Division of Instruction

High Leverage Practices Guidance for Math Instruction

About This Resource

The purpose of this document is to provide guidance and support for targeted and differentiated instruction that addresses the areas of most need based on math assessment results. This guide identifies the key actions teachers should take for students who are not meeting the identified focus standards for grades K-Algebra 2. Whole-group and small-group suggested activities are provided using the key instructional resources listed below.

Core Curriculum Resources	Supplemental Resources
• Illustrative Math Gr. K-Algebra 2 • Eureka Math Gr. K-6 • CPM Gr. 6-Algebra 2 • Big Ideas and SpringBoard - Algebra 1, Geometry, and Algebra 2	• Building Fact Fluency Kits • CAASPP Tools for Teachers • 3 Act Math Tasks • i-Ready Personalized Instruction • Digital Tools

Targeted and Differentiated Math Instruction

Whole group Instruction (WGI)	Small Group Instruction (SGI)
Teacher-led rigorous task to explore a new concept or practice a skill. Students are seated in small groups working on the same/similar task while the teacher circulates to monitor student thinking and provide feedback as needed. Teacher strategically selects 3-4 solutions to be shared during a whole-group discussion.	**Independent Group:** Students work individually, with partners or on a math task/problem with small groups, centers or choice menu of activities.
	Pulled Small Group: Teacher works directly with a small group on a particular math task targeting the needs of that group, then

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	provides extended independent practice and calls the next group.

GR K

If students are struggling with these domains/standards, then try…

Domain & Standard	Common Misconceptions	Core Curriculum Resources		Supplemental Resources	
		Whole Group Instruction	**Small Group Instruction**	**Differentiated Instruction**	**Small Group Instruction**
Operations and Algebraic Thinking **Big Idea:** **K.CC** **Count to 100 by ones and tens** **Count forward beginning from a given number within the known sequence** **Write numbers from 0 to 20.**	**Some students might see zero (0) as a number.** **"Teen" numbers can also be confusing for young students. To avoid confusion, these numbers should be taught as a bundle of 10 ones and some extra ones.** **(CA Math Framework, p 58)**	Adopted Program: Eureka GK, M5, Lesson 1 GK, M5, Lesson 2 GK, M5, Lesson 3 GK, M5, Lesson 4 GK, M5, Lesson 5 *Login to Schoology and access the Great Minds/Eureka Navigator to open resource links Adopted Program: Illustrative Math K.2. Numbers 1-10 K.6. Numbers 0-20	Adopted Program: Eureka GK, M5, Lesson 1 Exit Ticket GK, M5, Lesson 2 Exit Ticket GK, M5, Lesson 3 Exit Ticket GK, M5, Lesson 4 Exit Ticket GK, M5, Lesson 5 Exit Ticket *Login to Schoology and access the Great Minds/Eureka Navigator to open resource links IM Centers: Picture Books Which One? Match Mine Pattern Blocks Connecting Cubes	Building Fact Fluency (BFF): Addition & Subtraction https://buildingfactfluency.stenhouse.com • 3-Act Math Tasks • Anchor Problems • Contextualized Practice Problems LAUSD CCSS-Aligned Math Task Project Achieve the core Tasks Gr K Performance Task Gr K Performance Task: Choral Count CCSS-Aligned Mathematical Task	Building Fact Fluency (BFF): Addition & Subtraction https://buildingfactfluency.stenhouse.com • 3-Act Math Tasks • Anchor Problems • Contextualized Practice Problems What's Going on in this Graph? 3 ACT Math Tasks Cube Conversations Same or Different **Digital Resources:** i-Ready Supplemental Digital Learning Tools
Standards	☐ CCSS 1 Pager ☐ Achieve the Core-Focus Standards ☐ CCSS Math Bookmarks				
Assessments	☐ IM Lesson Cool-Downs, Practice Problems, and Section Checkpoint ☐ Eureka Topic Quiz, Mid Module, End of Module Assessments ☐ iREADY diagnostic, growth monitoring and standards mastery ☐ BFF Student Recording Sheets				

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GR 1	*If students are struggling with these domains/standards, then try…*				
Domain & Standard	Common Misconceptions	Core Curriculum Resources		Supplemental Resources	
		Whole Group Instruction	Small Group Instruction	Differentiated Instruction	Small Group Instruction

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Operations and Algebraic Thinking **(1.0A)** **Big Idea:** Develop an understanding of and strategies for addition and subtraction within 20.	Some students misunderstand the meaning of the equal sign. The equal sign means the *same as*, but many primary students think the equal sign means the *answer is coming up* to the right of the equal sign. Many students assume key words or phrases in a problem suggest the same operation every time (CA Math Framework, p 95)	Adopted Program: Eureka G1,M1 Lesson 1 G1,M1 Lesson 2 G1,M1 Lesson 3 G1, M1, Lesson 4 G1, M1, Lesson 5 G1, M1, Lesson 6 G1, M1, Lesson 7 G1, M1 Lesson 8 *Login to Schoology and access the Great Minds/Eureka Navigator to open resource links Adopted Program: Illustrative Math **1.OA**: Unit 3 1.3 Section C **1.OA**: Unit 3 1.3 Section D Activity 1.2 Section C: Add within 20 Activity 1.3 Section D: Practice Problems IM Talking Math	Adopted Program: Eureka G1 , M1, Lesson 1 Exit Ticket G1, M1, Lesson 2 Exit Ticket G1, M1, Lesson 3 Exit Ticket G1, M1, Lesson 4 Exit Ticket G1, M1, Lesson 5 Exit Ticket G1, M1, Lesson 6 Exit Ticket G1, M1, Lesson 7 Exit Ticket G1, M1, Lesson 8 Exit Ticket *Login to Schoology and access the Great Minds/Eureka Navigator to open resource links IM Centers: • What's Behind My Back (K-2) • Shake and Spill (K-2) • Math Stories (K-2)	Building Fact Fluency (BFF): Addition & Subtraction https://buildingfactfluency.stenhouse.com • 3-Act Math Tasks • Anchor Problems • Contextualized Practice Problems LAUSD CCSS-Aligned Math Task Project Achieve the core Tasks Gr 1 Performance Task G1 Hermit Crab Gr 1 Performance Task: Flower Boxes	Building Fact Fluency (BFF): Addition & Subtraction https://buildingfactfluency.stenhouse.com • 3-Act Math Tasks • Anchor Problems • Contextualized Practice Problems What's Going on in this Graph? 3 ACT Math Tasks Cube Conversations Same or Different Choral Counting **Digital Resources:** i-Ready Supplemental Digital Learning Tools
Standards	☐ CCSS 1 Pager ☐ Achieve the Core-Focus Standards ☐ CCSS Math Bookmarks				
Assessments	☐ IM Lesson Cool-Downs, Practice Problems, and Section Checkpoint ☐ Eureka Topic Quiz, Mid Module, End of Module Assessments ☐ iREADY diagnostic, growth monitoring and standards mastery ☐ BFF Student Recording Sheets				

GR 2	***If students are struggling with these domains/standards, then try…***		
		Core Curriculum Resources	**Supplemental Resources**

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Domain & Standard	Common Misconceptions	Whole Group Instruction	Small Group Instruction	Differentiated Instruction	Small Group Instruction
Operations and Algebraic Thinking **(2.OA.1)** **Big Idea:** Represent and solve problems involving addition and subtraction.	Students might assume all separate problems are subtraction and all join problems are addition and not pay attention to the part of the problem that is unknown.	Adopted Program: Eureka G2, M4, Lesson 1 G2, M4, Lesson 2 G2, M4, Lesson 3 G2, M4, Lesson 4 G2, M4, Lesson 5 *Login to Schoology and access the Great Minds/Eureka Navigator to open resource links Adopted Program: Illustrative Math **2.OA.1:** Gr. 2 Unit 1 Section C Lessons 15, 16, & 18 **2.OA.1**: Gr. 2 Unit 2 Section A Lessons 1 & 3 **2.OA.1:** Gr.2 Unit 2 Section C Lessons 11-16 **2.OA.1**: Gr.2 Unit 4 Section B Lessons 12-13	Adopted Program: Eureka G2, M4, Lesson 1 Exit Ticket G2, M4, Lesson 2 Exit Ticket G2, M4, Lesson 3 Exit Ticket G2, M4, Lesson 4 Exit Ticket G2, M4, Lesson 5 Exit Ticket *Login to Schoology and access the Great Minds/Eureka Navigator to open resource links IM Centers: • What's Behind My Back (K-2) • Shake and Spill (K-2) • Math Stories (K-2)	Building Fact Fluency (BFF): Addition & Subtraction 2.OA.1- Jingle Hoops 2.OA.1- Colors of Love 2. OA.1- Let's Bounce 2. OA.1- Stollen Skittles Illustrative Mathematics Common Core Tasks 2.OA.1: A Pencil and a Sticker 2.OA.1: Saving Money 2 LAUSD CCSS-Aligned Math Task Project Jordan Saves Money LAUSD Concept Lesson: Student Store Counting Collections Achieve the core Tasks	Building Fact Fluency (BFF): Addition & Subtraction https://buildingfactfluency.stenhouse.com • 3-Act Math Tasks • Anchor Problems • Contextualized Practice Problems What's Going on in this Graph? 3 ACT Math Tasks Cube Conversations Same or Different Choral Counting **Digital Resources:** i-Ready Supplemental Digital Learning Tools
Standards	☐ CCSS 1 Pager ☐ Achieve the Core-Focus Standards ☐ CCSS Math Bookmarks				
Assessments	☐ IM Lesson Cool-Downs, Practice Problems, and Section Checkpoint ☐ Eureka Topic Quiz, Mid Module, End of Module Assessments ☐ iREADY diagnostic, growth monitoring and standards mastery ☐ BFF Student Recording Sheets				

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If students are struggling with these domains/standards, then try...

