9	A1.F-IF.C.7a	A1.A-REI.B.4b	A1.F-BF.B.3	A1.F-BF.A.1
A1.S-ID.A.2	A1.A.REI.C.5	A1.F-IF.C.7b	A1.A-REI.D.11	A1.F-BF.A.1a	A1.F-BF.A.1a
A1. S-ID.A.3	A1.A.REI.C.6	A1.F-IF.C.9	A1.A-CED.A.1	A1.F-LE.A.1	A1.S-ID.B.6a
	A1.A-ID.B.5	A1.F-BF.A.1a	A1.A-CED.A.2	A1.F-LE.A.1a	A1.S-ID.B.6b
	A1.A-ID.B.6		A1.A-CED.A.4	A1.F-LE.A.2	A1.S-ID.B.6c
	A1.A-ID.B.6a		A1.N-RN.B.3	A1.F-LE.A.3	
	A1.A-ID.B.6b		A1.F-BF.B.3	A1.F-LE.B.5	
	A1.A-ID.B.6c		A1.A-REI.C.6	A1.A-SSE.B.3c	
			A1.F-IF.C.7a	A1.F-IF.C.7	
			A1.F-IF.C.8a	A1.F-IF.C.8	
			A1.F-IF.C.9		
			A1.A-SSE.B.3a		
			A1.A-SSE.B.3b		
			A1.F-BF.A.1a		
			A1.S-ID.B.6a		
			A1.N-Q.A.2		

Module 1	Module 2	Module 3	Module 4	Module 5	Module 6
Prerequisite Standards: 6.EE.A.3 6.EE.A.4 7.EE.A.1 7.EE.B.4 8.EE.A.1 8.EE.C.7 6.SP.A.2 6.SP.B.5	Prerequisite Standards: 8.EE.B.5 8.EE.C.8 8.F.A.3 8.B.F.B.4 8.SP.A.1 8.SP.A.2 8.SP.A.3 8.SP.A.4	Prerequisite Standards: 6.EE.A.2 8.F.A.1 8.F.A.2 8.F.A.3 8.EE.B.5 8.EE.C.8 8.F.B.4 8.F.B.5	Prerequisite Standards: 6.EE.A.2 6.EE.A.3 7.EE.A.1 7.EE.A.2 7.EE.B.4 8.EE.A.1 8.EE.A.2 8.EE.B.5 8.EE.C.7 8.EE.C.8 8.F.A.3 8.NS.A.1 8.F.B.4 8.F.B.5 8.SP.A.1 8.SP.A.2 8.SP.A.3	Prerequisite Standards: 6.EE.A.2 6.EE.A.3 7.EE.A.1 7.EE.A.2 8.EE.A.1 8.EE.B.5 8.EE.C.8 8.F.A.3 8.NS.A.1 8.F.B.4	Prerequisite Standards: 6.RP.A.3 8.F.A.3 8.F.B.4 8.SP.A.1 8.SP.A.2 8.SP.A.3

Standards by Lesson

Grade 9: Standards by Lesson	
Module 1 Lessons	**Standards**
1	A1.A-SSE.A.2
2	A1.A-SSE.A.2
3	A1.A-APR.A.1; A1.A-SSE.A.2
4	A1.A-APR.A.1
5	A1.A-APR.A.1
6	A1.A-APR.A.1
7	A1.A-CED.A.1; A1.A-REI.B.3
8	A1.A-REI.B.3
9	A1.A-REI.A.1; A1.A-REI.B.3
10	A1.A-REI.A.1; A1.A-REI.B.3
11	A1.A-CED.A.1; A1.A-CED.A.3; A1.A-REI.A.1; A1.A-REI.B.3
12	A1.A-CED.A.4
13	A1.A-CED.A.1; A1.A-REI.B.3
14	A1.A-CED.A.3
15	A1.A-CED.A.1; A1.A-CED.A.3; A1.A-REI.B.3
16	A1.A-REI.B.3
17	A1.A-REI.B.3
18	A1.S-ID.A.2; A1.S-ID.A.3
19	A1.S-ID.A.2; A1.S-ID.A.3
20	A1.S-ID.A.2; A1.S-ID.A.3
21	A1.S-ID.A.2; A1.S-ID.A.3
22	A1.S-ID.A.2; A1.S-ID.A.3
23	A1.S-ID.A.2; A1.S-ID.A.3
Module 2 Lessons	**Standards**
1	A1.A-CED.A.2; A1.A-CED.A.3; A1.A-REI.D.10
2	A1.A-CED.A.2; A1.A-REI.D.10
3	A1.A-CED.A.2
4	A1.A-REI.D.12
5	A1.A-REI.D.12
6	A1.A-CED.A.2; A1.A-CED.A.3
7	A1.A-REI.C.6
8	A1.A-REI.C.6
9	A1.A-REI.C.5; A1.A-REI.C.6
10	A1.A-REI.C.6
11	A1.A-REI.C.6
12	A1.A-REI.D.12
13	A1.A-REI.D.12
14	A1.A-REI.D.12
15	A1.A-ID.B.6
16	A1.A-ID.C.7; A1.A-ID.B.6a
17	A1.A-ID.C.7; A1.A-ID.B.6a; A1.A-ID.B.6c

