



Routines for Reasoning: Fostering Math Thinking and Teaching Practices

with guest speaker & author
Grace Kelemanik



Conference Details

September 15, 2017

Hilton Phoenix Airport Hotel

2435 S. 47th St.

Phoenix, AZ 85034

Registration: \$160

Be sure to register today!
(Seating is limited)

<http://www.aatm.org/>

Conference Registration: 8:00 am

Lunch: 11:30 - 12:30 pm
Sponsored by TI
Guest Lunch Speaker TBA

Conference: 8:30 am - 3:30 pm



Description: If we are to prepare our students for the world ahead of them we must teach them to think and reason mathematically. This means ensuring that all students develop powerful mathematical practices, and it will require that all teachers develop powerful math teaching practices. Practices are habits and habits are formed through routine, so instructional routines become powerful vehicles for developing both math thinking and math teaching practices.

In this session, you will learn about *Routines for Reasoning*, a set of instructional routines intentionally designed to develop habits of thinking articulated in the Common Core Standards for Mathematical Practices in ALL students. Specifically, you will learn:

- About three avenues of mathematical thinking found in the Standards for Mathematical practice, and dive deeply into one of those avenues, structural thinking
- The Instructional Routine, *Contemplate then Calculate*, which is designed to develop structural thinking.
- Design features and teacher moves embedded in the *Contemplate then Calculate* routine that foster structural thinking in ALL students
- How the *Contemplate then Calculate* routine can be used to develop the 8 NCTM Effective math Teaching Practices

Grace Kelemanik has more than 30 years of mathematics education experience. A frequent presenter at national conferences, her work focuses on urban education, special populations, and teacher training. She is a former urban high school mathematics teacher and Project Director at Education Development Center. Grace has also worked extensively with new and preservice teachers through the Boston Teacher Residency program.

Most recently, Grace is the coauthor of *Routines for Reasoning: Fostering the Mathematical Practices in All Students*. She is also coauthor of *The Fostering Geometric Thinking Toolkit*. She is a mathematics education consultant and professional development provider.

Follow Grace on Twitter [@GraceKelemanik](https://twitter.com/GraceKelemanik)

Learn more about her work at

www.fosteringmathpractices.com