## **Introduction:**

The impact of the Distance Learning Instructional Schedule adversely impacts the *amount* of content to which students have access during the 2020-2021 school year. In general, the secondary schedule allocates 2 hours of instructional time per course per week [two, 60 minute blocks]. In a typical school week, instructional time is about 4 hours [five, 48 minute blocks]: the distance learning schedule represents about 50% of the allocated time.

In August, the Secondary Mathematics Team reduced the content based on national guidance. At that time it was acknowledged that some courses may still need to strive for 2 lessons per instructional block. These content reductions were published to Middle School CSs and the larger community. A <u>public facing document</u> was created for sharing. This document highlights the content *included* and *cut* from the 2020-2021 school year.

A similar <u>document</u> was created in Spring of 2020 to highlight what was included in the Continuity of Learning period (CoL). The CoL materials document what content was suggested for schools, not necessarily what was taught. As a result of the school-curriculum implementation variability during the 2019-2020 school year, content was classified as "No CoL Instruction," "Instruction started but not completed," "Instruction uncertain," and, "CoL Instruction."

The tables that follow pertain to the <u>scope and sequence</u>, <u>planning guidance</u>, <u>and resources</u> developed utilizing the counsel from national leaders in curriculum, standards and student achievement. Documents used for guidance include:

- 2020-2021 Priority Instructional Content from Achieve the Core;
- Adaptation Packs, Guidance for Planning IM Instructional Materials in Distance Learning Environments in 2020-2021, and Priority Lessons
   Adjusted for Asynchronous Learning from Illustrative Mathematics; and Mathematics Guidance Continuity of Learning Standards Middle and
- Mathematics Guidance Continuity of Learning Standards High from the Maryland State Department of Education.

## **Contents**

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- Algebra 1
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Math 6	Cluster	Standard	In Suggested Scope
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			for '20-'21?
		6.RP.A.1	4 of 5 lessons included
		6.RP.A.2	4 of 5 lessons included
6.RP.A	Understand ratio concepts and use ratio reasoning to solve problems.	6.RP.A.3	9 of 14 lessons included
		6.RP.A.3.a	Yes
		6.RP.A.3.b	6 of 9 lessons included
		6.RP.A.3.c	6 of 9 lessons included
6.NS.A	Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	6.NS.A.1	12 of 17 lessons included
	Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.	6.NS.B.2	5 of 6 lessons included
6.NS.B		6.NS.B.3	8 of 10 lessons included
		6.NS.B.4	Entirely Omitted
		6.NS.C.5	Yes
		6.NS.C.6	Yes
6.NS.C	Apply and extend previous understandings of numbers to the system of rational numbers.	6.NS.C.6.a	Yes
		6.NS.C.6.b	Yes

		6.NS.C.6.c	Yes
		6.EE.A.1	Yes
		6.EE.A.2	Yes
		6.EE.A.2.a	3 of 4 lessons included
6.EE.A	Apply and extend previous understandings of arithmetic to algebraic expressions.	6.EE.A.2.b	Yes
		6.EE.A.2.c	Yes
		6.EE.A.3	Yes
		6.EE.A.4	Yes
	Reason about and solve one-variable equations and inequalities.	6.EE.B.5	Yes
6.EE.B		6.EE.B.6	Yes
O.EE.B		6.EE.B.7	Yes
		6.EE.B.8	Yes
6.EE.C	Represent and analyze quantitative relationships between dependent and independent variables.	6.EE.C.9	Yes
		6.G.A.1	Yes
601	Calva mad would and mathematical maddana involving and surface and and values	<u>6.G.A.2</u>	Entirely Omitted
6.G.A	Solve real-world and mathematical problems involving area, surface area, and volume.	<u>6.G.A.3</u>	Entirely Omitted
		6.G.A.4	Entirely Omitted
		6.SP.A.1	Entirely Omitted
6.SP.A	Develop understanding of statistical variability.	6.SP.A.2	Entirely Omitted

		<u>6.SP.A.3</u>	Entirely Omitted	
		<u>6.SP.B.4</u>	Entirely Omitted	
	Summarize and describe distributions.		6.SP.B.5	Entirely Omitted
( CDD		6.SP.B.5.a	Entirely Omitted	
6.SP.B		Summarize and describe distributions.	<u>6.SP.B.5.b</u>	Entirely Omitted
		<u>6.SP.B.5.c</u>	Entirely Omitted	
		6.SP.B.5.d	<b>Entirely Omitted</b>	

