



## CWSF 2005 - Vancouver, British Columbia



## Elizabeth Du

Infinitely Simplified: Elementary Proofs via Infinite Products

**Division:** Physical & Mathematical Sciences

Category: Senior

**Region:** Greater Vancouver **City:** Vancouver, BC

School: Sir Winston Churchill Secondary School

**Abstract:** This project focuses on finding more elementary ways to prove certain

infinite series formulae through the use of infinite products. More

specifically, the infinite product representation of  $\sin x$  is taken into account.

These infinite series formulae are often proven by employing more advanced mathematical methods like Fourier series.

Awards	Value
Honourable Mention - Physical & Mathematical Sciences - Senior	\$100
Sponsor: Encana Corporation	
Total	\$100