Domain & Standard	Common Misconceptions	Core Curriculum Resources		Supplemental Resources	
		Whole Group Instruction	Small Group Instruction	Differentiated Instruction	Small Group Instruction
Operations and Algebraic Thinking **(3.OA.6)** **Big Idea:** Understand Properties of multiplication and the relationship between multiplication and division. **3.OA.7)** **Big Idea:** Multiply and divide within 100. **3.OA.8-9**		Adopted Program: Eureka G3,M1 Lesson 4 G3,M1 Lesson 5 G3,M1 Lesson 6 G3,M3, Lesson 1 G3,M3, Lesson 2 G3,M3, Lesson 3 *Login to Schoology and access the Great Minds/Eureka Navigator to open resource links Adopted Program: Illustrative Math **3.OA.6**: Gr. 3 Unit 4 Section B Lessons 6-8 **3.OA.7:** Gr. 3 Unit 1 Section C Lesson 19 **3.OA.8:** Gr.3 Unit 3 Section D Illustrative Mathematics Common Core Tasks OA Kiri's Multiplication Matching Game	Adopted Program: Eureka G3, M1, Lesson 4 Exit Ticket G3, M1, Lesson 5 Exit Ticket G3, M1, Lesson 6 Exit Ticket G3, M3, Lesson 1 Exit Ticket G3, M3, Lesson 2 Exit Ticket G3, M3, Lesson 3 Exit Ticket *Login to Schoology and access the Great Minds/Eureka Navigator to open resource links IM Centers: • Capture Squares • Five in a Row: Multiplication • Tic Tac Round • Rectangle Rumble Caaspp Tools for Teachers: Talking Numbers Lemonade Stand Follow the Numbers Achieve the core Tasks	BFF Core Games 3-5 Teacher led games help students learn math facts by developing conceptual understanding and engaging in purposeful practice (30 mins) BFF Core Games 3.OA.7-8-Knotty Rope: 3 ACT Math Task 3.OA.7-8- Performance Task: Window Washers Illustrative Mathematics Common Core Tasks 3.OA Kiri's Multiplication Matching Game 3.OA.8 The Class Trip 3.OA.8 The Stamp Collection 3.OA.9 Addition Patterns 3.OA.9 Making a Ten 3.OA.9 Patterns in the Multiplication Table 3.OA.9 Symmetry of the Addition table Counting Collections Number Sense and Reasoning Routines LAUSD CCSS-Aligned Math Task Project Apples or Oranges	BFF Core Games 3-5 Extension from teacher led, students work collaboratively to develop computational fluency through mathematical reasoning (10- 15 mins) What's Going on in this Graph? 3 ACT Math Tasks Cube Conversations Same or Different Choral Counting **Digital Resources:** i-Ready Supplemental Digital Learning Tools
SBAC	☐ CCSS 1 Pager ☐ Achieve the Core, ☐ Achievement Level Descriptor ☐ Item Specifications Sample Questions ☐ CCSS Math Bookmarks ☐ High Priority Targets ☐ SBAC Alignment Grades 3-5 ☐ SBA Sample Items Alignment to Priority MATH Targets - Grades 3-6				

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Assessments	☐ SBAC Practice Test ☐ SBAC Performance Task ☐ IM Lesson Cool-Downs, Practice Problems, and Section Checkpoint ☐ Eureka Topic Quiz, Mid Module, End of Module Assessments ☐ iREADY diagnostic, growth monitoring and standards mastery ☐ BFF Student Recording Sheets

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Domain & Standard	**Common Misconceptions**	**Core Curriculum Resources**		**Supplemental Resources**	
		Whole Group Instruction	**Small Group Instruction**	**Differentiated Instruction**	**Small Group Instruction**
Number and Operations- Fractions **(3.NF.2-3)** **Big Idea:** Develop understanding of fractions as numbers	The idea that the smaller the denominator, the smaller the piece or part of the set, or the larger the denominator, the larger the piece or part of the set, is based on the comparison that in whole numbers, the smaller a number, the less it is, or the larger a number, the more it is. The use of different models, such as fraction bars and number lines, allows students to compare unit fractions to reason about their sizes.	Adopted Program: Eureka G3,M5,Lesson 14 G3,M5, Lesson 15 G3,M5, Lesson 16 G3,M5, Lesson 17 G3,M5, Lesson 18 *Login to Schoology and access the Great Minds/Eureka App to open resource links Adopted Program: Illustrative Math **3.NF.2-3:** Gr.3 Unit 5 Section B Lessons 5-9 **3.NF.3:** Gr.3 Unit 5 Section C Lessons 10-13 **3.OA.9:** Gr. 3 Unit 1 Section B Lessons 14-15	Adopted Program: Eureka G3, M5, Lesson 14 Exit Ticket G3, M5, Lesson 15 Exit Ticket G3, M5, Lesson 16 Exit Ticket G3, M5, Lesson 17 Exit Ticket G3, M5, Lesson 18 Exit Ticket *Login to Schoology and access the Great Minds/Eureka App to open resource links IM Centers: • Mystery Number • Number Line Scoot • Secret Fraction • Rolling for Fractions	Caaspp Tools for Teachers: • Compare and Share! • Mile Race: Representing Fraction on a Number Line 3.NF.2- The Wooly Worm Race 3.NF.3- Snow Day Achieve the core Tasks	**BFF Core Games 3-5** Extension from teacher led, students work collaboratively to develop computational fluency through mathematical reasoning (10- 15 mins) DWhat's Going on in this Graph? 3 ACT Math Tasks Cube Conversations Same or Different Choral Counting **Digital Resources:** i-Ready Supplemental Digital Learning Tools
SBAC	☐ CCSS 1 Pager ☐ Achieve the Core, ☐ Achievement Level Descriptor ☐ Item Specifications Sample Questions ☐ CCSS Math Bookmarks ☐ High Priority Targets				

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Assessments	☐ SBAC Practice Test ☐ SBAC Performance Task ☐ IM Lesson Cool-Downs, Practice Problems, and Section Checkpoint ☐ Eureka Topic Quiz, Mid Module, End of Module Assessments ☐ iREADY diagnostic, growth monitoring and standards mastery ☐ BFF Student Recording Sheets

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Measurement and Data 3.MD.5-7 **Big Idea:** Geometric Measurement: understand concepts of area and relate area to multiplication and to addition.	Students may confuse perimeter and area when they measure the sides of a rectangle and then multiply. They think the attribute they find is length, which is perimeter. Pose problems situations that require students to explain whether they are to find the perimeter or area.	Adopted Program: Eureka G3,M5, Lesson 1 G3,M5, Lesson 2 G3,M5, Lesson 3 G3,M5, Lesson 4 *Login to Schoology and access the Great Minds/Eureka Navigator to open resource links Adopted Program: Illustrative Math **3.MD.5-6:** Gr.3 Unit 2 Section A Lessons 1-4 **3.MD. 6-7:** Gr.3 Unit 2 Section B Lessons 5-11	Adopted Program: Eureka G3, M5, Lesson 1 Exit Ticket G3, M5, Lesson 2 Exit Ticket G3, M5, Lesson 3 Exit Ticket G3, M5, Lesson 4 Exit Ticket *Login to Schoology and access the Great Minds/Eureka Navigator to open resource links IM Centers: • Capture Squares • Five in a Row: Multiplication • Tic Tac Round • Rectangle Rumble	BFF Core Games 3-5 Teacher led games help students learn math facts by developing conceptual understanding and engaging in purposeful practice (30 mins) BFF Core Games Caaspp Tools for Teachers: Let's Look Around Same Area, Different Perimeter Different Perimeter, Same Area Find the Area of a rectilinear Figure Array Expressions 3. MD. 5-7- Piles of Tiles 3.MD.5-7- Cover the Floor Illustrative Mathematics Common Core Tasks Finding the Area of a Polygon Achieve the core Tasks	BFF Core Games 3-5 Extension from teacher led, students work collaboratively to develop computational fluency through mathematical reasoning (10- 15 mins) What's Going on in this Graph? 3 ACT Math Tasks Cube Conversations Same or Different Choral Counting **Digital Resources:** Supplemental Digital Learning Tools
SBAC	☐ CCSS 1 Pager ☐ Achieve the Core, ☐ Achievement Level Descriptor ☐ Item Specifications Sample Questions ☐ CCSS Math Bookmarks ☐ High Priority Targets				
Assessments	☐ SBAC Practice Test ☐ SBAC Performance Task ☐ IM Lesson Cool-Downs, Practice Problems, and Section Checkpoint ☐ Eureka Topic Quiz, Mid Module, End of Module Assessments ☐ iREADY diagnostic, growth monitoring and standards mastery ☐ BFF Student Recording Sheets				