Math 7	Cluster	Standard	In Suggested Scope for '20-'21?
		7.RP.A.1	Yes
		7.RP.A.2	22 of 25 lessons included
		7.RP.A.2.a	6 of 8 lessons included
7.RP.A	Understand ratio concepts and use ratio reasoning to solve problems.	7.RP.A.2.b	3 of 4 lessons included
		7.RP.A.2.c	Yes
		7.RP.A.2.d	Yes
		7.RP.A.3	14 of 16 lessons included
		7.NS.A.1	6 of 7 lessons included
		7.NS.A.1.a	Yes
		7.NS.A.1.b	Yes
7.NS.A	Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	7.NS.A.1.c	Yes
	fractions.	7.NS.A.1.d	Yes
		7.NS.A.2	Yes
		7.NS.A.2.1	Yes

		7.NS.A.2.b	Yes
		7.NS.A.2.c	Yes
		7.NS.A.2.d	2 of 3 lessons included
		7.NS.A.3	6 of 7 lessons included
7.EE.A	Has man article of an arcticus to concern a conjugate assumptions	7.EE.A.1	Yes
/.EE.A	Use properties of operations to generate equivalent expressions	7.EE.A.2	Yes
	Solve real-life and mathematical problems using numerical and algebraic expressions and equations.	7.EE.B.3	8 of 10 lessons included
7.EE.B		7.EE.B.4	11 of 12 lessons included
		7.EE.B.4.a	Yes
		7.EE.B.4.b	4 of 5 lessons included
		7.G.A.1	8 of 17 lessons included
7.G.A	Draw, construct, and describe geometrical figures and describe the relationships between them.	<u>7.G.A.2</u>	<b>Entirely Omitted</b>
		7.G.A.3	<b>Entirely Omitted</b>
	Solve real-life and mathematical problems involving angle measure, area, surface area, and	7.G.B.4	5 of 11 lessons included
7.G.B	volume.	<u>7.G.B.5</u>	<b>Entirely Omitted</b>

		7.G.B.6	2 of 11 lessons included
7.SP.A	Use rendem semaling to draw informace about a namulation	7.SP.A.1	<b>Entirely Omitted</b>
/.SP.A	Use random sampling to draw inferences about a population.	7.SP.A.2	<b>Entirely Omitted</b>
7.SP.B	Draw informal compositive informace about two populations	7.SP.B.3	<b>Entirely Omitted</b>
7.SP.B	Draw informal comparative inferences about two populations.	7.SP.B.4	<b>Entirely Omitted</b>
	Investigate chance processes and develop, use, and evaluate probability models.	7.SP.C.5	<b>Entirely Omitted</b>
		<u>7.SP.C.6</u>	<b>Entirely Omitted</b>
		<u>7.SP.C.7</u>	<b>Entirely Omitted</b>
		7.SP.C.7.a	<b>Entirely Omitted</b>
7.SP.C		7.SP.C.7.b	<b>Entirely Omitted</b>
		7.SP.C.8	<b>Entirely Omitted</b>
		7.SP.C.8.a	<b>Entirely Omitted</b>
		7.SP.C.8.b	<b>Entirely Omitted</b>
		7.SP.C.8.c	<b>Entirely Omitted</b>

Math 8	Cluster	Standard	In Suggested Scope for '20-'21?
O NIC A		8.NS.A.1	Yes
8.NS.A	Know that there are numbers that are not rational, and approximate them by rational numbers.	8.NS.A.2	Yes
		8.EE.A.1	6 of 9 lessons included
8.EE.A	Expressions and Equations Work with radicals and integer exponents.	8.EE.A.2	7 of 8 lessons included
		<u>8.EE.A.3</u>	<b>Entirely Omitted</b>
		8.EE.A.4	2 of 10 lessons included
8.EE.B	Understand the connections between proportional relationships, lines, and linear equations.	8.EE.B.5	2 of 4 lessons included
O.EE.D		8.EE.B.6	6 of 7 lessons included
		8.EE.C.7	Yes
		8.EE.C.7.a	Yes
		8.EE.C.7.b	Yes
8.EE.C	Analyze and solve linear equations and pairs of simultaneous linear equations.	8.EE.C.8	5 of 7 lessons included
		8.EE.C.8.a	Yes
		8.EE.C.8.b	1 of 3 lessons

