**Prompt 6: Think about an academic subject that inspires you. Describe how you have furthered this interest inside and/or outside of the classroom.**

Maths! That’s the first thing that pops into my head whenever I’m asked for a favourite subject. Most people won’t agree with me but one thing I like about maths is that there is always a right answer. To put it simply, maths is logic: true or false, yes or no.

Mathematical concepts have a kind of hierarchy; for example, you can't study calculus without being familiar with the fundamental algebraic functions. All of the mathematical ideas, whether they are new or old, that are being taught to us are interconnected, just as I believe that any action we take will have an effect on our lives.

Further enhancing my maths knowledge, I decided to participate in an American Mathematics Olympiad. When I first took the practice test, my mind was blown away; I couldn't solve even a single question from it. It wasn’t anything like my typical maths exam. Instead of merely inputting equations and solving them, it required me to think logically and approach the questions strategically. At this point, I realised that maths is not about memorising but understanding the concepts. This olympiad is all about providing proof why one plus one equals two and how the thought process behind it could be applied to other questions.

Looking back at all the concepts that I have learnt, I started to question all the formulas that were given and try to find my way to comprehend all the general concepts. The surge of adrenaline I had each time I was successful in solving a question was unmatched. Eventually, I was able to receive a silver medal in that competition.

Needless to say, I began to involve myself in other maths competitions, starting with the maths week held at my school, where I took first place, followed by the Singapore and Asian Maths Olympiad, and the SINGA maths Global Finals. My invitation to the International Junior Honour Society, an honour society for the top 1.5% of students who competed in Singapore International Mathematical Contests, was ultimately the outcome of all these accomplishments.

Since we live in a world filled with numbers, equations, and algorithms, the laws of mathematics are everywhere. I believe that the analytical skills obtained from solving maths problems will help us understand the world in a way that no other subjects can.