GR 4	***If students are struggling with these domains/standards, then try…***				
Domain & Standard	**Common Misconceptions**	**Core Curriculum Resources**		**Supplemental Resources**	
		Whole Group Instruction	**Small Group Instruction**	**Differentiated Instruction**	**Small Group Instruction**

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Operations and Algebraic Thinking (4.OA.1-2) **Big Idea:** Use the four operations with whole numbers to solve problems	Multiplying by two numbers in a multiplicative comparison always makes the product bigger than the original number. (CA Math Framework, p 199-200)	Adopted Program: Eureka G4, M3, Lesson 26 G4, M3, Lesson 27 G4, M3, Lesson 28 G4, M3, Lesson 29 G4, M3, Lesson 30 G4, M3, Lesson 31 G4, M3, Lesson 32 G4, M3, Lesson 33 *Login to Schoology and access the Great Minds/Eureka Navigator to open resource links Adopted Program: Illustrative Math **4.OA.1-2:** Gr. 4 Unit 5 Section A Lessons 1-6, & 18 Illustrative Mathematics Common Core Tasks • Carnival Tickets Illustrative Mathematics • Comparing Money Raised	Adopted Program: Eureka G4, M3, Lesson 26 Exit Ticket G4, M3, Lesson 27 Exit Ticket G4, M3, Lesson 28 Exit Ticket G4, M3, Lesson 29 Exit Ticket G4, M3, Lesson 30 Exit Ticket G4, M3, Lesson 31 Exit Ticket G4, M3, Lesson 32 Exit Ticket G4, M3, Lesson 33 Exit Ticket *Login to Schoology and access the Great Minds/Eureka Navigator to open resource links IM Centers: • How Close? Stage 5 & 6 • Five in a Row: Multiplication Stage 2 • Compare Stage 3	BFF Core Games 3-5 Teacher led games help students learn math facts by developing conceptual understanding and engaging in purposeful practice (30 mins) 4.OA.1-Dill'er Up: 3 ACT Math Task LAUSD CCSS-Aligned Math Task Project • Fundraising to Save Our Planet • School Main Hallway Flooring Project Caaspp Tools for Teachers: Prime Or Composite? Caaspp Tools for Teachers: Lemonade Stand Achieve the core Tasks	BFF Core Games 3-5 Extension from teacher led, students work collaboratively to develop computational fluency through mathematical reasoning (10- 15 mins) What's Going on in this Graph? 3 ACT Math Tasks Cube Conversations Same or Different Choral Counting **Digital Resources:** i-Ready Supplemental Digital Learning Tools
SBAC	☐ CCSS 1 Pager ☐ Achieve the Core ☐ Achievement Level Descriptor ☐ Item Specifications Sample Questions ☐ CCSS Math Bookmarks ☐ High Priority Targets ☐ SBAC Alignment Grades 3-5 ☐ SBA Sample Items Alignment to Priority MATH Targets - Grades 3-6				
Assessments	☐ SBAC Practice Test ☐ SBAC Performance Task ☐ IM Lesson Cool-Downs, Practice Problems, and Section Checkpoint ☐ Eureka Topic Quiz, Mid Module, End of Module Assessments ☐ iREADY diagnostic, growth monitoring and standards mastery ☐ BFF Student Recording Sheets				

GR 4	***If students are struggling with these domains/standards, then try…***		
Domain &	**Common**	**Core Curriculum Resources**	**Supplemental Resources**

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Standard	Misconceptions	Whole Group Instruction	Small Group Instruction	Differentiated Instruction	Small Group Instruction
4. Number and Operations in Base Ten (4.NBT.5-6) **Big Idea:** Use place value understanding and properties of operations to perform multi-digit arithmetic	General methods for computing quotients of multi-digit numbers and one-digit numbers rely on the same understanding as for multiplication, but in terms of division.	Adopted Program: Eureka G4, M3, Lesson 7 G4, M3, Lesson 8 G4, M3, Lesson 9 G4, M3, Lesson 10 G4, M3, Lesson 11 *Login to Schoology and access the Great Minds/Eureka Navigator to open resource links IM K-5 MATH Adopted Program: Illustrative Math **4.NBT.5:** Gr. 4 Unit 6 Section B Lessons 5-12 **4.NBT.6:** Gr. 4 Unit 6 Section C Lessons 13-20	Adopted Program: Eureka G4, M3, Lesson 7 Exit Ticket G4, M3, Lesson 8 Exit Ticket G4, M3, Lesson 9 Exit Ticket G4, M3, Lesson 10 Exit Ticket G4, M3, Lesson 11 Exit Ticket *Login to Schoology and access the Great Minds/Eureka Navigator to open resource links IM K-5 MATH IM Centers: Can You Draw It? Stage 4 Five in a Row: Multiplication Stage 2 & 3 Number Puzzles: Multiplication & Division Stage 1 Compare Stage 3 & 4 Watch Your Remainder Stage 1	BFF Core Games 3-5 Teacher led games help students learn math facts by developing conceptual understanding and engaging in purposeful practice (30 mins) 4.NBT.5 Where's the Beef: 3 ACT Math 4.NBT.5 Array-bow of Colors: 3 ACT 4.NBT.5 Krispy Kreme Me: 3 ACT Math Achieve the core Tasks Caaspp Tools for Teachers: Breaking Down Numbers? Caaspp Tools for Teachers: Multi-digit Arithmetic Place Value And Operations	BFF Core Games 3-5 Extension from teacher led, students work collaboratively to develop computational fluency through mathematical reasoning (10- 15 mins) 4.NBT.5 Strategies for Multiplying Multi-digit Numbers 4.NBT.6 Packaging Cupcakes 4.NBT.6 Dividing Resources What's Going on in this Graph? 3 ACT Math Tasks Cube Conversations Same or Different Choral Counting **Digital Resources:** i-Ready Supplemental Digital Learning Tools
SBAC	☐ CCSS 1 Pager ☐ Achieve the Core ☐ Achievement Level Descriptor ☐ Item Specifications Sample Questions ☐ CCSS Math Bookmarks ☐ High Priority Targets				
Assessments	☐ SBAC Practice Test ☐ SBAC Performance Task ☐ IM Lesson Cool-Downs, Practice Problems, and Section Checkpoint ☐ Eureka Topic Quiz, Mid Module, End of Module Assessments ☐ iREADY diagnostic, growth monitoring and standards mastery ☐ BFF Student Recording Sheets				

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GR 4	*If students are struggling with these domains/standards, then try…*				
Domain & Standard	**Common Misconceptions**	**Core Curriculum Resources**		**Supplemental Resources**	
		Whole Group Instruction	**Small Group Instruction**	**Differentiated Instruction**	**Small Group Instruction**
4. Number and Operations - Fractions (NF. B.3-4) **Big Idea:** Build fractions from unit fractions by applying and extending previous understanding of operations on whole numbers	Adding two fractions by adding their numerators and denominators	Adopted Program: Eureka G4, M5, Lesson 1 G4, M5, Lesson 2 G4, M5, Lesson 3 G4, M5, Lesson 4 G4, M5, Lesson 5 G4, M5, Lesson 6 *Login to Schoology and access the Great Minds/Eureka Navigator to open resource links Adopted Program: Illustrative Math **4.NF.4:** Gr. 4 Unit 3 Section A Lessons1-6 **4.NF.3:** Gr. 4 Unit 3 Section B Lessons 7-14	Adopted Program: Eureka G4, M5, Lesson 1 Exit Ticket G4, M5, Lesson 2 Exit Ticket G4, M5, Lesson 3 Exit Ticket G4, M5, Lesson 4 Exit Ticket G4, M5, Lesson 5 Exit Ticket G4, M5, Lesson 6 Exit Ticket *Login to Schoology and access the Great Minds/Eureka Navigator to open resource links IM Centers: Rolling For Fractions Stage 1 & 2 Compare Stage 5 & 6 Estimate and Measure Stage 3 & 4 Target Measurements Stage 2 & 3	BFF Core Games 3-5 Teacher led games help students learn math facts by developing conceptual understanding and engaging in purposeful practice (30 mins) 4.NF.4 Drip Drop: 3 ACT Math 4.NF.4 The Juice: 3 ACT Math 4.NF.4 Do the Dew 3 ACT Math SBAC Sample Summative Item Art Project Fractions (PT) Achieve the core Tasks Caaspp Tools for Teacher: Addition of Fractions with Like Denominators Subtracting Fractions with Like Denominators Multiplication of Fractions and Whole Numbers Fraction Word Problems	BFF Core Games 3-5 Extension from teacher led, students work collaboratively to develop computational fluency through mathematical reasoning (10- 15 mins) 4. NF.3 How Much Punch is Left? 4.NF.3 Pattern Blocks & Unit Fractions 4.NF.4 Drawing a Model 4.NF.4 Chris' Cookies What's Going on in this Graph? 3 ACT Math Tasks Cube Conversations Same or Different Choral Counting
SBAC	☐ CCSS 1 Pager ☐ Achieve the Core ☐ Achievement Level Descriptor ☐ Item Specifications Sample Questions ☐ CCSS Math Bookmarks ☐ High Priority Targets				
Assessments	☐ SBAC Practice Test ☐ SBAC Performance Task ☐ IM Lesson Cool-Downs, Practice Problems, and Section Checkpoint ☐ Eureka Topic Quiz, Mid Module, End of Module Assessments ☐ iREADY diagnostic, growth monitoring and standards mastery ☐ BFF Student Recording Sheets				