			included
		8.EE.C.8.c	Entirely Omitted
		8.F.A.1	5 of 6 lessons included
8.F.A	Define, evaluate, and compare functions.	8.F.A.2	Yes
		8.F.A.3	3 of 4 lessons included
		8.F.B.4	Yes
8.F.B	Use functions to model relationships between quantities.	8.F.B.5	2 of 3 lessons included
	Understand congruence and similarity using physical models, transparencies, or geometry software.	8.G.A.1	6 of 8 lessons included
		8.G.A.1.a	Yes
		8.G.A.1.b	Yes
		8.G.A.1.c	Yes
8.G.A		8.G.A.2	5 of 6 lessons included
		8.G.A.3	Yes
		8.G.A.4	3 of 4 lessons included
		8.G.A.5	1 of 5 lessons included

	Understand and apply the Pythagorean Theorem.	8.G.B.6	Yes	
8.G.B		8.G.B.7	3 of 5 lessons included	
		<u>8.G.B.8</u>	<b>Entirely Omitted</b>	
8.G.C	Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.	<u>8.G.C.9</u>	<b>Entirely Omitted</b>	
	Investigate patterns of association in bivariate data.		8.SP.A.1	<b>Entirely Omitted</b>
O CD A		8.SP.A.2	<b>Entirely Omitted</b>	
8.SP.A		8.SP.A.3	Entirely Omitted	
		8.SP.A.4	Entirely Omitted	

**Note:** C2.0 (A)IM is part 1 of a compacted math sequence that includes C2.0 Algebra 1. With the transition away from C2.0 Algebra 1, Grade 8 standards previously a part of C2.0 Algebra 1 are assumed knowledge in Illustrative Mathematics Algebra 1

- Of the 79 Grade 7 and Grade 8 standards, students moving to Algebra 1 will only have experienced
  - o **24** of the **43** Grade 7 standards
  - o 17 of the 36 Grade 8 standards
- Standards that are a part of C2.0 (A)IM and included during Distance Learning will be marked, "Yes\*." Schools have the option of continuing to utilize C2.0 resources or use analogous Grade 7 and Grade 8 materials from the Illustrative Mathematics courses. Thus, there will be variations in the number of lessons at schools.
- Standards that are a part of C2.0 (A)IM but excluded during Distance Learning will be marked, **Entirely Omitted**
- Standards that are **not a** part of C2.0 (A)IM but are assumed knowledge for Illustrative Mathematics Algebra 1 will be marked, **Not in C2.0 (A)IM**

C2.0 (A)IM	Cluster	Standard	In Suggested Scope for '20-'21?
		7.RP.A.1	Yes*
		7.RP.A.2	Yes*
	Understand ratio concepts and use ratio reasoning to solve problems.	7.RP.A.2.a	Yes*
7.RP.A		7.RP.A.2.b	Yes*
		7.RP.A.2.c	Yes*
		7.RP.A.2.d	Yes*
		7.RP.A.3	Yes*
		7.NS.A.1	Yes*
7.NS.A	Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	7.NS.A.1.a	Yes*
		7.NS.A.1.b	Yes*
		7.NS.A.1.c	Yes*

		7.NS.A.1.d	Yes*
		7.NS.A.2	Yes*
		7.NS.A.2.1	Yes*
		7.NS.A.2.b	Yes*
		7.NS.A.2.c	Yes*
		7.NS.A.2.d	Yes*
		7.NS.A.3	Yes*
7 00 4	Use properties of operations to generate equivalent expressions	7.EE.A.1	Yes*
7.EE.A		7.EE.A.2	Yes*
	Solve real-life and mathematical problems using numerical and algebraic expressions and equations.	7.EE.B.3	Yes*
7.EE.B		7.EE.B.4	Yes*
/.EE.B		7.EE.B.4.a	Yes*
		7.EE.B.4.b	Yes*
		<u>7.G.A.1</u>	Entirely Omitted
7.G.A	Draw, construct, and describe geometrical figures and describe the relationships between them.	7.G.A.2	Entirely Omitted
		<u>7.G.A.3</u>	Entirely Omitted
		<u>7.G.B.4</u>	Entirely Omitted
7.G.B	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	<u>7.G.B.5</u>	Entirely Omitted
		<u>7.G.B.6</u>	Entirely Omitted

