

# Scholar's Advanced Technological System

## Chapter 6: The Answer For A Proof Question

As a mathematics major, Lu Zhou was obviously familiar with the Mersenne prime numbers.

Of course, one would have to mention a famous Chinese mathematician when speaking about Mersenne prime numbers. In 1992, he published "Mersenne prime numbers distribution formula" and his paper was able to illustrate an equation for Mersenne prime numbers. It was then famously named "Zhou's approximation".

Previously, the British mathematician William Shanks, French mathematician Tartaglia, German mathematician Luders, Indian mathematician Ramanujan, and American mathematician Gillies had all speculated on this problem. Although they had a common theme, which was the approximation of the equation, the closeness of their research to the exact answer was unsatisfactory.

Zhou's approximation formula was very simple. When  $2^{(2^n)} < p < 2^{(2^{(n+1)})}$ ,  $p$  has  $2^{(n+1)}-1$  prime numbers.

Simple, right?

Anyone could do this, right?

However, the equation had not been proven or disproved. It had become one of the most famous mathematical problems and had been troubling the mathematics community for over 20 years.

It was like Riemann's conjecture. Even though it could not be proven, it did not stop people from using it.

Of course, even though there was an accurate way of using computers to discover Mersenne primes, it was still not an easy feat.

As of today, only forty-four Mersenne primes were discovered.

Was there any use for the Mersenne primes?

It seemed unlikely.

Strictly speaking, using the RSA algorithm, every time an online transaction went through, you would have to thank the unsolvable prime numbers that were hidden in the password. At the same time, large prime numbers were also used to test computer performances. For example, Intel used the GIMPS application to test the chips for bugs.

Anyway, to debate whether mathematics was useful was unmeaningful. Very often, the drives that motivated the mathematicians were not in monetizing the discovery, but merely because the problem was there.

At the end of the day, humans could not look purely at the short term gains but they had to also look at the long term gains.

However, Lu Zhou was not really willing. He did not care about the future. He wanted the gains now!

Also, why was it Zhou's approximation proof! Why not Riemann's Conjecture! Or even the lower level Birch's conjecture would be okay!

Putting the academic value aside, Birch's conjecture prize was already at one million U.S dollars. The prize money came from the well-known Texas banker Birch himself.

As for Zhou's approximation, there were a lot of people that were attempting to prove it. However, there was no prize money attached if one solved it.

A potential chance to own a house just flew away and Lu Zhou no longer felt so good anymore.

However, he should look at the bright side. Even though it was only Zhou's approximation, proving it would still give him some reputation in the mathematical

world. Although there was no physical prize that was attached to the discovery, the university would not treat him shabbily either. Three years of scholarship should be guaranteed.

The sophomore who proved Ramsey's theorem was the best example. Apparently, the University of Nanjing gave him a million dollars, half of which was used as funding for his research while the other half for his living expenses.

*The University of Jin Ling is among the top 10 in the country. Even though their mathematics department is relatively weak, the University of Jin Ling should still give more money than the lower ranked University of Nanking, right?*

After thinking about it, Lu Zhou felt slightly better.

He calmed down and started to look over the proof theorem.

It was different than the coke from the "garbage" category. Zhou's approximation proof was categorized under "blueprint". It was not printed on paper or as a digital file. When he wanted to read it, he just had to think about it and all the proof steps will appear in his brain.

"I can't comprehend this at all... I guess I would have to spend quite a lot of time to understand this proof."

Lu Zhou thought about how he would successfully extract the steps of the proof.

First of all, memorizing it was no use as he had to understand it.

Secondly, he had to portray himself as a genius.

Regardless, if one could solve a high level question such as Zhou's approximation, one would need to at least be able to score full marks in high school maths, right? Even if one accidentally lost one mark, one would still need to get 99 marks.

Lu Zhou was not too concerned about it. It only took him two days to finish learning mathematical analysis and advanced algebra. The lecturers would not trick the students on purpose. They would only test what was in the syllabus.

Everything was already secured... Lu Zhou planned to present Zhou's approximation proof after the summer holidays. In the next two months, in order to maximize his gains, he would try to make himself into a true genius.

He must find teachers to discuss the math problems with.

Level 1 mathematics was also a must.

The summer school was also a must.

He also had to call his parents as it could be New Year before his next family visit.

After getting his prizes, a question popped into Lu Zhou's head.

*Is the blueprint prize correlated with subject level?*

This question was crucial.

Otherwise, why was he so unlucky and got a weird proof answer? As opposed to the first prize space battleship?

The theory was stuck in Lu Zhou's head. The more he thought about it, the more likely it seemed.

"Ranking up a subject level is a priority. I should get mathematics level 1 ASAP in order to unlock other subjects' level 1 limit. Before that, should I save my lucky draw tickets? But if I don't utilize the lucky draw tickets, I can't refresh the mission list. It's not realistic to hoard the lucky draw tickets..."

