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Students' perceptions of the importance of closure in arithmetic: implications for algebra.

Rogerson, Alan, MEC 21 - The Mathematics Education into the 21st Century Project. New ideas in mathematics education. ,. 198-202 (2001).

Traditionally, many students have found the study of algebra difficult. This paper examines arithmetic prerequisites for algebra study, particularly those associated with the concept of equals and the operational laws. A sample of secondary students who were about to begin a unit of algebra was tested for their ability to do the prerequisite arithmetic. Analysis of their responses revealed that most of them were poorly equipped for algebra study. In particular, students performed poorly on problems where the equals sign did not simply designate where the answer is to be placed and where operations cannot be easily closed. (orig.)

Classification: D63