7 CD A	Use random sampling to draw inferences about a population.	7.SP.A.1	<b>Entirely Omitted</b>
7.SP.A		7.SP.A.2	<b>Entirely Omitted</b>
7.SP.B	Draw informal comparative inferences about two populations.	7.SP.B.3	<b>Entirely Omitted</b>
/.SP.D	Draw informat comparative interences about two populations.	<u>7.SP.B.4</u>	Entirely Omitted
		7.SP.C.5	<b>Entirely Omitted</b>
		<u>7.SP.C.6</u>	<b>Entirely Omitted</b>
		7.SP.C.7	<b>Entirely Omitted</b>
	Investigate chance processes and develop, use, and evaluate probability models.	7.SP.C.7.a	<b>Entirely Omitted</b>
7.SP.C		7.SP.C.7.b	<b>Entirely Omitted</b>
		<u>7.SP.C.8</u>	<b>Entirely Omitted</b>
		7.SP.C.8.a	<b>Entirely Omitted</b>
		7.SP.C.8.b	<b>Entirely Omitted</b>
		7.SP.C.8.c	<b>Entirely Omitted</b>
		8.EE.A.1	Yes*
OFEA		8.EE.A.2	<b>Entirely Omitted</b>
8.EE.A	Expressions and Equations Work with radicals and integer exponents.	8.EE.A.3	Yes*
		<u>8.EE.A.4</u>	<b>Entirely Omitted</b>
0.55.5	Understand the connections between monentianal relationships lines and lines are discon-	8.EE.B.5	Yes*
8.EE.B	Understand the connections between proportional relationships, lines, and linear equations.	8.EE.B.6	Yes*

		8.EE.C.7	Yes*
		8.EE.C.7.a	Yes*
		8.EE.C.7.b	Yes*
8.EE.C	Analyze and solve linear equations and pairs of simultaneous linear equations.	8.EE.C.8	Yes*
		8.EE.C.8.a	Yes*
		8.EE.C.8.b	Yes*
		8.EE.C.8.c	Yes*
O NIC A	Know that there are numbers that are not rational, and approximate them by rational numbers.	8.NS.A.1	Entirely Omitted
8.NS.A		8.NS.A.2	Entirely Omitted
	Define, evaluate, and compare functions.	8.F.A.1	Not in C2.0 (A)IM
8.F.A		8.F.A.2	Not in C2.0 (A)IM
		8.F.A.3	Not in C2.0 (A)IM
8.F.B	Use functions to model relationships between quantities.	8.F.B.4	Not in C2.0 (A)IM
0.Г.Д		8.F.B.5	Not in C2.0 (A)IM
		8.G.A.1	Yes*
		8.G.A.1.a	Yes*
8.G.A	Understand congruence and similarity using physical models, transparencies, or geometry software.	8.G.A.1.b	Yes*
	Onderstand congruence and similarity using physical models, transparencies, or geometry software.	8.G.A.1.c	Yes*
		8.G.A.2	Yes*

		8.G.A.3	Yes*
		<u>8.G.A.4</u>	Entirely Omitted
		<u>8.G.A.5</u>	Entirely Omitted
	Understand and apply the Pythagorean Theorem.	8.G.B.6	Not in C2.0 (A)IM
8.G.B		8.G.B.7	Not in C2.0 (A)IM
		8.G.B.8	Not in C2.0 (A)IM
8.G.C	Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.	8.G.C.9	Entirely Omitted
	Investigate patterns of association in bivariate data.	8.SP.A.1	Not in C2.0 (A)IM
O CD A		8.SP.A.2	Not in C2.0 (A)IM
8.SP.A		8.SP.A.3	Not in C2.0 (A)IM
		8.SP.A.4	Not in C2.0 (A)IM

Algebra 1	Cluster	Standard	In Suggested Scope for '20-'21?
		A.CED.A.1	Yes
		A.CED.A.2	Yes
A.CED.A	Create equations that describe numbers or relationships.	A.CED.A.3	12 of 14 lessons included
		A.CED.A.4	2 of 5 lessons included
A.REI.A	Understand solving equations as a process of reasoning and explain the reasoning.	A.REI.A.1	4 of 5 lessons included
	Solve equations and inequalities in one variable.	A.REI.B.3	3 of 5 lessons included
		A.REI.B.4	Yes
A.REI.B		A.REI.B.4a	1 of 4 lessons included
		A.REI.B.4b	8 of 15 lessons included
		A.REI.C.5	Yes
A.REI.C	Solve systems of equations.	A.REI.C.6	Yes
		A.REI.C.7	Yes
		A.REI.D.10	Yes
A.REI.D	Represent and solve equations and inequalities graphically.	A.REI.D.11	Yes