He clearly remembered that after he got the mission prizes, the mission list turned gray. Only after using his lucky draw tickets did the mission list become selectable again.

The only way to know was to enter more lucky draws.

If the next consecutive prizes were all proof answers, his theory would be correct.

Anyways, he should be able to take on new missions.

*What will it be?*

Lu Zhou began to think.

"Open mission list!"

A semi-transparent screen appeared in front of him.

[

Mission 1: The art of profiting from laziness

Description: Profiting from laziness is also a form of art. If you can earn money while being lazy, why would you need to work hard?

Requirements: Utilize the art of language and get your name on a million dollar science research project. Use as little effort as possible to gain the maximum merit. Try to be lazy, young one!

Reward: Subject experience points (Subject determined by research project type, amount of experience points is positively correlated with research project funding, negatively correlated with the amount of effort used). One lucky draw ticket (100% garbage).

]

[

Mission 2: Practice fundamental skills

Description: Rome wasn't built in a day, neither was the skyscraper of science.

Requirements: Solve 200 university level physics exercise questions (Questions are provided by the system and created with respect to the user's current knowledge).

Rewards: Question difficult level x 2. 50 general points. Item: Immersive learning hours (Type: special. Effect: 24 hours. Within a valid time frame, immersive learning is enabled when reading books. Permanent mastery of knowledge gained.)

]

[

Mission 3: Academic starts from theses

Explanation: Theses are the backbone of academia. An academician that can write a thesis might not be successful, but an academician that cannot write a thesis definitely won't be successful. Do not argue with the system about this. The system is definitely right! Publish a scientific thesis and start your academic career!

Requirements: Publish a scientific thesis.

Rewards: Subject experience points (determined by thesis value with a minimum of 100 points). 200 general points. One lucky draw ticket (95% garbage, 5% samples).

]

Lu Zhou had a weird expression after reading the last mission.

*Experience points were determined by thesis value?*

If he submitted his Zhou's approximation proof into the scientific journal, he would probably get a lot of experience points.

*That was pretty tempting...*

Chapter 7: Everyone Else Is Trash Compared To A Genius Student

At last, logic overcame greed. Lu Zhou dispelled his unrealistic idea.

There was nothing special about a freshman publishing in a scientific journal. Not to mention, a lot of papers in the Chinese mathematical journals were subpar. As long as one's English was good, one could probably sneak your way through even with subpar work.

This type of masquerading behavior was exposed by an individual who ranked the journals by inferiority. The one ranked at number one was Applied Mathematics (AMC) as it was infamous for publishing subpar work.

The University of Shanghai alone published hundreds of AMC theses just in four years. It was not unusual for someone to publish 20 subpar theses in a year.

To protect the academic integrity of the theses, some old-fashioned journals would often strictly limit the yearly published theses to 100 or less. However, this "monster journal" did not care. It published more than a thousand theses every year. This coupled with the phenomenon of overlapping resonance made the impact factor grow very quickly. Due to the copious amounts of pseudo-peer review, one editorial board published more than a hundred theses!

Lu Zhou was uncertain about publishing in other journals but for AMC...

He could be confident or cocky about it.

Either way, he felt like there was no problem.

However, it would be difficult if he wanted to publish Zhou's approximation in the scientific journal. The problem was not about getting accepted as he could easily get accepted. The crucial aspect was whether he could hold the spot after getting accepted.

Ultimately, Lu Zhou still selected the third mission. He did not plan on using Zhou's approximation. Rather, he planned on writing a phony thesis in order to pass the mission.

His current knowledge of advanced mathematics and mathematical analysis was equivalent to a master's student. If he wanted to write a thesis with his level four English, he only had to learn some technical words. It was nothing a dictionary could not solve.

In comparison, he did not have connections or the emotional intelligence needed for the first mission.

As for the second mission, the university did not even offer a physics class for freshmen. He was afraid that the system would produce high school level physics questions and god knows how low the difficulty level would be. Furthermore, he did not care too much about his physics level. He did not really need to learn it right now. He could just learn it later if he needed it.

After Lu Zhou chose his mission, he patted the grass off his backside and stood up. He put on some music and began to walk towards the dorms.

After being away for so long, Liu Rui would go crazy if he did not get back soon.

That guy was weird. He was pretty generous but when it came to studies, he was so competitive and selfish it made people speechless. He would chase you across the streets if you looked at his notes and rolled his eyes if you asked him questions. In his eyes, it seemed that everyone in the world was his competitor. What he strived for was not some kind of academic success but the admiration of students and teachers through obtaining the "genius" spot.

Could this type of person be considered a genius?

Lu Zhou did not think so.

In the eyes of a true genius, everyone else was trash. Who cared if you looked at my notes? Did you know about Zhou's approximation? You would not know what it was when it was in front of you!

