

1077-VC-1859 **Rebecca J. Schmitz*** (rjschmit@mtu.edu), Mathematical Sciences, Fisher Hall, Room 319, 1400 Townsend Drive, Houghton, MI 49931, and **Harvey Keynes**, 4 Vincent Hall, 206 Church Street SE, Minneapolis, MN 55455. *Student understanding and misconceptions of infinite repeating decimals in a Sequences and Series Bridge course.* Preliminary report.

This paper looks at understanding and misconceptions of infinite repeating decimals and their connections to sequences and series for students in a Sequences and Series Bridge class. We look at the influence of different instructional practices, which include conceptual discussions and related groupworks, and the role of previous coursework on student understanding. We measure pre- and post-instructional levels of understanding and examine certain demographical data for the varied backgrounds of the students in this course. Finally, we discuss Tzur and Simon's Reflection on Activity-Effect Relationships Model for student understanding and its application to and questions raised about the current study. Possible directions for additional investigations will be discussed. (Received September 21, 2011)