		A.REI.D.12	5 of 6 lessons included
		A.SSE.A.1	7 of 8 lessons included
A.SSE.A	Interpret the structure of expressions.	A.SSE.A.1b	Yes
		A.SSE.A.2	8 of 11 lessons included
		A.SSE.B.3	5 of 6 lessons included
A.SSE.B	Write expressions in equivalent forms to solve problems.	A.SSE.B.3a	Yes
		A.SSE.B.3b	<b>Entirely Omitted</b>
		A.SSE.B.3c	Yes
F.BF.A	Build a function that models a relationship between two quantities.	F.BF.A.1	4 of 6 lessons included
F.BF.A		F.BF.A.1a	14 of 15 lessons included
	Build new functions from existing functions.	F.BF.B.3	3 of 5 lessons included
F.BF.B		<u>F.BF.B.4</u>	<b>Entirely Omitted</b>
		F.BF.B.4a	<b>Entirely Omitted</b>
F.IF.A		F.IF.A.1	Yes
	Understand the concept of a function and use function notation.	F.IF.A.2	15 of 16 lessons included

		F.IF.B.4	18 of 22 lessons included
F.IF.B	Interpret functions that arise in applications in terms of the context.	F.IF.B.5	9 of 10 lessons included
		F.IF.B.6	5 of 6 lessons included
		F.IF.C.7	Yes
	Analyze functions using different representations.	F.IF.C.7a	4 of 9 lessons included
		F.IF.C.7b	Yes
F.IF.C		F.IF.C.7e	Yes
r.ir.C		F.IF.C.8	Yes
		<u>F.IF.C.8a</u>	<b>Entirely Omitted</b>
		F.IF.C.8b	Yes
		F.IF.C.9	1 of 2 lessons included
		F.LE.A.1	3 of 4 lessons included
		F.LE.A.1a	Yes
F.LE.A	Construct and compare linear, quadratic, and exponential models and solve problems.	F.LE.A.1b	1 of 2 lessons included
		F.LE.A.1c	1 of 2 lessons included

		F.LE.A.2	9 of 10 lessons included
		F.LE.A.3	Yes
F.LE.B	Interpret expressions for functions in terms of the situation they model.	F.LE.B.5	Yes
		N.Q.A.1	Yes
N.Q.A	Reason quantitatively and use units to solve problems.	N.Q.A.2	3 of 4 lessons included
		N.Q.A.3	1 of 3 lessons included
N.RN.B	Use properties of rational and irrational numbers.	<u>N.RN.B.3</u>	<b>Entirely Omitted</b>
	Summarize, represent, and interpret data on a single count or measurement variable.	S.ID.1	7 of 8 lessons included
S.ID.A		S.ID.2	7 of 8 lessons included
		S.ID.3	5 of 6 lesson included
	Summarize, represent, and interpret data on two categorical and quantitative variables.	S.ID.5	Yes
		S.ID.6	4 of 5 lessons included
S.ID.B		S.ID.6a	3 of 7 lessons included
		<u>S.ID.6b</u>	<b>Entirely Omitted</b>
		S.ID.6c	1 of 4 lessons included

S.ID.C	Interpret linear models.	S.ID.7	4 of 5 lessons included
		S.ID.8	3 of 4 lessons included
		S.ID.9	1 of 2 lessons included

Geometry	Cluster	Standard	In Suggested Scope for '20-'21?
		G.CO.A.1	5 of 7 SLTs included
		G.CO.A.2	Yes
G.CO.A	Experiment with transformations in the plane.	<u>G.CO.A.3</u>	<b>Entirely Omitted</b>
		G.CO.A.4	Yes
		G.CO.A.5	Yes
		G.CO.B.6	Yes
G.CO.B	Understand congruence in terms of rigid motion.	G.CO.B.7	Yes
		G.CO.B.8	Yes
	Prove geometric theorems.	G.CO.C.9	Yes
G.CO.C		G.CO.C.10	Yes
		G.CO.C.11	Yes
G.CO.D	Make geometric constructions.	G.CO.D.12	Yes
G.CO.D		<u>G.CO.D.13</u>	<b>Entirely Omitted</b>
		G.SRT.A.1	Yes
G.SRT.A	Understand similarity in terms of similarity transformations.	G.SRT.A.2	Yes
		G.SRT.A.3	Yes
G.SRT.B	Prove theorems using similarity.	G.SRT.B.4	1 of 4 SLTs included

