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Paul R. Coe* (coepaul@dom.edu), 7900 W. Division Street, River Forest, IL 60305, and
William T. Butterworth, Peter Alonzi and Daniel Condon. *Prisoners' Dilemma and the
TV Game Show "Friend or Foe"*. Preliminary report.

Prisoner's Dilemma is a classic game theory problem involving two criminals detained separately for committing a crime. Each is offered a reduced sentence for describing the other criminal's involvement. John Nash's seminal insight into equilibrium in conflict situations can be used to evaluate the most strategic behavior for each of the criminals. The TV game show "Friend or Foe" on the Game Show Network creates a very similar dilemma for its contestants with a very attractive equilibrium point, at least for the producers of the show. In this paper we will describe the competitive situation presented by the game show, describe its equilibrium point, and relate it to Prisoners' Dilemma. I will also discuss the actual behavior of contestants on the show, and the use of this material in a classroom setting. (Received September 28, 2005)