



2014 Focus Issue

# Rational Number Sense

Fractions and other rational numbers are challenging topics to teach as well as learn. The Editorial Panel wants to know your thoughts on what can be done to improve students' rational number sense.

What does it take for students to make sense of rational numbers in their myriad forms, such as fractions, ratios, rates, percentages, and decimals? For instance, understanding fractions requires part-whole thinking, including partitioning, iterating (the process of making copies of a unit fraction to make a whole), and unitizing (identifying the unit and the whole). Making sense of ratios also requires part-part thinking and proportional reasoning involving multiplicative rather than additive comparisons between two quantities. As teachers, we want to focus on how to foster these kinds of complex and sophisticated ways of thinking among our students.

The Editorial Panel of *MTMS* invites you to share your ideas on developing rational number sense among middle-grades students. We are especially interested in manuscripts that describe ideas that have been supported by implementation in middle-grades classrooms. Manuscripts that address one or more of the following questions are encouraged:

- What does powerful learning of rational numbers look like, and what examples of student reasoning demonstrate this?
- Why do students struggle with rational numbers, and how can middle-grades teachers address these difficulties?
- How can teachers support students in making sense of the many algorithms, instead of simply memorizing meaningless steps, when operating with rational numbers in their various forms?
- How can students be supported to understand fully the connections among the many different representations of rational numbers?
- What lessons and approaches have worked for promoting an understanding of rational number sense?

The manuscript should be no more than 2500 words. Include figures and photographs at the end. To submit manuscripts, access [mtms.msubmit.net](http://mtms.msubmit.net). On the tab titled Keywords, Categories, Special Sections, select the 2014 call from Departments/Calls. The due date is **January 7, 2013**.