Lu Zhou would only acknowledge one person as having the qualities of a true genius.

Yes, that was right.

One did not even need to guess. He was talking about himself.

...

When he opened the door to his dorm, it was exactly 10 o'clock.

Liu Rui was holding an exercise book. The other two people were not there. They were probably playing cards next door. Shi Shang was the type of person who only listened in class, but did not allocate additional time to study during exam periods. As for Huang Guangming, he was allegedly called a God of Study. He did not listen to classes. He would cram before exams and still do very well.

Lu Zhou threw his backpack onto the table and started to look for his showering card in the drawers.

At this moment, Liu Rui set down the exercise book in his hands and looked at Lu Zhou's direction.

"Buddy, why are you working so hard?"

"I have to work hard. I haven't touched a book for half a semester. If I don't start now, it'll be too late," said Lu Zhou before he threw his towel over his shoulder and stood up from his chair.

Liu Rui saw that Lu Zhou was about to shower and asked, "I can't solve this problem. Could you look at it for me?"

Oh, this was astonishing.

There were questions that even Liu Rui could not do?

"Let me look at it."

When Lu Zhou reached out with his hands, Liu Rui adjusted his glasses and handed over his exercise book. He pointed at the circled question and said, "This question."

"Calculus problem? This shouldn't be hard..." said Lu Zhou. He glanced at the question and was surprised to have never seen this type of problem before. He was excited. Who cared about showering? He took the exercise book, sat back down and started to draw diagrams on the draft paper.

Previously, if Liu Rui was unable to solve it, there was no way Lu Zhou could. He did not know why but now, there was not even a sliver of the word "impossible" in his mind.

After Lu Zhou spent some time trying to solve it, Liu Rui relaxed a bit. The dumbass he secretly looked down upon was still a dumbass. However he pretended, he was still a dumbass.

As for this question, Liu Rui genuinely was unable to solve it. However, there were official answers with the exact steps to solve it. The reason for asking Lu Zhou this question was not really for help. Rather, he only wanted to "spy on the enemy".

After all, if he actually wanted help for a math problem, he would not ask a dumbass like Lu Zhou for help.

Liu Rui was thinking this and asked, "What if you copied down the question first? I'll move onto the next question first?"

The hidden meaning was that there was no way Lu Zhou could solve it, so he would not waste his time.

However, Lu Zhou's response was not what Liu Rui expected.

"... no need. I solved it."

Solve- solved it?!

Liu Rui's eyes widened so much that his eyeballs nearly popped out.

"Yeah, you heard me," said Lu Zhou. He was spinning his pen as he explained the formula on the draft paper, "A typical two-step problem. First, you convert Cartesian coordinates into polar coordinates. Due to the interval symmetry, you can simply and reduce this part into  $\cot^2(x)$ ..."

"Then calculate the derivative as  $\csc^2(x)$ ! Then substitute back into the original function!" Liu Rui's pupils contracted slightly. He finally understood the underlying logic of solving this problem. The rest was easy and he just had to calculate it.

*F\*ck, I didn't think of this step...*

"Bingo! I solved it," said Lu Zhou with a smile. Sometimes, even a child could teach others.

"Thanks... Let me borrow the draft paper. I'll try to figure this out."

"Take it and you're welcome!" said Lu Zhou as he generously waved his hands and started to walk towards the bathroom.

Liu Rui took Lu Zhou's draft paper and sat back down. He pushed his glasses and looked at the question. He frowned and went into a deep thinking mode.

Even though the technique was new to him, the steps to solve it was clearly written down. There was nothing out of his knowledge, so he could easily understand it even without Lu Zhou's explanation.

However, one thing he failed to understand was how the hell did Lu Zhou figure it out?

*It was also in such a short amount of time...*

*Maybe he had encountered this type of problem before?*

Liu Rui thought that this was the only possibility. Otherwise, he could not imagine how this part-time working dumbass could solve this problem faster than a genius such as himself.

He flipped to the back of the exercise book. When Liu Rui looked at the answers, he froze.

"There's no way..."

*The answer is correct... But that's not the main point.*

*The main point is that Lu Zhou's method is easier than the answers! The answers didn't think about converting the Cartesian coordinates into polar coordinates. Instead, the answers used integral by parts which resulted in a large number of calculations.*

*And this was a method he thought about...*

*How is this possible?*

Liu Rui bit his lip.

He suddenly had doubts about his life.

## Chapter 8: The Optimal Inversion Theory of Linear Operators and Linear Functions

Since having the system, Lu Zhou felt his life becoming more structured. Every morning, he would carry his second-hand laptop and headed towards the library. He had never experienced this style of living before.

Sitting at the usual same spot, Lu Zhou opened his laptop and plugged his charger in the wall outlet. He contemplated for a while before typing a line of big words onto a Word document.