18	A1.A-ID.B.6b; A1.A-ID.B.6c
19	A1.A-ID.B.6b
20	A1.A-ID.C.8; A1.A-ID.C.9; A1.A-ID.B.6c
21	A1.A-ID.C.7; A1.A-ID.C.8; A1.A-ID.C.9; A1.A-ID.B.6
22	A1.A-ID.B.5
23	A1.A-ID.B.5
24	A1.A-ID.B.5

Module 3 Lessons	Standards
1	A1.F-IF.A.1; A1.F-IF.A.2
2	A1.F-IF.A.1; A1.F-IF.A.2
3	A1.F-IF.A.1; A1.F-IF.B.5
4	A1.F-IF.A.1; A1.F-IF.C.7a
5	A1.F-IF.A.1; A1.F-IF.C.7a
6	A1.F-IF.A.1; A1.F-IF.A.2; A1.F-IF.C.7a
7	A1.F-IF.B.4
8	A1.F-IF.B.4
9	A1.F-IF.B.4
10	A1.A-REI.D.11
11	A1.F-IF.B.4; A1.F-IF.C.9
12	A1.F-IF.B.4
13	A1.F-IF.B.4; A1.F-IF.B.5; A1.F-IF.C.7b
14	A1.F-IF.C.7b
15	A1.A-REI.D.11; A1.F-IF.C.7b
16	A1.F-IF.A.2; A1.F-IF.B.5; A1.F-IF.C.7b Modification- Optional Lesson
17	A1.F-IF.C.7b; A1.F-BF.A.1a Modification- Optional Lesson
18	A1.F-BF-B.3
19	A1.F-BF-B.3; A1.F-IF.C.7b
20	A1.F-BF-B.3
21	A1.F-BF-B.3
22	A1.F-BF-B.3
23	A1.F-BF-B.3; A1.F-IF.C.7b

Module 4 Lessons	Standards
1	A1.F-IF.B.4; A1.F-IF.B.6
2	A1.F-IF.B.4; A1.F-IF.B.5
3	A1.A-SSE.A.1a; A1.A-SSE.A.2; A1.F-IF.B.4; A1.F-IF.B.5; A1.F-IF.B.6
4	A1.F-IF.C.7a
5	A1.A-SSE.A.2; A1.A-REI.B.4b
6	A1.A-SSE.A.2; A1.A-REI.B.4b
7	A1.A-SSE.A.2; A1.A-REI.B.4b
8	A1.A-SSE.A.2; A1.A-REI.B.4b
9	A1.A-SSE.A.2; A1.A-CED.A.1; A1.A-REI.B.4b
10	A1.A-SSE.A.2; A1.A-SSE.B.3a; A1.F-IF.C.8a

11	A1.A-SSE.A.2; A1.A-CED.A.2; A1.F-IF.B.4; A1.A-SSE.B.3a; A1.F-IF.C.7a; A1.F-IF.C.8a
12	A1.A-SSE.A.2; A1.A-CED.A.2; A1.F-IF.B.4; A1.F-IF.B.6; A1.F-IF.C.7a; A1.F-IF.C.9
13	A1.A-CED.A.4; A1.A-REI.B.4b; A1.N-RN.B.3
14	A1.A-SSE.A.2; A1.A-REI.B.4a; A1.A-REI.B.4b
15	A1.A-SSE.A.2; A1.A-REI.B.4a; A1.A-REI.B.4b
16	A1.A-REI.B.4b
17	A1.N-RN.B.3
18	A1.A-REI.B.4b
19	A1.F-IF.C.7a
20	A1.F-BF.B.3
21	A1.F-IF.B.4; A1.A-SSE.B.3b; A1.F-IF.C.9
22	A1.A-SSE.B.3a; A1.A-SSE.B.3b; A1.F-IF.C.8

