

Logical reasoning

Last week, we asked our readers: "How could you use maths to change the community around you?"
From volunteering as a maths teacher to placing robots in crowded areas, here are our favourite answers

1 I would like to change all the numbers I see in my daily life to quadratic equations. Nowadays, searching for information on the internet is convenient, and you can do it without even thinking about it. We just need to type what we want to know into the search engine. Replacing simple numbers with quadratic equations could help us develop deeper thinking skills. This could be a good opportunity, especially for teenagers, to train their logical thinking and improve their maths skills.
Kayley Fung Wing-ki, 16, Leung Shek Chee College

2 We could significantly enhance the shopping experience by adding a calculator to the trolleys in supermarkets. Many people need to stick to a budget when buying groceries. Using the calculator, they can keep a tally of their total cost and avoid overspending.
Lois Ku Sin-yin, 14, St Joan of Arc Secondary School

3 I would volunteer to teach children maths. I think I could help enhance their maths skills by training their logical mind and raising their interest in the subject. This is key to nurturing a responsible future generation.
Anson Lau Wai-kwan, 16, Wesley College

4 I would collect data on the types of waste produced by the community. I would analyse it to identify the items that are commonly thrown away, such as clothing, plastic bottles, and unused food. Then I would work with the government or local organisations to suggest more effective waste collection methods, such as installing specific collection boxes or organising recycling programmes for certain materials.
Wu Yu-kwan, 13, St Joan of Arc Secondary School

5 I would use calculus and statistics to pinpoint crowded areas in the city where I could place intelligent robots. If an elderly person or child fell and injured themselves, a robot would immediately notify staff, who would deal with the issue. Robots could also act as security guards, patrolling housing estates and catching criminals. It would make life much safer for Hongkongers.
Fanny Liang, 16, Leung Shek Chee College

6 Maths can calculate the changes we must make to save the planet. For example, if we calculate how much trash we produce, we could determine how much we need to cut back or how much we should recycle. It could help the planet become a better place to live.
Kyle Peeters, 14, Ho Yu College and Primary School (Sponsored by Sik Sik Yuen)



7 Maths can be a powerful tool for improving infrastructure in Hong Kong. By using geometry and trigonometry, we can design more efficient transport systems and optimise the placement of public utilities. And let's not forget about the potential for maths to help us become a more sustainable community – after all, who doesn't love a good equation for reducing carbon emissions? So, let's give maths a chance to help us build a better world, one angle at a time.
Sophia Ling, 11, German Swiss International School

8 I would use statistics to calculate the city's population and the demand for housing, transport facilities, and the number of schools required. If there are more elderly people, we can add more nursing homes; if there are more children, we can set up more schools and libraries. And depending on the population, we can increase medical services and recreation facilities. I also hope to add a sports ground and a big hall for my community.
Mona Lee Pak-ye, 13, Catholic Ming Yuen Secondary School

9 Since I live on a lower floor in my building, I would like to use maths to redesign the open space at the podium so I could have a lovely view from my flat. I wish there were a fountain, a greenhouse, a playground, and a maze.
Alison Chan Lok-chui, 14, St Mary's Canossian College

10 I would use maths to solve social problems, like designing a local school or redesigning a housing unit. We could even use maths to develop infrastructure and help people manage money by figuring out the best ways to save and invest.
Amy Lin Yuxin, 16, Tsuen Wan Public Ho Chuen Yiu Memorial College

The Hang Lung Mathematics Awards (HLMA) encourages secondary students to unleash their creativity in mathematics and ignite their passion for intellectual discovery. We are asking a total of five questions to inspire you to think deeply about the power of mathematics, the importance of integrity and the pursuit of excellence. Unleash your potential to make an impact on the world!



This week's question: What is the best maths joke you have ever heard?

Scan the QR code to submit your response, or email us at ayp@scmp.com by 11.58pm on May 24