[The Optimal Inversion Theory of Linear Operators and Linear Functions ]

[Abstract: Researched a few types of inversion problems of linear functional and linear operators when given full and part information. Introduced the basic results of optimal inversion theory. Especially the construction of the optimal construction method.]

Lu Zhou thought about this problem while lying in bed going through his notes. When their mathematics analysis professor, Professor Tang, talked about the Fourier inversion formula, he mentioned this briefly. It was one of the few unpopular but still cutting edge fields.

Lu Zhou combined some information online and drafted this question

As for how to solve this problem?

*Hmm...*

With his skill level, there was no way he could solve it. Therefore, he had to use some unconventional means.

If he recalled correctly, the high tech system's general points could be used to solve modern technical problems. He tried to solve Riemann's conjecture but the system did not respond. He thought that the question must be above his mathematical level or that the general points required were an insanely high number that he did not have.

For this level of difficulty, surely the system would give a response?

Lu Zhou thought about this. As he concentrated on the computer screen, he began to think, "system, system, system."

*Hmm...*

It seemed like there was no response.

*What?*

Suddenly, a warm air current flew from his back to the top of his head. Lu Zhou felt his brain getting warmer. Immediately after, a "pong" sound went off. An enormous stream of information blasted open like a sea of knowledge. This was followed by lines of text floating in front of his eyes.

[65 general points used.]

[Currently producing an optimal solution based on a mathematical level of 0...]

He did not feel any discomfort. Rather, he felt pleasure. Just as Lu Zhou wondered if he was in a dream, he woke up.

Lu Zhou looked at the white computer screen. He then looked at his hands and the keyboard before muttering with a hint of excitement.

"Solve- solved it?!"

*It really solved it!!!*

If he was not at the library, he would have started to cheer loudly.

Just like when he was obtaining Zhou's approximation, the entire question's core theorems were planted into his head like a piece of iron.

From steps to answers, every number, every symbol, even every full stop was in his head. It was all so concise and filled with the beauty of mathematics.

The only downside was that this type of beauty was too abstract. He needed to use language to enrich its connotation and turn it into a thesis.

A thesis that could be comprehended by others.

While thinking, Lu Zhou seemed to understand the meaning behind the high tech system.

However, he was confused as to the point of all this.

Suddenly a ballpoint pen poked his arm lightly.

"Umm, student..." said Chen Yushan with a reddened face. Embarrassed, she asked, "Can I ask you another maths question?"

Originally, she did not want to ask him. However, she had asked everyone around her and no one could solve it.

She held her head down in defeat.

Chen Yushan chose to tolerate him and decided to forget the "humiliation" that Lu Zhou had previously caused her.

Lu Zhou opened his mouth and said, "Okay, bring me the question."

Chen Yushan released a breath and quietly moved her chair next to Lu Zhou.

Lu Zhou looked at the question briefly and saw that it was much more difficult than the question that she asked him the other day. It was around the same level as the question Liu Rui had asked him.

However hard it may be, it was only an advanced algebra question. For him, as long as it was a question from an exercise book, he could definitely solve it.

Lu Zhou took a pen and started to write on the draft paper.

While Lu Zhou was doing the question, Chen Yushan secretly looked at his face.

Although this guy's personality was unlikeable, his look of focus was surprisingly attractive.

Chen Yushan was bored while she waited for Lu Zhou to solve the question. She suddenly noticed the Word document on his computer screen. She asked quietly, "Student, are you doing a graduate project?"

It was already June and he still had not completed the graduate project. What a "genius"!

Lu Zhou answered, "No, that's my thesis, I'm submitting it to the scientific journal."

Hearing this, Chen Yushan was filled with respect for him.

*Oh my god, I met a god!*

*I didn't even notice. He looks so young. How is he a PhD student?*

Also, this PhD student had already started to submit to the scientific journal during the semester. Impressive!

Filled with worship, Chen Yushan asked, "Student, what do you major in?"

Lu Zhou had a poker face on while he tried to solve the question. When he heard her, he began to smile, "Uh... mathematics."

"Mathematics major, Jesus Christ! Anyone that can study mathematics is a god..." said Chen Yushan. Her worship was even more sincere than before.

She was in the business school. She did pretty well in her other subjects and the only subject she worried about was mathematics. She was about to go into the fourth year. The immense pressure from the postgraduate exams was right in front of her, making her worried about continuing her studies.

"Solved it. I wrote the thought process and steps on the paper. If you look at it for a while, you should be able to understand." said Lu Zhou. He threw the draft paper next to Chen Yushan as he said softly, "Mathematics is partly driven by talent and partly driven by hard work. It's different than other quantitative subjects. You won't understand it by having others explaining it to you."