23	A1.F-IF.B.4; A1.F-IF.B.5; A1.A-CED.A.2; A1.F-IF.C.7a; A1.S-ID.B.6a; A1.F-BF.A.1A
24	A1.A-REI.D.11; A1.A-REI.C.6; A1.F-IF.C.7a
25	A1.A-CED.A.2; A1.F-IF.B.4; A1.N-Q.A.2; A1.F-BF.A.1a
26	A1.A-CED.A.2; A1.F-BF.A.1a; A1.S-ID.B.6a
27	A1.A-CED.A.2; A1.F-BF.A.1a; A1.S-ID.B.6a
Module 5 Lessons	**Standards**
1	A1.F-IF.A.2; A1.F-IF.A.3; A1.F-BF.A.1a
2	A1.F-IF.A.2; A1.F-IF.A.3; A1.F-BF.A.1a Modification- Modify the section of Learn. Instead of having students write the recursive formula, have them write a description that specifies the operations and the initial term.

3	A1.F-IF.A.2; A1.F-IF.A.3; A1.F-BF.A.1a Modification- Replace any request for recursive formulas with requests for symbolic expressions or a verbal or written description.
4	A1.F-IF.A.2; A1.F-IF.A.3; A1.F-BF.A.1a Modification- Replace any request for recursive formulas with requests for symbolic expressions or a verbal or written description.
5	A1.F-IF.A.3; A1.F-BF.A.1a Modification- Replace any request for recursive formulas with requests for symbolic expressions or a verbal or written description.
6	A1.F-IF.A.3; A1.F-BF.A.1a Modification- The first section of Learn, “Converting Between Formulas”, is optional.
7	A1.F-IF.A.2; A1.F-BF.A.1a
8	A1.A-SSE.A.1b; A1.F-BF.A.1a; A1.F-LE.A.2

9	A1.N-RN.A.1; A1.N-RN.A.2 *These standards are not part of the LSSM for Algebra I. Modification- Optional lesson
10	A1.N-RN.A.1; A1.N-RN.A.2 *These standards are not part of the LSSM for Algebra I. Modification- Optional lesson
11	A1.A-SSE.A.2; A1.A-SSE.B.3c; A1.F-IF.C.7
12	A1.F-LE.A.2; A1.F-BF.B.3; A1.A-SSE.B.3c; A1.F-IF.C.7; A1.F-IF.C.8
13	A1.A-REI.D.11; A1.F-BF.B.3; A1.F-IF.C.7
14	A1.F-BF.B.3; A1.F-LE.A.2
15	A1.F-BF.A.1a; A1.F-LE.A.1
16	A1.A-SSE.A.1b; A1.F-LE.A.2
17	A1.A-SSE.A.1b; A1.F-LE.A.2
18	A1.A-SSE.A.1b; A1.A-SSE.A.2; A1.A-SSE.B.3c; A1.F-IF.C.8;

	A1.F-LE.A.1; A1.F-LE.B.5
19	A1.F-IF.B.6; A1.F-LE.A.1a; A1.F-LE.B.5
20	A1.A-REI.D.11; A1.F-IF.B.6; A1.F-LE.A.3
21	A1.F-LE.A.1; A1.F-LE.A.2
22	A1.F-LE.A.1; A1.F-LE.A.2 Modification- Provide the exponential function that models the situation instead of having students produce it.
23	A1.A-SSE.A.1b; A1.F-BF.B.3; A1.F-LE.A.2; A1.F-LE.B.5
24	A1.F-IF.B.6; A1.F-LE.A.1; A1.F-LE.A.2; A1.F-LE.B.5 Modification- Optional lesson
Module 6 Lessons	**Standards**
1	A1.F-LE.A.1; A1.S-ID.B.6a; A1.S-ID.B.6b; A1.S-ID.B.6c
2	A1.F-LE.A.1; A1.S-ID.B.6a;

	A1.S-ID.B.6b; A1.S-ID.B.6c Modification- Provide the exponential function that models the situation instead of having students produce it.
3	A1.F-LE.A.1; A1.S-ID.B.6a; A1.S-ID.B.6b; A1.S-ID.B.6c Modification- Provide the exponential function that models the situation instead of having students produce it.
4	A1.F-BF.A.1a; A1.F-LE.A.2
5	A1.A-CED.A.3; A1.A-REI.D.12; A1.N-Q.A.1; A1.N-Q.A.2; A1.F-BF.A.1; A1.F-LE.A.2
6	A1.F-BF.A.1; A1.F-LE.A.2
7	A1.F-BF.A.1a Modification- Provide the exponential function that models the situation instead of having students produce it.

