

CWSF 2008 - Ottawa, Ontario



Lawrence Xie

Prime Probability Paradox Through Parity!

Division: International / None

Category: Senior

Region: Waterloo-Wellington

City: Guelph, ON

School: Centennial Collegiate & Vocational Institute

Abstract: By considering the relationship between sets of prime numbers and even numbers in the natural number set, this study investigates the probability of a randomly selected number being prime. The probability determined through this analysis was then compared with the results from a computer program. This study offers a new approach to understand the distribution of prime numbers through the Fundamental Theorem of Arithmetic.

Biography

My name is Lawrence Xie. I am a grade twelve student at Centennial Collegiate Vocational Institute in Guelph, Ontario. Although this is my first and possibly only time attending CWSF, I have had an interest in mathematics for quite some time. I have frequently performed well on numerous math and physics contests as well as completed Advanced Placement exams in calculus and physics with a top level of 5. Aside from academic studying, I also enjoy running. I am a member of my school's cross-country and track teams. Moreover, I am also an accomplished pianist, having completed my ARCT in June, 2007. Coming June, I will be competing in the Kiwanis Music Festival Provincial Finals. Next year I plan on either majoring in Math at University of Waterloo, or Engineering Science at University of Toronto.