After all, this was the library. It was unsuitable for discussion. Quiet conversations were fine, but if they kept on talking, people would start to get annoyed. Therefore, Lu Zhou stopped the conversation and gave this girl the necessary resources to figure it out herself.

Chen Yushan thanked him softly and took the draft paper. She then took out her phone and requested softly, "Umm... Student, can I get your WeChat? I still want to ask you if I'm stuck on a question."

"No problem," said Lu Zhou. He did not think much and took out his crappy Xiaomi phone to let the girl scanned his QR code.

"Thanks, I'll buy you food next time," said Chen Yushan. She blushed and thanked him again. She then moved her chair back and continued to study hard.

Suddenly, Lu Zhou had a moment of realization. He forgot to clear up a misunderstanding.

He was not a graduate student. He was just a freshman.

Although... He would be a sophomore in a few months.

If he went after her to specifically clarify this, it would seem a bit obsessive and awkward. He would have to clarify this misunderstanding next time when he had the chance.

He shook his head and put the thought in the back of his mind. His eyes continued to stare at the screen while his fingers tapped lightly on the keyboard. He started to focus on writing his thesis.

...

Although the system gave the answer based on a level zero mathematics , there was one aspect Lu Zhou was certain of. This method of solving it definitely did not come from his current knowledge. Rather, it came from the system's database of knowledge.

While writing his thesis, Lu Zhou was also writing down notes in his notebook. He listed the parts that he did not understand and wrote down a question mark on the steps that he still had doubts about.

When other people wrote theses, it was like they were squeezing water from a sponge. As for Lu Zhou, it was like pouring water into a sponge. It was not output, it was input.

Lu Zhou was in the library for the entire day. Even his lunch was the leftover bao from breakfast.

He looked at the thousands of words on his screen and the two full pages of notes on his notebook. He laid back on his chair and stretched.

"All I have to do now is to understand the parts on my notebook. I'll figure it out myself if I can. Otherwise, I'll just ask the teacher."

"Also for the parts of the thesis that are messy, I should streamline them. I'll do some researching online for steps that are already proven by other theses. After that, I can just delete the proof and label the reference."

"The last step is to double check it... Shouldn't be a big problem for me. After all, I wrote every word personally."

*Technically the system wrote it, but it's the same thing.*

It was getting late and his tummy started to rumble. Lu Zhou stood up from his chair and started to walk out of the library.

*Should I eat barbecue on rice again? Or eat curry?*

After he finished his dinner, he would go and visit Professor Tang's office. If he recalled it correctly, he should be on fourth year's classroom duty right now.

*Okay, I'll decide at that!*

## Chapter 9: Did I Even Study At University...

The consultation room did not even have a single empty seat.

The third-year students preparing for graduate entrance exams were all focused on studying.

Next to the lectern, sat the professor of University of Jin Ling's mathematics department, Tang Zhiwei. He put the newspaper in his hand down and started to meticulously look at the question on the draft paper. His right hand flipped the pen cover repetitively.

Lu Zhou stood next to him. He clearly understood that this little gesture meant that he was in his deep thinking mode.

"Where did you get this question?" asked Tang Zhiwei suddenly after staring at the draft paper for a long time.

"The textbook mentioned the Fourier series, so I went to the library to find related materials. I found variants of the Fourier inversion theorem and a few applications for the variants. I tried to derive them and was stuck on this one step," said Lu Zhou with an apologetic smile. His facial expression was full of gratefulness.

Tang Zhiwei looked at Lu Zhou for a second before looking back at the draft paper. He put the pen cover down and picked up a piece of chalk. He walked next to the blackboard and paused for a second. He then reached out and started to draft the question on the blackboard.

Lu Zhou looked at the blackboard with immense focus. Perhaps it was because he had already done his homework on these type of questions, he found himself to be able to keep up with the teacher's pace.

The noise created by the chalk on the podium attracted the attention of the third-year math students that were studying. Occasionally, they would look up and stare blankly at the formula that was written on the blackboard before looking back down quickly.

*Emmm...*

*What are they writing?*

Time passed by slowly and without them knowing, the entire blackboard was full.

Tang Zhiwei wrote from the blackboard's upper left corner all the way to the lower right corner. He stopped writing and looked back at Lu Zhou before asking, "Do you understand this part?"

Lu Zhou looked intently at the blackboard and nodded, "I get it."

Tang Zhiwei lifted his eyebrows as he asked, "Do you really understand?"

Lu Zhou said, "I really understand it."

Tang Zhiwei did not say much and started to wipe the blackboard with the eraser. He took the chalk and continued to write on the blackboard. He changed his judgment of Lu Zhou's character.

He hated two types of students. The students that asked him for extra marks and the fake students that would purposely ask him very difficult questions.

Especially the latter, as it purely wasted his time!

He clearly was uninterested in maths, yet he acted like he was doing research. Disgusting! This type of people only wanted to get close with the teachers. They completely forgot the point of studying.

