Facilitating Social, Emotional, and Academic Development (SEAD) Through Grade-Level Mathematics Content (Grade 8)

The left-hand column contains sample actions for how SEAD can be effectively integrated into grade-level mathematics instruction, in connection with Standards for Mathematical Practice named in the right-hand column.

Sample Actions	Connection to Standards for Mathematical Practice (SMP)
Promote student engagement and identity by embedding systems and routines such as "stronger and clearer each time" or other routines that allow students to engage in productive struggle and take ownership in their progress and growth toward intended learning outcomes.	MP3: Construct viable arguments and critique the reasoning of others.
Enhance students' mathematical agency by including regular collaborative opportunities for students to work together with others as a team on modeling tasks that provide multiple pathways for success and that require reasoning and problem solving.	MP4: Model with mathematics.
Provide opportunities for students to consider tools they may use to solve a problem and justify their appropriateness. For example, they may choose to graph a function defined by expressions to picture the way one quantity depends on the other or use graphing technology to approximate solutions to a system of equations.	MP5: Use appropriate tools strategically.

The FFC8 Unfinished Learning Guidance documents embrace the most current research around effective mathematics intervention. The documents outline a process for providing Tier 1, Tier 2, and Tier 3 "just-in-time" supports to help students master foundational content standards from previous grades and/or earlier in the current grade-level, so students can access the grade-level unit, lessons, and standards. This approach moves away from traditional remediation practices to focus on accelerating student learning. The tables below show the required prerequisite skills/standards students need to master in order to be successful with grade-level learning, how to diagnose whether students have mastery of these prerequisite skills/standards, and how to take action when students do not have mastery of these prerequisite skills. Illuminate can also be used to help develop a quarterly pre-assessment for these required prerequisite skills. This Illuminate assessment, aligned to the required prerequisite skills/standards could replace the Getting Ready or be used in conjunction with the Getting Ready (within the Diagnose column of the tables below).

The Diagnose column lists the question number(s) from the *SpringBoard* Getting Ready that align to the prerequisite skills/standards listed in the Understand column. In the event that a student does not correctly answer a question(s) on the Getting Ready (or Illuminate pre-assessment), then the teacher(s) can use the resources listed in the Take Action column to provide a reteach opportunity for the student in order for the student to reach mastery (Tier 1 or Tier 2 intervention). In addition, the teacher(s) can explore the tasks aligned to each prerequisite standard within the Coherence Map links contained within the Understand column and utilize these tasks with the student as a reteach opportunity (Tier 1 or Tier 2). ALEKS can be utilized to create additional practice opportunities aligned to the skills/standards contained within the Getting Ready Practice, Mini Lessons, or associated prerequisite standards (Tier 2). Student learning conferences can also be utilized for a teacher(s) to collaborate with an individual student to determine the topic(s) within a student's ALEKS learning pathway that is the most necessary prerequisite knowledge for upcoming lessons of grade-level instruction (Tier 2).

In the event that a student is in need of more intensive Tier 3 support because the student has not yet mastered foundational prerequisite skills/standards to the identified prerequisite skills, the teacher(s) can use the Coherence Map to identify the prerequisite skills/standards for the Required Prerequisite Skills/Standards identified within the tables below. The teacher(s) can then work through a similar unfinished learning and just-in-time support process with the information obtained from the Coherence Map to provide reteach opportunities and supports to continue to provide access to the prerequisite skills for grade-level content.

8.EE.B - Understand the connections between proportional relationships, lines, and linear equations. (Quarter 2)			
Understand	Diagnose	Take Action	
Required Prerequisite Skills/Standards 7.RP.A.2 - Recognize and represent proportional relationships between quantities. 7.G.A.1 - Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale. Coherence Map 8.EE.B	Course 3 Unit 2 Getting Ready • Questions 3, 4, 5, 6, 7, and 8	Course 3 Unit 2 Teacher Resources	

Understand	Diagnose	Take Action
Required Prerequisite Skills/Standards 6.EE.B.5 - Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true. 7.EE.A.1 - Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients. 7.EE.B.4 - Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. 7.NS.A.1 - Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. 7.NS.A.2 - Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. Coherence Map 8.EE.C	Course 3 Unit 2 Getting Ready ● Questions 1 and 2	Course 3 Unit 2 Teacher Resources
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8.G.A - Understand congruence and similarity using physical models, transparencies, or geometry software. (Quarter 2)			
Understand	Diagnose	Take Action	
Required Prerequisite Skills/Standards 7.G.B.5 - Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write	Course 3 Unit 3 Getting Ready • Question 3	Course 3 Unit 3 Teacher Resources • Getting Ready Practice ○ Triangles	

and solve simple equations for an unknown angle in a figure.	Mini-Lessons Magazing with a
Coherence Map 8.G.A	Measuring with a Protractor

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