Karate ace fighter in maths

When black belt Malcolm Granville isn't figuring out how to sort out martial arts opponents he's picking a fight with top mathematical minds, reports **John Thornton**

ALCOLM GRANVILLE gazes thoughtfully out of the car window. He does so in a manner I sense is his nature, pondering my question about his extracurricular activity — martial arts.

"Well, I am a black belt in karate, so that's how I spend my free time," he says.

This softly spoken approachable teenager is not your typical karate master. He also happens to be an outstanding mathematics student who won a silver medal at the International Mathematical Olympiad in Kazakhstan in July.

Malcolm, 18, was the ace card in a record-breaking New Zealand team to gain their highest place so far at the competition — 29th among 98 countries.

"Malcolm stood out from the other students," says Yuri Vyatkin, one of the main tutors for the New Zealand Mathematical Olympiad Committee.

"He demonstrated a broad knowledge and background in mathematics. Many problems he knew how to solve, so the instructors had an additional trouble — to get fresh material for him."

Ilya says Malcolm is "a sort of leader in the team".

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Malcolm's silver medal for a 76th place may seem as puzzling as the formulas he deciphered, but here's the solution.

The grading system for the International Mathematical Olympiad allots gold medals to competitors whose scores finish in the top 12, silver medals to the next one-sixth of participants and bronze medals to the following quarter.

"It was a lot of hard work," says Malcolm. "I was working weekends but I was not missing out on much."

The Auckland Grammar student shrugs off the intense commitment required of him and his team-mates.

Each exam was four and a half hours long, twice daily, containing three or four hugely complex questions which most of us couldn't comprehend with a lifetime's effort.

To counter the Olympiad's

gruelling regime, the New Zealand team visited the countryside around the institute, which Malcolm recalls with great affection.

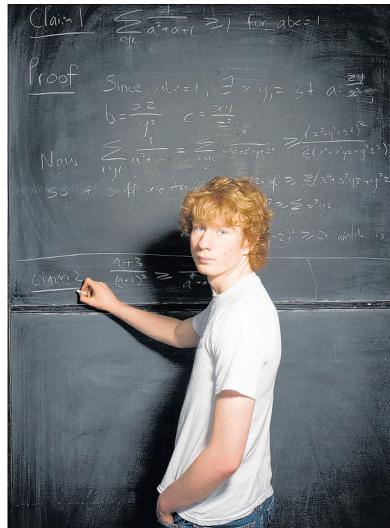
"We were taken on excursions while the papers were being marked. Kazakhstan is such a hugely different country to New Zealand — very few people could speak English. Luckily, we had a team leader who spoke Kazakh, so that was really good."

More than 600 students competed in the highly regarded event with Malcolm achieving an impressive joint 76th place, top of the New Zealand contingent in his second attempt at the Olympiad.

It's likely his mathematical prowess will feature in his future but the details are still being worked out. "I am in the last year of Grammar school so I am applying to a lot of different universities. I'm not sure where I am going to go yet. I am applying all over the US. I might go to MIT (Massachusetts Institute of Technology) or Princeton."

Celtic, Harvard or Cambridge are also possibilities.

You get the impression that Malcolm can go wherever he chooses. Mathematically speaking, nothing seems beyond this numeric prodigy.



Malcolm Granville revels in solving maths problems

MICHELLE HYSLOP







