

# AGENDA

# HMH Math Inventory "Getting Started" Professional Learning

# OVERVIEW

This course prepares participants to use the *HMH Math Inventory* (MI) to determine what students know and are ready to learn. Participants analyze the various data reports and consider how to utilize the teacher resources to differentiate instruction based on students' Quantile<sup>®</sup> measures.

# OUTCOMES

- Interpret students' results from the SMI online adaptive math assessment to determine students' readiness for math instruction and track growth toward algebra and college and career readiness.
- Use online management tools to view data, manage enrollment, customize user experience, and access resources.
- Plan targeted instruction and differentiation using students' Quantile measures and the Quantile Framework<sup>®</sup> for mathematics.
- Effectively prepare students, and create an environment for online testing to get accurate results.

# **Research and Program Overview**

This session provides customers with an overview of the components and research of *HMH Math Inventory* (MI) College & Career and its use to measure students' readiness for instruction, target instruction using Quantile measures, and track progress from Kindergarten through Algebra II.

# **The Student Experience**

Participants experience the HMH MI test using a Simulator to become familiar with the format and components of the test.

# BREAK

# **Exploring the Quantile Framework for Mathematics**

Participants develop an understanding of how the Quantile Framework for Mathematics was developed, how it links students' readiness for instruction to mathematics concepts and skills, and how it provides a quantifiable trajectory from Kindergarten to Algebra II. Participants also learn how related skills and concepts form Knowledge Clusters with prerequisite, supporting, and impending skills.

# Math Solutions Course Agenda: HMH Math Inventory "Getting Started" Professional Learning

#### Analyzing Results and Data

HMH MI results can be used for a variety of purposes. Using SAM, participants engage in data analysis. They learn that SAM makes it easy to assess and plan instruction and monitor student progress toward mastery with college and career and grade-level standards. Participants learn about individual student and class reports, how to group students for differentiated instruction, and how to benchmark students' math growth over time toward Algebra and beyond.

# LUNCH

#### Using the Digital Management Tools

Using SAM, participants engage in program settings, managing enrollment, and professional learning all in one centralized location and learn this makes it easy to assess and plan instruction. They learn that the Student Achievement Manager (SAM) is a component of Math Inventory and is accessed through SAM to import students, set up schools and teacher accounts, and manage advanced settings.

#### **Connecting Assessment to Instruction**

Participants use the Math Skills Database and Knowledge Clusters with data from the reports to inform instruction.

#### BREAK

# **Best Practices for the Assessment**

Participants learn the important tasks to be completed before, during, and after administering the HMH MI.

#### **Final Questions and Evaluation**

Participants take time to reflect on the experiences of the day and ways that these experiences will positively impact their classroom instruction.

# **Math Solutions Guiding Principles**

Drawing upon academic work and our own classroom-grounded research and experience, Math Solutions has identified the following four instructional needs as absolutely essential to improving instruction and student outcomes:

- Robust Content Knowledge
- Understanding of How Students Learn
- Insight Into Individual Learners Through Formative Assessment
- Effective Instructional Strategies

These four instructional needs drive the design of all Math Solutions courses, consulting and coaching. We consider them our guiding principles and strive to ensure that all educators:

- Know the math they need to teach—know it deeply and flexibly enough to understand various solution paths and students' reasoning
- Understand the conditions necessary for learning, what they need to provide, and what students must make sense of for themselves
- Recognize each student's strengths and weaknesses, content knowledge, reasoning strategies, and misconceptions
- Have the expertise to make math accessible for all students, to ask questions that reveal and build understanding, and help students make sense of and solve problems