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GR 5	*If students are struggling with these domains/standards, then try...*				
Domain & Standard	**Common Misconceptions**	**Core Curriculum Resources**		**Supplemental Resources**	
		Whole Group Instruction	**Small Group Instruction**	**Differentiated Instruction**	**Small Group Instruction**
Number and Operations - Fractions (NF B.3) **Big Idea:** Apply and extend previous understanding of multiplication and division to multiply and divide fractions	Conceptual understanding of division as equal sharing	Adopted Program: Eureka G5, M4, Lesson 2 G5, M4, Lesson 3 G5, M4, Lesson 4 G5, M4, Lesson 5 *Login to Schoology and access the Great Minds/Eureka Navigator to open resource links IM K–5 MATH Adopted Program: Illustrative Math **5.NF.3:** Gr. 4 Unit 3 Section A Lessons1-6 **5.NF.4:** Gr. 4 Unit 3 Section B Lessons 7-14	Adopted Program: Eureka G5, M4, Lesson 2 Exit Ticket G5, M4, Lesson 3 Exit Ticket G5, M4, Lesson 4 Exit Ticket G5, M4, Lesson 5 Exit Ticket *Login to Schoology and access the Great Minds/Eureka Navigator to open resource links IM K–5 MATH IM Centers: Rolling For Fractions Stage 1 & 2 Compare Stage 5 & 6 Estimate and Measure Stage 3 & 4 Target Measurements Stage 2 & 3	BFF Core Games 3-5 Teacher led games help students learn math facts by developing conceptual understanding and engaging in purposeful practice (30 mins) Number Talk and Dots LAUSD Concept Lesson • Fruit Bar Fun Achieve the core Tasks Caaspp Tools for Teachers: Fraction Action Caaspp Tools for Teachers: App Mazing Fractions Caaspp Tools for Teachers: Fraction Satisfaction	BFF Core Games 3-5 Extension from teacher led, students work collaboratively to develop computational fluency through mathematical reasoning (10- 15 mins) 5.NF.3.KNot Tying Project 5.NF.3 Candy Conundrum 5. NF4.Basketball or Football 5.NF.4. Folded Paper Lengths Performance Task What's Going on in this Graph? 3 ACT Math Tasks Cube Conversations Same or Different Choral Counting **Digital Resources:** i-Ready
SBAC	☐ CCSS 1 Pager ☐ Achieve the Core ☐ Achievement Level Descriptor ☐ Item Specifications Sample Questions ☐ CCSS Math Bookmarks ☐ High Priority Targets ☐ SBAC Alignment Grades 3-5 ☐ SBA Sample Items Alignment to Priority MATH Targets - Grades 3-6				
Assessments	☐ SBAC Practice Test ☐ SBAC Performance Task ☐ IM Lesson Cool-Downs, Practice Problems, and Section Checkpoint ☐ Eureka Topic Quiz, Mid Module, End of Module Assessments ☐ iREADY diagnostic, growth monitoring and standards mastery ☐ BFF Student Recording Sheets				

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If students are struggling with these domains/standards, then try…

Domain & Standard	Common Misconceptions	Core Curriculum Resources			Supplemental Resources		
		Whole Group Instruction	Small Group Instruction	Differentiated Instruction	Concept Recovery Modules	Imagine MyPath K-12	Small Group Instruction
Expressions and Equations (6.EE.5, 6.EE.9) **Key ideas:** Reason about and solve one-variable equations and inequalities. Understanding what it means for a value to be a solution Represent and analyze quantitative relationships between dependent and independent variables.	When 4x is evaluated where x=7, substitution does not result in the expression meaning 47 For expressions like *a+3a* , students need to understand ***a*** as ***1a*** to know that **a+3a =4a** , not **$3a^2$** . Students can't distinguish between the dependent and independent variables and put them on the wrong axis when graphing Making errors when solving inequalities that involve integer division or multiplication	Adopted Program; Eureka G6. M4 Lesson 31, 32 *Login to Schoology and access the Great Minds/Eureka Navigator to open resource links Adopted Program: Illustrative Math Gr. 6 Unit 6 **6.EE.5:** Lessons 1-5 **6.EE.9:** Lessons 16-19 CPM Math Notes Variables and Alg Expressions CPM Math Notes Algebra Tiles Like Terms CPM Checkpoint problems	Caaspp Tools for Teachers: Expressions and Equations Illustrative Mathematics Grade 6, Lesson 3 • Staying in balance • Practice Solving Equations and Representing Situations with Equations LAUSD CCSS-Aligned Math Task Project •Chocolate Bar Sales • Function Machines	Just in Time Intervention Resources Middle School Number Talks Equal and Equivalent Used as a warm up to the math lesson. Completed in 10 minutes • Which one does not belong • Notice/Wonder • Take turn Discovery Education 6.EE.5 Reason about and solve one variable and equations and inequalities 6.EE.9 Independent and Dependent Variables Contextualized Practice Problem (20 mins)	Imagine Edgenuity **Math 6** – 6.EE.5, 6.EE.6, and 6.EE.7: Equations **Math 6** – 6.EE.9: Equations in Two Variables	Finding Unknown Numbers Writing Equations to Find Unknowns Writing Inequalities Addition and Subtraction Inequalities Multiplication and Division Inequalities Modeling Real-World Problems with One-Step Equations	What's Going on in this Graph? https://ca.pbslearningmedia.org/resource/mgbh.math.ee.balance/balancing-scales-to-solve-equations/ 3 ACT Math Tasks Cube Conversations Same or Different Choral Counting **Digital Resources:** Zearn and IXL IXL CAASPP Learning Plan i-Ready
SBAC	☐ CCSS 1 Pager ☐ Achieve the Core ☐ Achievement Level Descriptor ☐ Item Specifications Sample Questions ☐ CCSS Math Bookmarks ☐ Math 6 Focus Practice Items ☐ Math 6 Performance Task Module ☐ Performance Task Overview and Blueprint ☐ SBAC Generic Performance Task Rubrics ☐ SBA Sample Items Alignment to Priority MATH Targets to iM - Secondary Grades 6-11 ☐ SBA Sample Items Alignment to Priority MATH Targets - Grades 3-6						

Division of Instruction

High Leverage Practices Guidance for Math Instruction

Assessments	☐ SBAC Practice Test ☐ SBAC Performance Task ☐ Sample SBAC item ☐ Renaissance ☐ IM Lesson Cool-Downs, Practice Problems, and Section Checkpoint ☐ Eureka Topic Quiz, Mid Module, End of Module Assessments

GR 7

If students are struggling with these domains/standards, then try...

Domain & Standard	Common Misconceptions	Core Curriculum Resources		Supplemental Resources			
		Whole Group Instruction	Small Group Instruction	Differentiated Instruction	Concept Recovery Modules	Imagine MyPath K-12	Small Group Instruction
Expressions and Equations **(7.EE. 1, 2, 3, 4)** **Key ideas:** Use properties of operations to generate equivalent expressions. Solve real- life and mathematical problems using numerical and algebraic expressions and equations. Fluently solve equations of the form px+q = r and p(x +q) = r where p, q, and r are rational #s.	Common errors with distributive property include: • not distributing the factor outside the parentheses with all the quantities inside the parentheses. • not distributing a negative with all the quantities in the parentheses. • Common errors with solving equations with rational #s include making errors with integers and not understanding that multiplying by the reciprocal is the same as dividing	Adopted Program IM 7th grade Unit 6 6th grade Unit 6 lessons 9, 10 , 11 review distributive property 7th grade unit 5 operations with rational numbers Adopted Program CPM Chap 3 Math Notes Chap 4 Math Notes Chap 6 Math Notes Checkpoint 6 Checkpoint 7A	Caaspp Tools for Teachers: Expressions and Equation	Just in Time Intervention Resources Middle School Number Talks **Swimming Pool Border Problem** for generating equivalent expressions Desmos version Teacher Guide Menu Math by Brad Fulton solving inequalities iReady Teacher Tools	Imagine Edgenuity **Math 7** - 7.EE.1 and 7.EE.2: Expressions **Math 7** - 7.EE.3: Problem Solving with Expressions and Equations **Math 7** - 7.EE.4.a: Equations **Math 7** - 7.EE.4.b: Inequalities	Writing and Evaluating Expressions Using Properties to Simplify Expressions Adding and Subtracting Expressions Factoring Expressions Expanding Expressions Rational Numbers Solving Problems Involving Rational Numbers Writing Equations Solving Two-Step Equations Writing Inequalities Solving Two-Step Inequalities	Three Act Tasks: Discovery Education 7th grade **Core Games** Integer product game to support practice with integer multiplication Zearn and IXL Students to work in pairs or individually or small groups (20 -30 mins) IXL CAASPP Learning Plans i-Ready