Louisiana Alignment		
Standard Code	Standard Language	Aligned Lessons
A1.N-RN.B.3	Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational.	Module 4: Lessons 13, 17
A1.N-Q.A.1	Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays. *	Module 6: Lesson 5
A1.N-Q.A.2	Define appropriate quantities for the purpose of descriptive modeling. *	Module 4: Lesson 25 Module 6: Lesson 5
A1.N-Q.A.3	Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. *	
A1.A-SSE.A.1	Interpret expressions that represent a quantity in terms of its context. *	
A1.A-SSE.A.1a	Interpret parts of an expression, such as terms, factors, and coefficients. *	Module 4: Lesson 3
A1.A-SSE.A.1b	Interpret complicated expressions by viewing one or more of their parts as a single entity. *For example, interpret $P(1+r)^n$ as the product of P and a factor not depending on P.* *	Module 5: Lessons 8, 16, 17, 18, 23
A1.A-SSE.A.2	Use the structure of an expression to identify ways to rewrite it. *For example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$, or see $2x^2 + 8x$ as $(2x)(x) + 2x(4)$, thus recognizing it as a polynomial whose terms are products of monomials and the polynomial can be factored as $2x(x+4)$.*	Module 1: Lessons 1, 2, 3 Module 4: Lessons 3, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15 Module 5: Lessons 11, 12, 18
A1.A-SSE.B.3	Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. *	

A1.A-SSE.B.3a	Factor a quadratic expression to reveal the zeros of the function it defines. *	Module 4: Lessons 10, 11, 22
A1.A-SSE.B.3b	Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines. *	Module 4: Lessons 21, 22
A1.A-SSE.B.3c	Use the properties of exponents to transform expressions for exponential functions emphasizing integer exponents. *For example, the growth of bacteria can be modeled by either* $f(t) = 3^{(t+2)}$ *or* $g(t) = 9(3^t)$ *because the expression* $3^{(t+2)}$ *can be rewritten as* $(3^t)(3^2) = 9(3^t)$. *	Module 5: Lessons 11, 12, 18
A1.A-APR.A.1	Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.	Module 1: Lessons 3, 4, 5, 6
A1.A-APR.B.3	Identify zeros of quadratic functions, and use the zeros to sketch a graph of the function defined by the polynomial.	
A1.A-CED.A.1	Create equations and inequalities in one variable and use them to solve problems. *Include equations arising from linear, quadratic, and exponential functions.* *	Module 1: Lessons 7, 11, 13, 15 Module 4: Lesson 9
A1.A-CED.A.2	Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. *	Module 2: Lessons 1, 2, 3, 6 Module 4: Lessons 11, 12, 23, 25, 26, 27
A1.A-CED.A.3	Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. *For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.* *	Module 1: Lessons 11, 14, 15 Module 2: Lessons 1, 6 Module 6: Lesson 5
A1.A-CED.A.4	Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. *For example, rearrange Ohm's law* $V = IR$ *to highlight resistance* R. *	Module 1: Lesson 12 Module 4: Lesson 13

A1.A-REI.A.1	Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.	Module 1: Lessons 9, 10, 11
A1.A-REI.B.3	Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.	Module 1: Lessons 7, 8, 9, 10, 11, 13, 15, 16, 17
A1.A-REI.B.4	Solve quadratic equations in one variable.	
A1.A-REI.B.4a	Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x - p)^2 = q$ that has the same solutions. Derive the quadratic formula from this form.	Module 4: Lessons 14, 15
A1.A-REI.B.4b	Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as "no real solution. *	Module 4: Lessons 5, 6, 7, 8, 9, 13, 14, 15, 16, 18
A1.A-REI.C.5	Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions.	Module 2: Lesson 9
A1.A-REI.C.6	Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.	Module 2: Lessons 7, 8, 9, 10, 11 Module 4: Lesson 24
A1.A-REI.D.10	Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line).	Module 2: Lessons 1, 2
A1.A-REI.D.11	Explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, piecewise linear (to include absolute value), and exponential functions. *	Module 3: Lessons 10, 15 Module 4: Lesson 24 Module 5: Lessons 13, 20

