

1086-K5-708

**Brian Pasko\*** ([brian.pasko@enmu.edu](mailto:brian.pasko@enmu.edu)), ENMU, Station 18, Portales, NM 88130, and **Tom Brown** ([tom.brown@enmu.edu](mailto:tom.brown@enmu.edu)), ENMU, Station 18, Portales, NM 88130. *Winning a Racquetball Match.*

We derive a combinatorial formula for the probability of winning a game of racquetball to any score  $k$  given the probabilities that each player wins a point while serving. We extend this result to winning a best of three match. If a third game is required, the player scoring the most points in the first two games serves first. This unique rule for choosing the first server in a deciding game adds a wrinkle to predicting the winner of a match not present in other racquet games. (Received September 11, 2012)