Division of Instruction

High Leverage Practices Guidance for Math Instruction

SBAC	☐ CCSS 1 Pager ☐ Achieve the Core Assessments ☐ Achievement Level Descriptor pp 21-24 ☐ Item Specifications Sample Questions ☐ SBA Math Blueprint (Adjusted) ☐ Math 7 Focus Practice Items ☐ Math 7 Performance Task Module ☐ Performance Task Overview and Blueprint ☐ SBAC Generic Performance Task Rubrics ☐ SBA Sample Items Alignment to Priority MATH Targets to iM - Secondary Grades 6-11 ☐ SBAC Alignment Grades 6-8
Assessments	☐ IM Lesson Cool-Downs, Practice Problems, and Section Checkpoint ☐ SBAC Practice Test ☐ SBAC Performance Task ☐ Sample SBAC item ☐ Renaissance ☐ Expressions and Equations IAB

GR 8

If students are struggling with these domains/standards, then try...

Domain & Standard	Common Misconceptions	Core Curriculum Resources		Supplemental Resources			
		Whole Group Instruction	**Small Group Instruction**	**Differentiated Instruction**	**Concept Recovery Modules**	**Imagine MyPath K-12**	**Small Group Instruction**
Expressions and Equations (8.EE) **Key ideas:** Work with radicals and integer exponents. Understand the connections between proportional relationships, lines, and linear equations. Analyze and solve linear equations and pairs of simultaneous linear equations.	Students do not know how to convert from standard form to slope-intercept form. Students do not understand that when the equation is in slope-intercept form, slope and y-intercept can be used to graph the system. Students forget to substitute the first value obtained in one of the equations to find the second variable. Students ignore the minus at the beginning of the terms and solve the equation.	IM 6–8 MATH Adopted Program: IM Lesson 2: Keeping Equations Balanced Lesson 3 : Balanced Moves Lesson 6 : Strategic Solving Lesson 5 - Solving Any Linear Equation Lesson 12: Systems of Equations Lesson 14: Solving More Systems Unit 4 Mid-unit Assessment Math Notes Chap 2	Caaspp Tools for Teachers: Expressions and Equations Illustrative Mathematics Tasks • Giantburgers • Extending the Definitions of Exponents, Variation 1 • DVD Profits, Variation 1 • Find the Change • Solving Equations LAUSD CCSS-Aligned	Just in Time Intervention Resources Algebra Talks Used as a warm up to the math lesson. Completed in 10 minutes • Notice/Wonder • Which one does not belong • Collect and Display • Think Pair Share • Which one would you choose **Discovery Education**	**Imagine Edgenuity** **Math 8** - 8.EE.8.a: Solving Systems Graphically **Math 8** - 8.EE.8.c: Modeling with Linear Systems **Math 8** - 8.EE.8.b: Solving Systems Algebraically **Math 8** - 8.EE.3 and 8.EE.4: Scientific Notation **Math 8** - 8.EE.1: Exponents **Math 8** - 8.EE.5: Slope and Proportional	Powers and Exponents Zero and Negative Exponents Raising a Power to a Power Evaluating Expressions with Exponents Exploring Real Numbers Solving Square Root Equations Solving Cube Root Equations Introduction to Scientific Notation Operations with	Students to work in pairs or individually or small groups (20 - 30 mins) Three Act Tasks **IXL** Linear Graph from a graph Interpret the slope and y-intercept of a linear function Use an equation to complete a table and a graph IXL Activities IXL CAASPP Learning Plan **Zearn** Introduction to Linear Relationships

Division of Instruction

High Leverage Practices Guidance for Math Instruction

		Math Notes Chap 3 Math Notes Chap 5 Checkpoint 5 Checkpoint 6 Checkpoint 7 **FIABS:** Proportional Relationships, Lines, and Linear Equations; 2) Analyze and Solve Linear Equations; 3) Expression and Equations II	Math Task Project • Estimating Length	8.EE.A - Work with radicals and integer exponents. 8.EE.B - Understand the connections between proportional relationships, lines, and linear equations 8.EE.C - Analyze and solve linear equations and pairs of Contextualized Practice Problem (20 mins)	Relationships **Math 8** - 8.EE.7.a and 8.EE.7.b: Algebraic Expressions and Solving Equations **Math 8** - 8.EE.2, 8.G.7, and 8.G.8: Using the Pythagorean Theorem **Math 8** - 8.F.3 and 8.EE.6: Linear Functions	Scientific Notation Rate of Change and Introduction to Slope Slope-Intercept Form Solving Equations with Rational Numbers Solving with Variables on Both Sides Solving with the Distributive Property Analyzing Solutions Exploring Systems of Linear Equations Writing and Solving Systems Using Graphs to Solve Systems Using Substitution to Solve Systems Using Addition to Solve Systems	Lessons 4-14 i-Ready Algebra Tiles IXL CAASPP Learning Plan
SBA	☐ CCSSM 1 Pager ☐ Achieve the Core Assessments ☐ Achievement Level Descriptors pp 25-28 ☐ Item Specifications ☐ SBA Math Blueprint (Adjusted) ☐ Math 8 Focus Practice Items ☐ Math 8 Performance Task Module ☐ Performance Task Overview and Blueprint ☐ SBAC Generic Performance Task Rubrics ☐ SBA Sample Items Alignment to Priority MATH Targets to iM - Secondary Grades 6-11 ☐ SBAC Alignment Grades 6-8						
Assessments	☐ IM Lesson Cool-Downs, Practice Problems, and Section Checkpoint ☐ SBAC Practice Test ☐ SBAC Performance Task ☐ Sample SBAC item ☐ Renaissance						

Division of Instruction

High Leverage Practices Guidance for Math Instruction

GR 8	*If students are struggling with these domains/standards, then try…*						
Domain & Standard	**Common Misconceptions**	**Core Curriculum Resources**		**Supplemental Resources**			
		Whole Group Instruction	**Small Group Instruction**	**Differentiated Instruction**	**Concept Recovery Modules**	**Imagine MyPath K-12**	**Small Group Instruction**
Functions (8.F.1-3, 5) **Key ideas:** Define, evaluate, and compare functions. Use functions to model relationships between quantities.	Students may use different scales on the axes and then try to compare rates. Make sure students identify the correct scales on a graph, not all scales increase by 1 or by the same increment.	Adopted Program: IM Lesson 1 - Inputs and Outputs Lesson 2 - Introduction to Functions Lesson 4 - Tables, Equations, and Graphs of Functions Lesson 6 - Even More Graphs of Functions Lesson 7 - Connecting Representations of Functions Lesson 8 - Linear	Caaspp Tools for Teachers: Functions Illustrative Mathematics Tasks • Rabbit and Foxes • Baseball Cards • Function Rules • Video Streaming LAUSD CCSS-Aligned Math Task Project •	Just in Time Intervention Resources iReady Teacher Tool: Functions Used these activities as a warm up to the math lesson. Completed in 10 minutes • Notice/Wonder • Which one does not belong • Think Pair	Imagine Edgenuity **Math 8** - 8.F.1, 8.F.2, and 8.F.5: Introduction to Functions **Math 8** - 8.F.3 and 8.EE.6: Linear Functions	Introduction to Functions Using Function Notation Linear vs. Nonlinear Functions Constructing Linear Functions Interpreting Graphs	Students to work in pairs or individually or small groups (20 - 30 mins) Three Act Tasks IXL **Zearn Mission 5**

		Function Lesson 9 - Linear Model Adopted Program: CPM Chap 8 Math Notes **FIAB:** Functions		• Share • Think Pair Share **Desmos** Activities Card Sort: Functions Picture Perfect Guess My Rule Discovery Education 8.F.1-3 - Define, evaluate, and compare functions. 8.F.5 - Use functions to model relationships between quantities.			
SBA	☐ CCSSM 1 Pager ☐ Achieve the Core Assessments ☐ Achievement Level Descriptors pp 25-28 ☐ Item Specifications ☐ SBA Math Blueprint (Adjusted) ☐ Math 8 Focus Practice Items ☐ Math 8 Performance Task Module ☐ Performance Task Overview and Blueprint ☐ SBAC Generic Performance Task Rubrics						
Assessments	☐ IM Lesson Cool-Downs, Practice Problems, and Section Checkpoint ☐ SBAC Practice Test ☐ SBAC Performance Task ☐ Sample SBAC item ☐ Renaissance						

ALG 1	***If students are struggling with these domains/standards, then try...***					
Domain & Standard	**Common Misconceptions**	**Core Curriculum Resources**		**Supplemental Resources**		
		Whole Group Instruction	**Small Group Instruction**	**Differentiated Instruction**	**Concept Recovery Modules**	**Small Group Instruction**

