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Shumei C. Richman* (richmansm@aol.com), 220 N. woodlake Dr., Columbia, SC 29229. *On The Teaching of the Three Methods for Solving a Linear Inequality in Two Variables*. Preliminary report.

For solving a linear inequality in two variables, most commonly available textbooks use a one-point test to determine the half-plane solution after the boundary line is located using the corresponding equation. In this paper, we propose to also include two alternative methods: Variable Reduction and One-Coefficient Test. Our discussions aim to answer two questions: 1. Is it sufficient to teach only one-point test method? and 2. Do the benefits of teaching more than one method out-weight the extra time spent? Our analysis is based on our understanding of the possible impacts of a formula approach and its corresponding concept approach on students' math learning, now in beginning algebra and beyond. (Received September 18, 2010)