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Richard H Stout* (richard.stout@gordon.edu), Department of Mathematics, Gordon College, Wenham, MA 01984. *Using Sudoku Number Puzzles to Practice Reasoning Skills in a Basic Mathematics Course.*

Sudoku number puzzles are formatted on a 9x9 grid, separated into nine 3x3 grids. At the start, each puzzle has various squares filled in with numbers from 1-9. The object is to write numbers in the remaining spaces so that each row, column, and small grid contains the numbers 1-9. Because a variety of reasoning skills are needed to finish the puzzle, Sudoku can be used to introduce basic mathematics students to the ideas of identifying important information, making connections, and justifying decisions as part of the problem solving process. The talk will include examples illustrating ways to use these puzzles together with a critique of their effectiveness in introducing reasoning skills to a class of prospective elementary teachers. (Received September 16, 2005)