Division of Instruction

High Leverage Practices Guidance for Math Instruction

Reasoning with Equations & Inequalities (A1.A-REI.1-6, 10-11) **Key ideas:** Understand solving equations as a process of reasoning and explain the reasoning. Solve equations and inequalities in one variable. Solve systems of equations. Represent and solve equations and inequalities graphically	• Students may not realize that a solution to a system of equations must be a solution of all the equations in the system simultaneously. • Students may incorrectly apply basic integer operations when substituting one equation into another one. • Students may believe that a line and a circle have nothing in common.	Adopted Program: **IM** Lesson 1 - Planning pizza party Lesson 5 - Equations and Their Graphs Lesson 12 - Writing and Graphing Systems of Linear Equations Lesson 21 - Graphing Linear Inequalities in Two Variables (Part 1) **Big Ideas:** Lesson 1.1 Solving Simple Equations Lesson 1.2 Solving Multi Step Equations Lesson 1.3 Solving Equations with Variables on both sides Lesson 1.4 Solving absolute value equations Lesson 6.6 Geometric Sequence **SpringBoard:** 2-1 Writing and Solving Equations 2-2 Equations with Variables on Both Sides 2-3 Solving More Complex Equations 2-4 Equations with No Solutions or Infinitely Many Solutions 2-5 Solving Literal Equations for a Variable 31-1 Solving by Graphing or Factoring **CPM** Chap 2 Math Notes - slope, y intercept, writing eqn from lines Chap 3 Math Notes - Algebra Tiles Chap 4 Math Notes - systems Chap 5 Math Notes - systems	Caaspp Tools for Teachers: Reasoning with Equations and Inequalities Illustrative Mathematics Tasks •Throwing Baseballs •Solving Two Equations in Two Unknowns LAUSD CCSS-Aligned Math Task Project •Solving Linear Equations in Two Variables	Just in Time Intervention Resources Used these activities as a warm up to the math lesson. Completed in 10 minutes • Notice/Wonder • Which one does not belong • Think Pair Share Discovery Education Understand solving equations as a process of reasoning and explain the reasoning. Solve equations and inequalities in one variable. Solve systems and inequalities in one variable Represent and solve equations and inequalities graphically Contextualized Practice Problem (20 mins)	**Imagine Edgenuity** **Algebra I** - A.REI.A.1: Explaining Each Step in Solving a Simple Equation **Algebra I** - A.CED.A.2 and A.REI.D.10: Creating and Graphing Equations in Two Variables **Algebra I** - A.REI.B.3: Solving Linear Equations and Inequalities in One Variable **Algebra I** - A.REI.B.4b: Solving Quadratic Equations **Algebra I** - A.REI.C.5: Solving Systems by Elimination **Algebra I** - A.REI.C.6: Solving Systems of Linear Equations Exactly and Approximately **Algebra I** - A.CED.A.2 and A.REI.D.10: Creating and Graphing Equations in Two Variables **Algebra I** - A.REI.C.7 and A.REI.D.11: Solving a Linear and Quadratic System and Explaining the Intersection of Two Systems	Students to work in pairs or individually or small groups (20 - 30 mins) Three Act Tasks **IXL** Solve Equations Systems of Equations Solve Inequalities Factoring Quadratic Equations Completing the Square IXL CAASPP Learning Plans Algebra Tiles

		Checkpoints #1-7A **FIAB:** Equations and Reasoning; Solve Equations and Inequalities: Linear and Exponential; Solve Equations and Inequalities: Quadratic				
SBA	☐ Standards One pager ☐ Achieve the Core Assessments ☐ Achievement Level Descriptors pp 33 - 38 ☐ Item Specifications ☐ SBA Math Blueprint (Adjusted) ☐ HS Focus Practice Items ☐ HS Performance Task Module ☐ Performance Task Overview and Blueprint ☐ SBAC Generic Performance Task Rubrics ☐ SBA Sample Items Alignment to Priority MATH Targets to iM - Secondary Grades 6-11 ☐ SBAC Grade 11 Claim 1 Distribution					
Assessments	☐ IM Lesson Cool-Downs, Practice Problems, and Section Checkpoint ☐ SBAC Practice Test ☐ SBAC Performance Task ☐ Sample SBAC item ☐ iReady					

ALG 1	***If students are struggling with these domains/standards, then try…***		
Domain & Standard	**Common Misconceptions**	**Core Curriculum Resources**	**Supplemental Resources**

Division of Instruction

High Leverage Practices Guidance for Math Instruction

		Whole Group Instruction	Small Group Instruction	Differentiated Instruction	Concept Recovery Modules	Small Group Instruction
Seeing Structures in Equations (A1.A-SSE.1-4) **Key ideas:** Interpret the structure of expressions. Write expressions in equivalent forms to solve problems.	•Students may confuse the parts of an expression, such as counting variables and not terms and misidentify the number of terms in an expression. • Students may not have a conceptual basis for patterns, such as an area model for difference of squares, and struggle to recognize and apply them to new situations.	Adopted Program: **IM** Lesson - Patterns of Growth Lesson 3 - Representing Exponential Growth **SpringBoard:** 1-1 Numeric and Graphic Representations of Data 1-2 Writing Expression 26-1 Factoring by Greatest Common Factor (GCF) 31-1 Solving by Graphing or Factoring **CPM** Math Notes 1: Families of functions Checkpoint Problems **FIAB:** Seeing Structure in Expressions/Polynomial Expressions	Caaspp Tools for Teachers: Seeing Structures in Equations Illustrative Mathematics Tasks •A-SSE Increasing or Decreasing? Variation 2 LAUSD CCSS-Aligned Math Task Project •Solving Linear Equations in Two Variables	Just in Time Intervention Resources Used these activities as a warm up to the math lesson. Completed in 10 minutes • Notice/Wonder • Which one does not belong • Think Pair Share Discovery Education Interpret the structure of expressions Write expressions in equivalent forms to solve problems. Contextualized Practice Problem (20 mins)	**Imagine Edgenuity** **Algebra I** - A.SSE.A.1a and A.SSE.A.1b: Interpreting Expressions **Algebra I** - A.SSE.A.2: Rewriting an Expression **Algebra I** - A.SSE.B.3a: Factoring a Quadratic Expression **Algebra I** - A.SSE.B.3b and F.IF.C.8a: Completing the Square and Factoring Quadratic Functions **Algebra I** - N.RN.A.1, N.RN.A.2, and A.SSE.B.3c: Properties of Exponents	Students to work in pairs or individually or small groups (20 - 30 mins) Three Act Tasks **IXL** Simplifying Expressions Factoring Expressions IXL CAASPP Learning Plan
SBA	☐ Standards One pager ☐ Achieve the core assessments ☐ Achievement Level Descriptors pp 33 - 38 ☐ Item Specifications ☐ SBA Math Blueprint (Adjusted ☐ HS Focus Practice Items) ☐ HS Performance Task Module ☐ Performance Task Overview and Blueprint ☐ SBAC Generic Performance Task Rubrics ☐ SBA Sample Items Alignment to Priority MATH Targets to iM - Secondary Grades 6-11 ☐ SBAC Grade 11 Claim 1 Distribution					
Assessments	☐ IM Lesson Cool-Downs, Practice Problems, and Section Checkpoint ☐ SBAC Practice Test ☐ SBAC Performance Task ☐ Sample SBAC item ☐ iReady					

ALG 1	***If students are struggling with these domains/standards, then try…***

Division of Instruction

High Leverage Practices Guidance for Math Instruction

Domain & Standard	Common Misconceptions	Core Curriculum Resources		Supplemental Resources		
		Whole Group Instruction	Small Group Instruction	Differentiated Instruction	Concept Recovery Modules	Small Group Instruction
Building Functions (A1.F-BF.1-4) **Key ideas:** Build a function that models a relationship between two quantities. Build new functions from existing functions.	• Students do not have ample experience with linear and exponential function over equal intervals and equal ratios over equal intervals. • Students do not see the effect of transformations on the graph of a function and why it appears that the effect on the graph is the opposite to the transformation on the variable.	Adopted Program: **IM** Lesson 1 - Functions Involving Percent Change Lesson 17 - Writing Inverse Functions to Solve Problems Lesson 15 - Vertex Form Mid-unit assessment **Big Ideas:** Lesson 3.2 Functions Lesson 3.3 Function Notation Lesson 3.5 Graphing Linear Equations in slope intercept form SpringBoard 5-1 Relations and Functions 5-2 Domain and Range 5-3 Function Notation 10-1 Direct Variation 10-2 Indirect Variation 10-3 Another Linear Model 10-4 Inverse Functions 22-1 Exponential Functions and Exponential Growth 22-2 Exponential Decay 29-1 Modeling with a Quadratic Functions 29-2 Graphing and Analyzing a Quadratic Function 30-1 Translations of the Quadratic parent Functions 30-2 Stretching and Shrinking the Quadratic Parent Function 30-3 Multiple Transformation of the Quadratic Parent Function	Caaspp Tools for Teachers: Building Functions Illustrative Mathematics Tasks •Transforming the graph of a function •Identifying Quadratic Functions (Vertex Form) LAUSD CCSS-Aligned Math Task Project • Building Functions	Used these activities as a warm up to the math lesson. Completed in 10 minutes • Notice/Wonder • Which one does not belong • Think Pair Share Discovery Education Build a function that models a relationship between two quantities B.F. 3 Building new functions from existing functions B.F.4 Build new functions from existing functions. Contextualized Practice Problem (20 mins)	**Imagine Edgenuity** **Algebra I** - F.IF.A.3, F.BF.A.1a, F.BF.A.2, and F.LE.A.2: Sequences **Algebra I** - F.IF.C.7e, F.IF.C.8b, F.BF.A.1b, and F.LE.B.5: Exponential Functions **Algebra I** - F.BF.B.3: Transformations of Graphs **Algebra I** - F.BF.B.4a: Function Inverses	Students to work in pairs or individually or small groups (20 - 30 mins) Three Act Tasks **IXL** Build Functions Exponential Functions Quadratic Functions IXL CAASPP Learning Plan

