

## CWSF 2011 - Toronto, Ontario



### David Shorey

#### The First Advantage

**Challenge:** Information

**Category:** Senior

**Region:** South Fraser

**City:** Surrey, BC

**School:** Kwantlen Park Secondary

**Abstract:** Through mathematical analysis of the three by three tic tac toe grid, and experimentation with four-in-a-row on a five by five grid, I will determine whether there is an advantage to going first in tic tac toe. I believe that there will be an advantage to moving first on the three by three grid, and that the advantage will diminish as the grid size increases.

#### Biography

David is an eleventh grade student at Kwantlen Park Secondary in Surrey, B.C. He enjoys fencing competitively, and is BC's under-20 Epee champion, and a National gold medalist in under-17. When he's not fencing, teaching fencing or working on Science Fair projects, he enjoys playing the clarinet in the school's Concert Band and acting in school plays. His interests include video games, strategy games and reading. His future goals involve Engineering or teaching, and representing Canada at the Olympics.