Tang Zhiwei was writing the finishing parts and had only a few lines left. He suddenly stopped and looked back at Lu Zhou before asking with a laugh, "I'll finish writing here. You should be able to understand right?"

Lu Zhou nodded, "I understand... Thanks, Professor!"

Chen Yushan sat at the corner of the front row seats. She was secretly observing the two people on the podium. She heard the back and forth conversation of "Understand?" "Understood." Her face had a confused expression written on it.

*What do you mean understand, understood?*

*What exactly are these two communicating?*

Chen Yushan realized that with her ability, she could never understand their conversation. All of a sudden, she felt hopeless about her own mathematical abilities.

*Maybe... I'm actually just a bad student?*

Tang Zhiwei heard Lu Zhou's reply and laughed. He carefully put the chalk back onto the table and sat down. He opened his vacuum flask and drank some tea. He then slowly said, "Do you really understand? Then why don't you finish writing down the steps."

*Understand? My ass!*

*When I was writing, you stood there like a dumbass. You didn't even take notes. If you really understood it, I'll eat this cup!*

Lu Zhou saw Tang Zhiwei's expression and he suddenly understood. The professor doubted if he actually paid attention. He was testing him!

Lu Zhou did not know whether he should laugh or cry.

*Honest to God! I really understood!*

He also did not know why. When Professor Tang was solving on the blackboard, the lines of equations felt so familiar. It was as if he had seen them before, but he could not recall where.

Perhaps it was because he exchanged the system's general points for knowledge and it subsequently covered this information? Or because his own mathematical experience increased and it increased his intuition towards mathematics?

In short, he actually understood it.

Lu Zhou did not know the exact reason but it was obvious that Professor Tang was not planning on solving this question. Professor Tang looked leisurely at him to perform. He could not screw up his chances of successfully submitting a thesis next semester.

With a confident smile, Lu Zhou walked towards the blackboard with a chalk in his hand.

Professor Tang's eyebrows rose as he thought that there was no way this little kid could complete the steps.

*There's no way.*

*Definitely no way!*

Even though he already wrote down most of the proof steps, the last few steps of the proof were not something a freshman student could do! Even his master's students would have to go through the steps multiple times before they could understand it!

*But this guy! He didn't even write notes when he was listening!*

Time passed by slowly. From the initial state of being amazed, Professor Tang's feeling soon turned to shock before it finally became a feeling of approval.

All of the doubts that he had was like snow in the spring. It melted as soon as the sun shined on it.

After Lu Zhou wrote down the last symbol on the blackboard, he looked back at Professor Tang. Professor Tang nodded his head in approval and said, "Not bad... Well written."

The last few steps were slightly different than his method. It was slightly more cumbersome, but still quite sophisticated. This showed that not only did Lu Zhou understand what he said, but he also incorporated his own thought process into it.

This ability was very precious.

It turned out that he had judged wrong...

"It was still thanks to teacher's help. If I do this by myself, there's no way I could solve it until this step..." Lu Zhou apologetically smiled.

He did not lie about this part. The steps the system calculated had a lot "a = b" proofs. It did not really explain exactly why a equaled to b.

He asked Professor Tang for the exact explanation of the proof.

"Don't need to be humble with me. I can see your skill level," said Professor Tang. He closed the lid of the vacuum flask and continued to ask, "What class are you in?"

"Class one. First year. Lu Zhou," answered Lu Zhou honestly.

"Lu Zhou..." Professor Tang repeated it a couple of times as if he was trying to remember this name.

*It turns out that this student is called Lu Zhou...*

Chen Yushan sat in the corner. She was secretly listening and nodded. Suddenly, she felt something was wrong and she immediately realized it.

*First, first year?!*

Chen Yushan blushed as she remembered calling him senior. Her entire body was like an ostrich as she rested her head on the table.

Chen Yushan was not the only person that was shocked. Some of the senior female students who were sitting in the front row also looked at this junior student intensely. Their hearts were racing like a pack of lambs.

*How smart are the freshmen these days?*

*How are we supposed to compete?*

"It's going to be exams soon, right? How's your revision going?"

"I'm almost done with revising. I just want to study something else," said Lu Zhou with a forced smile.

"Ah, it's a bit insulting for someone like you to take that test," said Tang Zhiwei. With a smile, he asked jokingly, "How about I make a test specifically for you?"

"Please don't! I'll die!" Lu Zhou replied jokingly.

"What? How can a test kill you? I don't believe it," said Tang Zhiwei. He evaluated Lu Zhou before nodding approvingly and said, "Not bad, not bad at all. I rarely complimented students. If you weren't in the first year, I would want to talk to the academic office and take you under my wing to do research."

"Teacher, you spoke too highly of me. I still have a lot to learn. If I actually did research with you, I would drag you down," replied Lu Zhou. He knew that Professor Tang was joking so he was humble in his reply.