High Leverage Practices Guidance for Math Instruction

		CPM Chap 1 Math Notes: Functions Checkpoint Problems **FIAB:** Interpreting Functions Create Equations: Linear and Exponential				
SBA	☐ Standards One Pager Achieve the Core Assessments ☐ Achievement Level Descriptors pp 33 - 38 ☐ Item Specifications ☐ SBA Math Blueprint (Adjusted) ☐ HS Focus Practice Items ☐ HS Performance Task Module ☐ Performance Task Overview and Blueprint ☐ SBAC Generic Performance Task Rubrics ☐ SBA Sample Items Alignment to Priority MATH Targets to iM - Secondary Grades 6-11 ☐ SBAC Grade 11 Claim 1 Distribution					
Assessments	☐ IM Lesson Cool-Downs, Practice Problems, and Section Checkpoint ☐ SBAC Practice Test ☐ SBAC Performance Task ☐ Sample SBAC item ☐ iReady					

Division of Instruction

High Leverage Practices Guidance for Math Instruction

ALG 2

If students are struggling with these domains/standards, then try...

Domain & Standard	Common Misconceptions	Core Curriculum Resources		Supplemental Resources		
		Whole Group Instruction	Small Group Instruction	Differentiated Instruction	Concept Recovery Modules	Small Group Instruction
Interpret functions. (F-IF.B.4-6; F-IF.C7a,b,c,e; F-IF.8, F-IF.9) **Key ideas:** Interpret functions that arise in applications in terms of the context. Analyze functions using different representations.	• Students may believe that each family of functions (e.g., quadratic, square root, etc.) is independent of the others, so they may not recognize commonalities among all functions and their graphs. • Students may also believe that even and odd functions refer to the exponent of the variable, rather than the sketch of the graph and the behavior of the function. • Students often confuse when they are looking for the input value and when they are looking for the output value. •Students think that a constant function is not actually a function at all since they cannot see an input variable in the equation. • Students think function is all about unknowns, variables and graphs. When it comes to operations of functions and they learn about add/subtract/multiplication /division of functions they get confused because	Adopted Program: IM Lesson 1: Towering Sequence Lessons 2 - 7: Sequence Lessons 8 - 11: What's the equation? Lessons 16 - 19: Rational Functions Big Ideas: Lesson 2.2 Characteristics of Quadratic Functions Lesson 2.3 Focus of a Parabola Lesson 4.1 Graphing Polynomial Functions Lesson 4.8 Analyzing Graphs of Polynomial Functions Lesson 8.1 Defining and Using Sequences and Series Lesson 8.2 Analyzing Arithmetic Sequences and Series Lesson 8.3 Analyzing Geometric Sequences and Series Lesson 8.4 Finding Sums of Infinite Geometric Sequences Lesson 8.5 Using Recursive Rules with Sequences Lesson 2.4 Modeling with Quadratic	Caaspp Tools for Teachers: Interpreting Functions Illustrative Mathematics Tasks •Throwing Baseballs •Average Cost •Influenza Epidemic •Graphs of Quadratic Functions LAUSD CCSS-Aligned Math Task Project •	Just in Time Intervention Resources Used these activities as a warm up to the math lesson. Completed in 10 minutes • Notice/Wonder • Which one does not belong • Think Pair Share Discovery Education Understand solving equations as a process of reasoning and explain the reasoning. Solve equations and inequalities in one variable. Solve systems and inequalities in one variable Represent and solve equations and inequalities graphically Interpret the structure of expressions Write expressions in equivalent forms to solve problems. Contextualized Practice Problem (20 mins)	Imagine Edgenuity **Algebra II** - F-IF.4, F-IF.7.c, and F-IF.9: Polynomial Functions **Algebra II** - F-IF.5, F-IF.7.b and F-IF.9: Graphing Absolute Value, Piecewise, and Step Functions **Algebra II** - A-CED.1 and F-IF.6: Creating Equations and Inequalities **Algebra II** - F-IF.7e and F-IF.9: Graphing Trigonometric Functions **Algebra II** - F-IF.8.a: Completing the Square **Algebra II** - F-IF.8.b: Modeling with Exponential Functions **Algebra II** - F-IF.7.b and F-IF.9: Graphing Radical Functions	Students to work in pairs or individually or small groups (20 - 30 mins) Three Act Tasks IXL IXL CAASPP Learning Plan Graph a linear equation Match quadratics functions and graph Match polynomials and graph Rational functions Match exponential functions and graph Domain and range of quadratic functions Domain and range of function: graph Graph absolute functions Graph piecewise-defined functions Graph exponential functions

	those operations are valid for numbers only. • Students seem to struggle to grasp the possibility of a graph being piecewise.	Equations SpringBoard: 28-1: Inverse Variation and Combined Variation 28-2: Transformations of the Parent Rational Function 21-1: Exploring Exponential Patterns 21-2: Exponential Functions 21-3: Properties of Logarithms 21-4: More Properties of Logarithms 22-1: Exponential Data 22-2: The Common Logarithm Function 22-3: Properties of Logarithms 22-4: More Properties of Logarithms 27-1: Formulating and Graphing a Rational Function 27-2: Formulating and Graphing More Rational Functions 27-3: Identifying Asymptotes 4-1: Introduction to Piecewise Defined Functions 4-2: Step Functions and Absolute Value Functions 4-3: Transforming the Absolute Value Parent Function s 11-1: Translations of Parabolas 11-2: Shrinking, Stretching, and Reflecting Parabolas 11-3: Vertex Form CPM 1.1.2, 1.2.1, 1.2.2, 1.2.4, 2.1.3, 2.2.1, 5.2.3, 5.2.5, 8.1.1, 8.1.3 MN: 1.2.2 2-4, 2-109, 2-118, 2-131, 2-148, 3-30, 3-34, 3-133, 5-79, 5-104, 5-129, 6-132, 7-				

		19, 7-112, 7-137, 7-141, 8-25, 8-95, 9-69 1.1.3, 1.2.1, 1.2.2, 4.2.2, 4.2.3, 5.1.2, 5.2.5, 8.3.3 MN: 1.1.3 Checkpoint 3B 1-23, 1-34, 1-68, 1-109, 2-69, 2-81, 2-141, 3-118, 4-45, 5-62, 5-80, 7-4, 7-19, 7-24, 7-70, 7-134, 8-95, 10-130, 10-163 1-112, 3-36, 3-55, 6-28 1.1.3, 2.2.1, 2.2.2, 2.2.5 1-86, 2-52, 2-126, 2-131, 2-141, **FIAB:** • Interpreting Functions				
SBA	☐ Standards One pager Achieve the Core Assessments ☐ Achievement Level Descriptors pp 33 - 38 ☐ Item Specifications ☐ SBA Math Blueprint (Adjusted) ☐ HS Focus Practice Items ☐ HS Performance Task Module ☐ Performance Task Overview and Blueprint ☐ SBAC Generic Performance Task Rubrics ☐ SBA Sample Items Alignment to Priority MATH Targets to iM - Secondary Grades 6-11 ☐ SBAC Grade 11 Claim 1 Distribution					
Assessments	☐ IM Lesson Cool-Downs, Practice Problems, and Section Checkpoint ☐ SBAC Practice Test ☐ SBAC Performance Task ☐ Sample SBAC item ☐ iReady					

Division of Instruction

High Leverage Practices Guidance for Math Instruction

ALG 2

If students are struggling with these domains/standards, then try...