A1.A-REI.D.12	Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.	Module 2: Lessons 4, 5, 12, 13, 14 Module 6: Lesson 5
A1.F-IF.A.1	Understand 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. 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*).	Module 3: Lessons 1, 2, 3, 4, 5, 6
A1.F-IF.A.2	Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.	Module 3: Lessons 1, 2, 6, 16 Module 5: Lessons 1, 2, 3, 4, 7
A1.F-IF.A.3	Recognize that sequences are functions whose domain is a subset of the integers. Relate arithmetic sequences to linear functions and geometric sequences to exponential functions.	Module 5: Lessons 1, 2, 3, 4, 5, 6
A1.F-IF.B.4	For linear, piecewise linear (to include absolute value), quadratic, and exponential functions that model a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. *Key features include. intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; and end behavior*. *	Module 3: Lessons 7, 8, 9, 11, 12, 13 Module 4: Lessons 1, 2, 3, 11, 12, 21, 23, 25
A1.F-IF.B.5	Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. *For example, if the function h(n) gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function.* *	Module 3: Lessons 3, 13, 16 Module 4: Lessons 2, 3, 23
A1.F-IF.B.6	Calculate and interpret the average rate of change of a linear, quadratic, piecewise linear (to include absolute value), and exponential function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph. *	Module 4: Lessons 1, 3, 12 Module 5: Lessons 19, 20, 24

A1.F-IF.C.7	Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.*	Module 5: Lessons 11, 12, 13
A1.F-IF.C.7a	Graph linear and quadratic functions and show intercepts, maxima, and minima.*	Module 3: Lessons 4, 5, 6 Module 4: Lessons 4, 11, 12, 19, 23, 24
A1.F-IF.C.7b	Graph piecewise linear (to include absolute value) and exponential functions.*	Module 3: Lessons 13, 14, 15, 16, 17, 19, 23
A1.F-IF.C.8	Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.	Module 5: Lessons 12, 18
A1.F-IF.C.8a	Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context.	Module 4: Lessons 10, 11, 22
A1.F-IF.C.9	Compare properties of two functions (linear, quadratic, piecewise linear [to include absolute value] or exponential) each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). *For example, given a graph of one quadratic function and an algebraic expression for another, determine which has the larger maximum*.	Module 3: Lesson 11 Module 4: Lessons 12, 21
A1.F-BF.A.1	Write a linear, quadratic, or exponential function that describes a relationship between two quantities.*	Module 6: Lessons 5, 6
A1.F-BF.A.1a	Determine an explicit expression, a recursive process, or steps for calculation from a context.*	Module 3: Lesson 17 Module 4: Lessons 23, 25, 26, 27 Module 5: Lessons 1, 2, 3, 4, 5, 6, 7, 8 Module 6: Lessons 4, 7

A1.F-BF.B.3	Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $k\,f(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative). Without technology, find the value of k given the graphs of linear and quadratic functions. With technology, experiment with cases and illustrate an explanation of the effects on the graph that include cases where *f(x)* is a linear, quadratic, piecewise linear (to include absolute value) or exponential function.	Module 3: Lessons 18, 19, 20, 19, 20, 21, 22, 23 Module 4: Lesson 20 Module 5: Lessons 12, 13, 14, 23
A1.F-LE.A.1	Distinguish between situations that can be modeled with linear functions and with exponential functions. *	Module 5: Lessons 15, 18, 21, 22, 24 Module 6: Lessons 1, 2, 3
A1.F-LE.A.1a	Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals. *	Module 5: Lessons 15, 19
A1.F-LE.A.1b	Recognize situations in which one quantity changes at a constant rate per unit interval relative to another. *	
A1.F-LE.A.1c	Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another. *	
A1.F-LE.A.2	Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table). *	Module 5: Lessons 8, 14, 16, 17, 21, 22, 23, 24 Module 6: Lessons 4, 5, 6
A1.F-LE.A.3	Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function. *	Module 5: Lesson 20
A1.F-LE.B.5	Interpret the parameters in a linear or exponential function in terms of a context. *	Module 5: Lessons 18, 19, 23, 24
A1.S-ID.A.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. *	Module 1: Lessons 18, 19, 20, 21, 23

