Understanding the Major Work of the 6–8 Grade Band

This full-day, six-hour session develops participants' understanding of the instructional sequence that builds up to the introduction of functions in Grade 8. The session traces the trajectory of content from ratios to properties of similar triangles. Further, the session shows the progression of those concepts, highlighting where they intersect and providing participants with a deep understanding of why the slope of a line is well-defined.

Participants are invited to study Classwork, analyze Problem Sets, deliver lesson segments, and model with mathematics. They synthesize their learning from the first half of the day by developing an argument that the slope of a nonvertical line can be determined by using any two distinct points along the line. Work in the second half of the day focuses on one-variable linear equations. Participants experience the progression of expressions and equations, leveraging the support of visual models, identities, and properties.

Participants can expect to deepen their understanding of

- how Grade 5 work with multiplicative comparison relates to Grade 6 work with ratios.
- specific terminology in *Eureka Math*™ to help students recognize the coherence of mathematics as they move through middle school grades and beyond.
- the full progression of equations across the 6–8 grade band.
- prerequisite skills from Grades 6 and 7 that are necessary for success with target Grade 8 problems.