

## Number Sense and Operations

## RESEARCH AND STANDARDS

The two keys to teaching algebra to students with learning differences are reading level and repetition. The reading level must be kept low by using simple sentence structure (Sousa, 2001). Since math vocabulary is integral to mastering the subject matter, the words need to be identified in the text while meanings need to be assimilated (Torres-Velasquez and Rodriguez, 2005). Repetition is an essential activity to ensure the maintenance of the concepts and skills previously learned. Repetition is also essential for developing the ability to apply these skills in a variety of contexts. Problem solving at this level involves retrieving learned skills that involve basic operations and knowing where and when to apply them (Bley and Thornton, 2001). It is only with continued and consistent exposure to the problem-solving process that students can begin to develop their skills in this particular area of mathematics. The more varied the contexts in which problems are presented to students, the more proficient and comfortable students become with



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problem-solving situations. When it comes to students passing standardized assessments, 10 to 15 minutes of classroom time each day can make the difference.

The *Algebra Warm-Ups* series focuses on the needs of students with learning differences. The reading level has been kept below 5.0. Essential mathematics vocabulary is written in bold within the questions. Each volume includes 180 questions from one National Council of Teachers of Mathematics (NCTM) strand, providing many opportunities to practice and maintain the skills learned earlier in the school year.

Each volume covers all the standards and objectives of the NCTM for that particular strand.

Bley, N. and C. Thornton (2001). *Teaching Mathematics to Students with Learning Disabilities*. Austin, TX: Pro-Ed, Inc. Sousa. D. A. (2001). *How the Special Needs Brain Learns*. Thousand Oaks, CA: Corwin Press, Inc.

Torres-Velasquez, D. and D. Rodriguez (2005). *Mathematics & Science Instruction for Culturally and Linguistically Diverse Students*. Paper delivered at Council for Exceptional Children Conference, Baltimore, MD.