		G.SRT.B.5	4 of 5 SLTs included
		G.SRT.C.6	Yes
G.SRT.C	Define trigonometric ratios and solve problems involving right triangles.	G.SRT.C.7	Entirely Omitted
		G.SRT.C.8	Yes
		<u>G.SRT.D.9</u> (+)	Entirely Omitted
G.SRT.D	Apply trigonometry to general triangles.	<u>G.SRT.D.10</u> (+)	Entirely Omitted
		G.SRT.D.11 (+)	<b>Entirely Omitted</b>
	Understand and apply theorems about circles.	<u>G.C.A.1</u>	<b>Entirely Omitted</b>
G.C.A		G.C.A.2	Yes
		<u>G.C.A.3</u>	<b>Entirely Omitted</b>
G.C.B	Find arc lengths and areas of sectors of circles.	G.C.B.5	Yes
	Translate between the geometric description and the equation of a conic section.	G.GPE.A.1	<b>Entirely Omitted</b>
G.GPE.A		G.GPE.A.2	<b>Entirely Omitted</b>
		<u>G.GPE.A.3</u> (+)	<b>Entirely Omitted</b>
		G.GPE.B.4	4 of 6 SLTs included
	Use coordinates to prove simple geometric theorems algebraically.	G.GPE.B.5	Yes
G.GPE.B		<u>G.GPE.B.6</u>	<b>Entirely Omitted</b>
		G.GPE.B.7	2 of 3 SLTs included
G GMD A	Explain volume formulas and use them to solve problems.	G.GMD.A.1	5 of 6 SLTs included

		G.GMD.A.3	7 of 9 SLTs included
G.GMD.B	Visualize relationships between two-dimensional and three-dimensional objects.	G.GMD.B.4	3 of 4 SLTs included
G.MG.A		G.MG.A.1	Yes
	Apply geometric concepts in modeling situations.	G.MG.A.2	Yes

Algebra 2	Cluster	Standard	In Suggested Scope for '20-'21?
NIDNIA		N.RN.A.1	Yes
N.RN.A	Extend the properties of exponents to rational exponents.	N.RN.A.2	Yes
N.Q.A	Reason quantitatively and use units to solve problems.	N.Q.A.2	Yes
NI CNI A	D. C	N.CN.A.1	Yes
N.CN.A	Perform arithmetic operations with complex numbers.	N.CN.A.2	Yes
		N.CN.B.7	Yes
N.CN.B	Use complex numbers in polynomial identities and equations.	N.CN.B.8 (+)	Yes
		N.CN.B.9 (+)	Yes
A.SSE.A	Interpret the structure of expressions.	A.SSE.A.2	Yes
A.SSE.B	Write expressions in equivalent forms to solve problems.	A.SSE.B.3c	Yes
A.APR.A	Perform arithmetic operations on polynomials.	A.APR.A.1	Yes
A ADD D		A.APR.B.2	Yes
A.APR.B	Understand the relationship between zeros and factors of polynomials.	A.APR.B.3	Yes
A.APR.C	Use polynomial identities to solve problems.	A.APR.C.4	Yes
A.APR.D	Rewrite rational expressions.	A.APR.D.6	Yes
A CED A	Constructions that describe more borners and the 12	A.CED.A.1	Yes
A.CED.A	Create equations that describe numbers or relationships.	A.CED.A.3	Yes
A.REI.A	Understand solving equations as a process of reasoning and explain the reasoning.	A.REI.A.1	Yes