Tang Zhiwei criticized him, "Stop! Don't give me all that polite stuff. People in academia have to focus on doing academics. Don't give people that fake politeness."

Although he had no doubt that he was being criticized, Lu Zhou knew that Professor Tang was not angry. Professor Tang was teaching him like he would his own student.

When this old guy got angry, he would definitely put on a smile. For example, when he was writing on the blackboard earlier and thought that Lu Zhou was pretending to know what was going on, he must have been so angry.

"Teacher, you are right. I understand."

Seeing Lu Zhou's sincere expression, Tang Zhiwei relaxed his tone and nodded his head. He continued to say, "It's good that you have an interest in mathematics. I hope that you can continue to maintain this interest. Also, your selection of the field is good. Even though it isn't a popular field, it is a field that one can easily succeed in. If you've good ideas, don't be afraid to go for it. If you don't understand some parts, just read or ask. This is how academia is built. Who knows, you could come up with something no one else has thought of before."

Professor Tang paused for a moment before continuing, "The mathematics department of the University of Jin Ling isn't very strong, but our physics department is very good. The Fourier transformation is used in spectrum analysis, data compression and orthogonal frequency division and its applications are quite broad. If you become an expert in this field, I believe that when you are in your fourth year, physics professors from next door would definitely want you."

Professor Tang laughed and continued, "Study more, read more, practice more, research more. I'll stop rambling. Go and think through this by yourself. I'll stop wasting your time."

"Thank you, professor! I will definitely remember these words that came from the bottom of your heart," replied Lu Zhou sincerely.

"Don't give me that fake politeness. Didn't I just tell you this? Just say thanks, then head off. Do you need me to send you?" laughed Tang Zhiwei.

Lu Zhou smiled. He took the draft paper and pen before walking out of the door. He even closed the door behind him.

Tang Zhiwei looked back at the blackboard and let out a breath. His heart was deeply moved by it.

*No wonder Jin Ling is one of the ancient capital of the Six Dynasties and the birthplace of astounding people.*

*With the University of Jin Ling standing on this dragon's pulse, it would really produce talented people!*

The undergraduate students were muddled. They looked at the dazzling equations on the blackboard. When they looked back at their own exercise book, they felt a sense of inadequacy.

*Did I even study at university...*

Chapter 10: I Have Two Girlfriends

Room 201. Male dorm rooms.

Liu Rui was doing practice questions under the light when he suddenly stopped his pen and looked at the room's door. He asked carelessly, "Why hasn't Zhou come back yet?"

Huang Guangming was sitting on the bed playing soul hunters. He did not even raise his head as he replied, "I don't know. Why do you care so much about the guy? Are you gay or something? Disgusting!"

"Come down! I'll beat your ass!"

Liu Rui swore. He grabbed the ladder and started to shake the bed to the point that Huang Guangming could not even see his phone clearly. He quickly grabbed the rail and screamed mercy.

"Brother Liu! Brother Liu! I was wrong, I was wrong! Stop shaking! I'm gonna die! Ahhhhh~"

In fact, there was no way he could die. The bed frame was connected. There were also lots of books and clothes in the cabinet supporting it. Even if Liu Rui threw his entire body weight onto the ladder, he still could not flip over the massive rectangular object.

These two noisy people had already become the norm for Room 201.

Shi Shang was studying English when he suddenly lifted up his head and said coldly, "Speaking of which, Zhou hasn't been working part-time recently. He also stopped playing League at night and he spends all his time at the library. Maybe..."

"Maybe?" Liu Rui's ears perked up.

"Maybe he's dating?" said Shi Shang with a tone of uncertainty.

Liu Rui: "..."

Huang Guangming: "..."

"... Yeah, why aren't you guys talking?" said Shi Shang embarrassingly when he realized the room was quiet.

Liu Rui and Huang Guangming looked at each other before looking at Shi Shang.

In a serious tone, Liu Rui said, "You're crazy"

"F\*ck me, call me crazy again and see what happens!"

Huang Guangming said seriously, "You're crazy. We're math majors."

"..."

This logic was too perfect. Shi Shang's throat choked up and he was speechless. Tears nearly started to flow down his cheeks.

The ratio of single versus guys with girlfriends in the mathematics department was ranked first in the University of Jin Ling. Other quantitative departments could still find one hot girl, but for them... If they wanted to find a hot girl, they would have to convince some guy to cross-dress.

As for people from the other classes, if they told them that they were math major, their first reaction was, "Oh, you're part of that loner squad," "Ever had a girlfriend?", "Never had one, right?". Normally speaking, girls dislike guys that were not romantic. It was very rare to find a partner.

*Otherwise, why would a tall, handsome, basketball playing, and Rukawa Kaede level guy like me still be single?*

*Sigh... Reality is cruel.*

Shi Shang looked at the sky.