A1.S-ID.A.3	Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers). *	Module 1: Lessons 18, 19, 20, 21, 22, 23
A1.S-ID.B.5	Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data. *	Module 2: Lessons 22, 23, 24
A1.S-ID.B.6	Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. *	Module 2: Lessons 15, 21
A1.S-ID.B.6a	Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear and quadratic models. *	Module 2: Lessons 16, 17 Module 4: Lessons 23, 26, 27 Module 6: Lessons 1, 2, 3
A1.S-ID.B.6b	Informally assess the fit of a function by plotting and analyzing residuals. *	Module 2: Lessons 17, 18, 19 Module 6: Lessons 1, 2, 3
A1.S-ID.B.6c	Fit a linear function for a scatter plot that suggests a linear association. *	Module 2: Lessons 18, 20 Module 6: Lessons 1, 2, 3
A1.S-ID.C.7	Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data. *	Module 2: Lessons 16, 17, 21
A1.S-ID.C.8	Compute (using technology) and interpret the correlation coefficient of a linear fit. *	Module 2: Lessons 20, 21
A1.S-ID.C.9	Distinguish between correlation and causation. *	Module 2: Lessons 20, 21

*Modeling Standard

Acceleration in Mathematics within the context of Eureka Math Squared Equip

Diagnose:
To begin, use the Pre-Module Assessment to diagnose students' proficiency with essential foundational knowledge. Then use the data from that assessment to do the following:

- Identify possible unfinished student learning.
- Select supporting activities from this guide that best meet the needs of your students.

Plan:
Plan when you might provide student support to accelerate learning by reviewing the Pre-Module Assessment overview which includes at-a-glance information about the material associated with each assessment item and when the foundation content is needed in the current module.

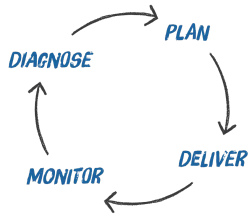
Map out when the supporting activities will be provided to students, individually, in small groups, or with the entire class.

Deliver:
Deliver the supporting activities. Depending on students' needs, select any combination of the supporting activities to teach. Supporting activities are designed to be flexible. Most can be used with a single student, a small group, or even a whole class.

Monitor:
Monitor student progress by analyzing their performance on the Exit ticket from the "Needed By" module lesson, topic quizzes, or end of Module assessments.

Useful Resources:
Eureka Math Squared Equip User Guide

For more information visit the Equip Section in the platform.
*Please log in for the link to work.



Family Resources for Eureka Math Squared

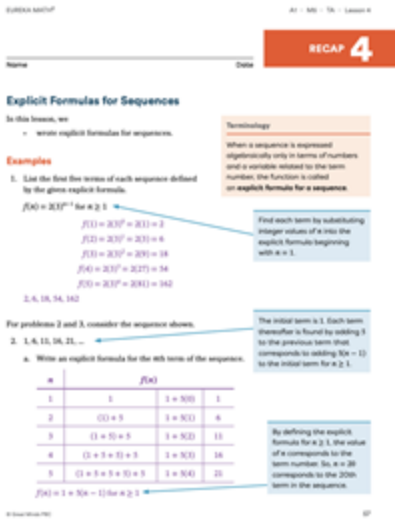
Parents "How can I Help"

Practice Support

- Use the thinking of the "partner" who is solving problems like those in the Practice.

Ask Questions

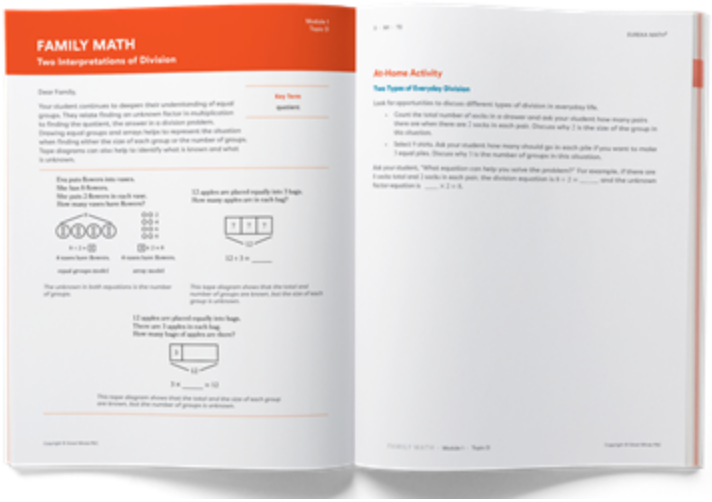
- What do you notice about how they solve the problem?
- How have you solved a problem like this before?
- How can you start the problem?
- What tool can you use?



Lesson Recap for grades 6-9 in the Apply Book

Family Math (K-5) in the Apply Book

- Describes and shows key math concepts.
- Highlights new math vocabulary.
- Provides activities for student and family to do together at home.



Visit the Greatminds Family Math Page:
https://greatminds.org/eureka-math-squared-family-resources