		A.REI.A.2	Yes
A.REI.B	Solve equations and inequalities in one variable.	A.REI.B.4	Yes
		A.REI.B.4a	Yes
		A.REI.B.4b	Yes
A.REI.D	Represent and solve equations and inequalities graphically.	A.REI.D.11	Yes
	Interpret functions that arise in applications in terms of the context.	F.IF.B.4	Yes
F.IF.B		F.IF.B.5	Yes
		F.IF.B.6	Yes
	Analyze functions using different representations.	F.IF.C.7	Yes
		F.IF.C.7c	Yes
F.IF.C		F.IF.C.7d (+)	Yes
r.ir.C		F.IF.C.7e	Yes
		F.IF.C.8b	Yes
		F.IF.C.9	Yes
	Build a function that models a relationship between two quantities.	F.BF.A.1	Yes
F.BF.A		F.BF.A.1a	Yes
		F.BF.A.1b	Yes
		F.BF.A.2	Yes
F.BF.B	Build new functions from existing functions.	F.BF.B.3	Yes

		F.BF.B.4	Yes
		F.BF.B.4a	Yes
		F.LE.A.2	Yes
F.LE.A	Construct and compare linear, quadratic, and exponential models and solve problems.	F.LE.A.3	Yes
		F.LE.A.4	Yes
ETEA	Trade and the decreasing of this constraint Constitution and the society similar	F.TF.A.2	Yes
F.TF.A	Extend the domain of trigonometric functions using the unit circle.	F.TF.A.4	Yes
F.TF.B	Model periodic phenomena with trigonometric functions.	F.TF.B.5	Yes
F.TF.C	Prove and apply trigonometric identities.	F.TF.C.8	Yes
S.ID.A	Summarize, represent, and interpret data on a single count or measurement variable.	<u>S.ID.A.4</u>	<b>Entirely Omitted</b>
S.IC.A	Understand and evaluate random processes underlying statistical experiments.	S.IC.A.1	Entirely Omitted
		<u>S.IC.B.3</u>	<b>Entirely Omitted</b>
CICD	Make inferences and justify conclusions from sample surveys, experiments, and observational	<u>S.IC.B.4</u>	<b>Entirely Omitted</b>
S.IC.B	studies.	<u>S.IC.B.5</u>	<b>Entirely Omitted</b>
		S.IC.B.6	<b>Entirely Omitted</b>
S.MD.B	Use probability to evaluate outcomes of decisions.	<u>S.MD.B.7</u> (+)	Entirely Omitted
		<u>S.CP.A.1</u>	<b>Entirely Omitted</b>
S.CP.A	Understand independence and conditional probability and use them to interpret data.	S.CP.A.2	Entirely Omitted
5.CI.A	onderstand independence and conditional probability and use them to interpret data.	S.CP.A.3	<b>Entirely Omitted</b>

		<u>S.CP.A.4</u>	Entirely Omitted
		<u>S.CP.A.5</u>	Entirely Omitted
S.CP.B Use the rules of probability to compute probabilities of compound events in a uniform probab model.		<u>S.CP.B.6</u>	Entirely Omitted
	<u>S.CP.B.7</u>	Entirely Omitted	
		<u>S.CP.B.8</u> (+)	Entirely Omitted

<u>Precalculus</u>	Cluster	Standard	In Suggested Scope for '20-'21?
N.CN.A	Perform arithmetic operations with complex numbers.	<u>N.CN.A.3</u> (+)	Entirely Omitted (Was Honors Only)
		<u>N.CN.B.4</u> (+)	Entirely Omitted (Was Honors Only)
N.CN.B	Represent complex numbers and their operations on the complex plane.	N.CN.B.5 (+)	Entirely Omitted (Was Honors Only)
		N.CN.B.6 (+)	Yes
		N.VM.A.1 (+)	Yes
N.VM.A	Represent and model with vector quantities.	N.VM.A.2 (+)	Yes
		N.VM.A.3 (+)	Yes
		N.VM.B.4a (+)	Yes
	Perform operations on vectors.	N.VM.B.4b (+)	Yes
N.VM.B		N.VM.B.4c (+)	Yes
		N.VM.B.5a (+)	Yes
		N.VM.B.5b (+)	Yes
N.VM.C	Perform operations on matrices and use matrices in applications.	N.VM.C.6 (+)	Entirely Omitted from On-Level 1 of 2 lessons included for Honors
		<u>N.VM.C.7</u> (+)	Entirely Omitted

