## 1077 - 91 - 1182

Steven J. Brams, Todd R. Kaplan and D. Marc Kilgour\* (mkilgour@wlu.ca), Department of Mathematics, Wilfrid Laurier University, 75 University Avenue, Waterloo, ON N2L3C5, Canada. A Simple Bargaining Mechanism That Elicits Truthful Reservation Prices.

We describe a simple 2-stage mechanism that induces two bargainers to be truthful in reporting their reservation prices in a 1<sup>st</sup> stage. If these prices criss-cross, the referee reports that they overlap, and the bargainers proceed to make offers in a 2<sup>nd</sup> stage. The average of the 2<sup>nd</sup>-stage offers becomes the settlement if both offers fall into the overlap interval; if only one offer falls into this interval, it is the settlement, but is implemented with probability  $\frac{1}{2}$ ; if neither offer falls into the interval, there is no settlement. Thus, if the bargainers reach the 2<sup>nd</sup> stage, they know their reservation prices overlap even if they fail to reach a settlement, possibly motivating them to try again. (Received September 17, 2011)