Domain & Standard	Common Misconceptions	Core Curriculum Resources		Supplemental Resources		
		Whole Group Instruction	Small Group Instruction	Differentiated Instruction	Concept Recovery Modules	Small Group Instruction
Build Functions (F-BF.A.1b; F-BF.3, F-BF.4) **Key ideas:** Build a function that models a relationship between two quantities. Build new functions from existing functions.	•Students may believe that the graph of $y = (x - 4)^3$ is the graph of $y = x^3$ shifted 4 units to the left (due to the subtraction symbol). Examples should be explored by hand and on a graphing calculator to overcome this misconception. •Students may also believe that even and odd functions refer to the exponent of the variable, rather than the sketch of the graph and the behavior of the function. •Students may believe that all functions have inverses and need to see counter examples, as well as examples in which a non-invertible function can be made into an invertible function by restricting the domain. For example, $f(x) = x^2$ has an inverse $(f^{-1}(x) = \sqrt{x})$ provided that the domain is restricted to $x \geq 0$. • Students do not have ample experience with linear and exponential function over equal intervals and equal ratios over equal intervals.	Adopted Program: IM Lessons 1 - 7: Translations, Reflections, and Symmetry Lessons 8 - 9: Scaling Outputs and Inputs Lessons 10 - 11: Putting it All Together Mid-unit assessment **Big Ideas:** 1.3 Modeling with Linear Functions 2.4 Modeling with Quadratic Equations 4.9 Modeling with Polynomial Functions 6.7 Modeling with Exponential and Logarithmic Equations 8.5 Using Recursive Rules with Sequences 9.6 Modeling with Trigonometric Functions 1.1 Parent Functions and Transformations 1.2 Transformations of Linear and Absolute Value Functions 2.1 Transformations of Quadratic Functions 4.7 Transformations of Polynomials 4.8Analyzing Graphs of Polynomials Functions 5.3 Graphing Radical Functions 6.4 Transformations of Exponential and Logarithmic Functions	Caaspp Tools for Teachers: Building Functions Build Functions Illustrative Mathematics Tasks •Building and Explicit Function by Composition •Transforming the graph of a function •Identifying Quadratic Functions (Vertex Form) LAUSD CCSS-Aligned Math Task Project • Building Functions	Just in Time Intervention Resources Used these activities as a warm up to the math lesson. Completed in 10 minutes • Notice/Wonder • Which one does not belong • Think Pair Share Discovery Education Build a function that models a relationship between two quantities B.F. 3 Building new functions from existing functions B.F.4 Build new functions from existing functions. Contextualized Practice Problem (20 mins)	**Imagine Edgenuity** **Algebra II** - F-BF.3: Transformations of Functions **Algebra II** - F-BF.4.a: Function Inverses	Students to work in pairs or individually or small groups (20 - 30 mins) Three Act Tasks **IXL** IXL CAASPP Learning Plan Build Functions Exponential Functions Quadratic Functions IXL CAASPP Learning Plan

	• Students do not see the effect of transformations on the graph of a function and why it appears that the effect on the graph is the opposite to the transformation on the variable.	7.2 Graphing Rational Functions 9.4 Graphing Sine and Cosine Functions 9.5 Graphing Other Trigonometric Functions 5.6 Inverse of a Function 6.3 Logarithms and Logarithmic Functions SpringBoard: 5-1: Operations with Functions 5-2: Function Composition 5-3: More Function Composition 23-1: Logarithms in Other Bases 23-2: Properties of Logarithms and the Change of Base Formula 23-3: Graphs of Logarithmic Functions 4-1: Introduction to Piecewise Defined Functions 4-2: Step Functions and Absolute Value Functions 4-3: Transforming the Absolute Value Parent Function 11-1: Translations of Parabolas 11-2: Shrinking, Stretching, and Reflecting Parabolas 11-3: Vertex Form 12-1: Key Features of Quadratic Functions 12-2: More Key Features of Quadratic Functions 12-3: Graphing Quadratic Functions 12-4: The Discriminant 12-5: Graphing Quadratic Inequalities 6-1: Finding Inverse Functions 6-2: Graphs of Inverse Functions CPM 5.2.5, 6.2.3, 6.2.4 MN: 5.1.3 1-35, 1-71, 5-48, 5-112, 5-113, 5-116, 6-87, 6-141, 7-150 2.1.2–2.1.4, 2.2.1, 2.2.4, 2.2.5, 5.2.4, 7.2.1–7.2.4 MN: 2.2.2, 2.2.3, 2.2.5 2-70, 2-74, 2-				

		107, 2-109, 2-118, 2-125, 2-143, 2-148, 2-163, 2-164, 2-165, 2-174, 3-30, 3-54, 3-83, 3-133, 3-134, 6-27, 6-42, 6-86, 6-154, 7-129, 7-137, 7-141, 7-150, 7-158, 10-190 5.1.1–5.1.3, 5.2.1, 5.2.2 Checkpoint 9B 5-8, 5-26, 5-51, 5-62, 5-127, 5-129, 6-136, 7-85, 7-97, 8-77, 8-142, 9-92 **FIAB:** • Solve Equations and Inequalities: Quadratic •Create Equations: Quadratic				
SBA	☐ Standards One pager ☐ Achieve the core assessments ☐ Achievement Level Descriptors pp 33 - 38 ☐ Item Specifications ☐ SBA Math Blueprint (Adjusted) ☐ HS Focus Practice Items ☐ HS Performance Task Module ☐ Performance Task Overview and Blueprint ☐ SBAC Generic Performance Task Rubrics					
Assessments	☐ IM Lesson Cool-Downs, Practice Problems, and Section Checkpoint ☐ SBAC Practice Test ☐ SBAC Performance Task ☐ Sample SBAC item ☐ iReady					

Division of Instruction

High Leverage Practices Guidance for Math Instruction

GEOMETRY	*If students are struggling with these domains/standards, then try...*					
Domain & Standard	**Common Misconceptions**	**Core Curriculum Resources**		**Supplemental Resources**		
		Whole Group Instruction	**Small Group Instruction**	**Differentiated Instruction**	**Concept Recovery Modules**	**Small Group Instruction**
Similarity, Right Triangles, and Trigonometry **(G-SRT.C.6, 7, 8, 8.1)** **Key ideas:** Define trigonometric ratios and solve problems involving right triangles.	• Students may think that the comparison of any pair of angles will be sufficient, when the comparison must be made using corresponding pairs. Students may incorrectly apply the scale factor. • Some students often do not list the vertices of similar triangles in order. • A common misconception is that corresponding sides are 'matching' regardless of the orientation of the shape.	Adopted Program: **IM** Lesson 1-5: Angles and Steepness Lessons 6 - 11: Defining Trigonometric Ratios **Big Ideas:** Lesson 9.1 The Pythagorean Theorem Lesson 9.4 The Tangent Ratio Lesson 9.5 The Sine and Cosine Ratios Lesson 9.6 Solving Right Triangles **SpringBoard:** 22-1: Similar Right Triangles 22-2: Trigonometric Ratios 22-3: Using Trigonometric Ratios 22-4: Solving Right Triangles 21-1: 45°-45°-90° Triangles 21-2: 30°-60°-90° Triangles **CPM** 4.1.1–4.1.4, 5.1.1–5.1.3 MN: 4.1.2, 4.1.4, 5.1.2, 5.1.4 For applications in homework, see standards G-SRT.7 and G-SRT.8. 5.1.2 5-14, 5-46, 8-110 2.3.2, 4.1.4, 4.1.5, 5.1.1–5.1.4, 5.2.1, 5.2.2, 5.3.1, 5.3.5	Caaspp Tools for Teachers: Right Triangle Trigonometry Illustrative Mathematics Tasks •Defining Trigonometric Ratios •Sine and Cosine of Complementary Angles • Shortest line segment from a point P to a line L LAUSD CCSS-Aligned Math Task Project •Inscribing and Circumscribing Right Triangle	Just in Time Intervention Resources Used these activities as a warm up to the math lesson. Completed in 10 minutes • Notice/Wonder • Which one does not belong • Think Pair Share Discovery Education Understand solving equations as a process of reasoning and explain the reasoning. Solve equations and inequalities in one variable. Solve systems and inequalities in one variable Represent and solve equations and	**Imagine Edgenuity** **Geometry** - G-SRT.6 and G-SRT.7: Trigonometric Ratios **Geometry** - G-SRT.8: Trigonometric Ratio Applications	Students to work in pairs or individually or small groups (20 - 30 mins) Three Act Tasks IXL Trigonometric ratios: sine, cosine, tangent, secant Trigonometric ratios in similar triangle Sine and cosine of complementary angles Trigonometric ratios: find a side length Trigonometric ratios: find an angle measure Solve a right triangle Special right triangle

		MN: 2.3.2 Checkpoint 7 4-43, 4-50, 4-124, 5-18, 5-137, 7-78, 8-77, 12-10 **FIAB:** Geometry and Right Triangle Trigonometry		inequalities graphically Contextualized Practice Problem (20 mins)		Find trigonometric functions of special angles
SBA	☐ Standards One pager ☐ Achieve the Core Assessments ☐ Achievement Level Descriptors pp 33 - 38 ☐ Item Specifications ☐ SBA Math Blueprint (Adjusted) ☐ Performance Task Overview and Blueprint ☐ SBAC Generic Performance Task Rubrics ☐ SBA Sample Items Alignment to Priority MATH Targets to iM - Secondary Grades 6-11 ☐ SBAC Grade 11 Claim 1 Distribution					
Assessments	☐ IM Lesson Cool-Downs, Practice Problems, and Section Checkpoint ☐ SBAC Practice Test ☐ SBAC Performance Task ☐ Sample SBAC item ☐ iReady					