		<u>N.VM.C.8</u> (+)	<b>Entirely Omitted</b>
		<u>N.VM.C.9</u> (+)	<b>Entirely Omitted</b>
		N.VM.C.10 (+)	<b>Entirely Omitted</b>
		<u>N.VM.C.11</u> (+)	Entirely Omitted
		<u>N.VM.C.12</u> (+)	Entirely Omitted
A.SSE.B	Write expressions in equivalent forms to solve problems.	A.SSE.B.3	Yes
A.SSE.B	write expressions in equivalent forms to solve problems.	A.SSE.B.4	Yes
A.APR.C	Use polynomial identities to solve problems.	<u>A.APR.C.5</u> (+)	Entirely Omitted
A.APR.D	Rewrite rational expressions.	A.APR.C.7 (+)	1 of 2 lessons included (On-level)  1 of 3 lessons included (Honors)
		A.REI.6	Entirely Omitted
A.REI.C	Solve systems of equations.	<u>A.REI.C.8</u> (+)	Entirely Omitted
		<u>A.REI.C.9</u> (+)	Entirely Omitted
F.IF.A	Understand the concept of a function and use function notation.	F.IF.A.3	Yes (Honors Only)
F.IF.C	Analyze functions using different representations.	F.IF.C.7d (+)	Yes
F.IF.C		F.IF.C.8	Yes
F.BF.A	Build a function that models a relationship between two quantities.	F.BF.A.1c (+)	Yes
EDED	Build new functions from existing functions.	F.BF.B.4b (+)	Yes
F.BF.B		F.BF.B.5 (+)	Yes

F.TF.A	Extend the domain of trigonometric functions using the unit circle.	F.TF.A.3 (+)	Yes
		F.TF.A.4 (+)	Yes
F.TF.B	Model periodic phenomena with trigonometric functions.	F.TF.B.5	Yes
		F.TF.B.6 (+)	Yes
		F.TF.B.7 (+)	Yes
F.TF.C	Prove and apply trigonometric identities.	F.TF.C.9 (+)	Yes
		G.SRT.9 (+)	Yes
G.SRT	Apply trigonometry to general triangles	G.SRT.10 (+)	Yes (On-Level) 2 of 3 lessons included (Honors)
		G.SRT.11 (+)	Yes (On-Level) 2 of 3 lessons included (Honors)
S.CP.B	Use the rules of probability to compute probabilities of compound events.	<u>S.CP.B.9</u> (+)	<b>Entirely Omitted</b>
		1.1.A2.3	Yes
	The student will represent functions and relations numerically, graphically, and algebraically.	1.1.A2.4	Yes
1.1.A2 1.1.PC		1.1.PC.2 (H) Write a rational function or expression in an equivalent form, including partial fractions.	Entirely Omitted (Was Honors Only)
		1.1.PC.4 (H)	Yes

		1.1.PC.5	Yes
		1.1.PC.10 (H)	Yes (Honors only)
		1.1.PC.12 (H)	Yes
		1.1.PC.13 (H)	Yes (Honors only)
		1.1.PC.16 (H)	Yes (Honors only)
		1.1.PC.17	Yes
		1.1.PC.18 (H)	Yes (Honors only)
1.2.DC		1.2.PC.3	Yes
1.2.PC	The student will describe and apply properties of functions and relations.	1.2.PC.6	Yes
	The student will perform a variety of operations and geometrical transformations on functions and relations.	1.3.A2.5 (H)	Yes
1.3.A2 1.3.PC		1.3.PC.1	Yes
		1.3.PC.5 (H)	Yes
		1.4.PC.1	Yes
		1.4.PC.2	Yes
		1.4.PC.3	Yes
		1.4.PC.4 (H)	Yes
1.4.PC	The student will use numerical, algebraic, and graphical representations of functions and relations in order to solve real world problems.	1.4.PC.6 (H) Solve systems of equations in polar form.	Entirely Omitted (Was Honors Only)
		1.4.PC.9	Yes

		1.4.PC.11 (H)	Yes (On-Level) 1 of 2 lessons included (Honors)
		2.1.PC.6 (H)	Yes (Honors only)
2.1.PC	The student will describe relationships between geometric figures.	2.1.PC.7 (H)	Yes (Honors only)
		2.1.PC.8	Yes
		4.2.PC.3	Yes
4.2.PC	The student will estimate and compute using mental strategies, paper and pencil, and technology.	4.2.PC.5	Yes

**Note:** The standards for Precalculus combine Common Core (CCSSM) standards with Voluntary State Curriculum (VSC) standards. The VSC standards are being replaced for 2021-2022 by the new Maryland College and Career Ready Standards (MCCRS) for Precalculus.