1086-K5-1196 **Michael A. Jones*** (`maj@ams.org`), Mathematical Reviews, American Mathematical Society, 416 Fourth Street, Ann Arbor, MI 48103, and **Laura VerHulst** (`llv10@albion.edu`), Albion College, Albion, MI 49224. *The National Football League's Overtime Rule Revisited.*

On January 8, 2012, the Denver Broncos defeated the Pittsburgh Steelers in the first use of a new overtime rule that the National Football League (NFL) instituted for the playoffs the year before. Under the old rule, sudden death, the first team to score wins the game. The new rule offsets the first-possession advantage of sudden death by allowing the game to end on a single possession only if the team with the ball first scores a touchdown. This rule was adopted for the 2012 regular season.

Using aggregate data from the 2011 regular season and Markov chain models in which each team has equal probabilities of scoring on each possession, we compare the new rule, sudden death, and a previously proposed first-to-six rule by computing the likelihoods of the team receiving the ball first wins. We construct a more detailed Markov chain model to compare the likelihood of the first-possession team winning under asymmetric probabilities of scoring. We apply the model with team data from the 2011 season. (Received September 20, 2012)