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Do twelfths terminate or repeat?

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Summary: When finding the decimal equivalent of a fraction with 12 in the denominator, will it terminate or repeat? This question came from a seventh grader in author Erica Burnison's class as the student was pondering a poster generated by one of her classmates. Not only was the question intriguing, but it also affirmed the belief in the power of tailoring instruction to students' interests and needs. As math educators, trying to figure out how to implement the content and Standards for Mathematical Practice (SMP) found in the Common Core State Standards for Mathematics in a student-centered fashion, the authors were thrilled by this moment. This question from a student also demonstrated that students can engage in the SMP while working in collaborative groups. In this article, the authors will describe the activities that gave rise to this student-generated question. They will also provide their collaborative reflection of the activities because they find that collaboration deepens their understanding of pedagogy as well as mathematics. The authors hope that their account will inspire others to work together. (ERIC)

Classification: F43 D73

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<http://www.nctm.org/Publications/Mathematics-Teaching-in-Middle-School/2015/Vol21/Issue4/Do-Twelfths-Terminate-or-Repeat-/>