

1086-N1-1214 **Mary D Shepherd*** (msheprd@nwmissouri.edu), 9112 County Rd 62, Savannah, MO 64485.
Mathematicians Reading Mathematics—A View of the Experts.

As students progress through the college mathematics curriculum, enter graduate school and eventually become practicing mathematicians, reading mathematics textbooks and journal articles appears to come easier and these readers appear to gain quite a bit from reading mathematics. This study was designed to help us begin to understand how more advanced readers of mathematics read for understanding compared to first year undergraduate students. Three faculty members and three graduate students participated in this study and read from a first year graduate textbook in an area of mathematics unfamiliar to each of them. These observed reading strategies of more expert readers are compared to observed reading strategies of first-year undergraduate students. The reading methods of the faculty level mathematicians were all quite similar and were markedly different from all the students the researcher has encountered so far, including the more advanced students in this study. A proposed Mathematics Reading Framework and some teaching recommendations are given based on this study and years of observations of first-year undergraduate students reading their mathematics textbooks. (Received September 20, 2012)