At this moment, Lu Zhou came back to his dorm. He laughed as he opened the door.

"What were you guys talking about? I could hear you guys screaming from across the hallway. Go and find yourself a girlfriend. It'll be too late if you don't."

Huang Guangming had a serious face on as he said, "Zhou, I have to ask you a very serious question. Answer honestly."

"What...?"

Shi Shang asked seriously, "Do you have a girlfriend?"

Lu Zhou said impatiently, "Yeah, sure. I have two! Jealous? Want me to lend them to you?"

"F\*ck off!" was the response from the three guys.

Lu Zhou paused. He was surprised by their unison. He suddenly realized something and he laughed as he said, "What... are you guys thinking? I was talking about two-digit composite numbers. I wrote notes on it. Feel free to read them. Just remember to give it back."

" ... "

" ... "

" ... "

Uh.

The room became silent again.

...

In the morning, Lu Zhou routinely woke up in the morning. He brushed his teeth, washed his face, and headed to the cafeteria with his laptop.

The cafeteria had just opened for business and so, the hall was pretty much empty.

When Lu Zhou walked in, he could smell the delicious freshly steamed buns from miles away.

"Ma'am, can I have three steamed buns and a cup of soy milk to take away?"

"Okay! Young man, you're up so early. I'll pick a big bun for you."

"Thank you, ma'am!"

It did not matter if it was a classmate, a teacher, or a stranger, Lu Zhou was always very polite.

His father taught him to be nice to people as he would never get the short end of the stick.

Of course, nothing was that absolute. His father worked at the metal factory for many years and suffered a lot of abuse. On the other hand, even though Lu Zhou remembered the lessons his father taught him, he still could not control himself and would occasionally swear.

Once the buns were packed, Lu Zhou took out his food card and pressed it against the machine.

A second later, he felt embarrassed.

[Card declined]

The cafeteria lady saw how embarrassed Lu Zhou was and laughed before saying kindly, "It's okay. Cash is fine. I can give you change."

Lu Zhou searched in his pockets and took out his wallet. He felt even more embarrassed.

His wallet was empty and it only had a bank card in it. As for his Xiaomi phone, he left it charging back in his dorm room. He could not even scan the QR code to pay.

*This cafeteria probably doesn't accept bank cards, right?*

*System...*

*Let's negotiate a bit. Can I exchange general points for money?*

Lu Zhou said in his heart. He was full of regret when the system did not respond.

At this moment, like a flash of thunder, the card machine rang.

Lu Zhou looked behind him immediately and saw a girl with bangs. She stood there and looked at him with a smile as she waved her food card.

"Hey, morning."

"Morning..." Lu Zhou nodded his head. He was stunned.

*This person...*

*Who is this?*

"How dare you! You don't even recognize me!" said Chen Yushan as she knew instantly that Lu Zhou did not recognize her. Her lips perked up in anger.

"Oh, sorry... Thanks. How about I add your WeChat to pay you back?"

"It's fine. It's only two dollars fifty. I'm not that cheap. Also, we've already added each others' WeChat!" said Chen Yushan as she waved her hair and grinned. She reached out with her right hand and said, "Let me reintroduce myself. My name is Chen Yushan. I'm in the business school. Little brother, you can call me older sister."

Lu Zhou did not know why she emphasized on "brother" or why she added a "little" in front of it. He had no idea how she knew he was younger. However, after hearing her talk about adding his WeChat, he suddenly remembered who she was.

*Just what...*

Her appearance changed a lot!

She was wearing denim shorts and a pair of sandals. He did not know if he should stare at her S\*xy long legs. She had a small white t-shirt with very noticeable curves. Her face had little makeup and she was wearing bright red lip gloss. Most noticeably, the pair of round glasses came off. Maybe she was wearing contact lenses?

Chen Yushan noticed that Lu Zhou was speechless and she was secretly happy. Her roommate dragged her to give her an appearance makeover, which somewhat annoyed her. However, right now, she felt that the effort was worth it.

Of course, her body was naturally attractive. She was just accustomed to not caring.

A normal person would not get half of the results even if they tried.

"What? Little brother?" Chen Yushan waved her long hair, pouted her mouth, and laughed at Lu Zhou mischievously. Her eyes signaled, "Aren't you going to say anything?"

Lu Zhou paused for a second and looked at Chen Yushan. He contemplated if he should speak. Finally, he gave in to his kindness as he quietly said, "The air conditioning in the library is very cold. You'll feel cold wearing this."

"..."

Chen Yushan felt stupid for anticipating his response.

Lu Zhou ate one of the three buns, put the rest in a plastic bag and stuffed them into his backpack. Chen Yushan was slurping on noodles. She looked at him and did not say much. She only thought it was respectable that he did not waste food.

The pair finished eating at the same time and started to walk towards the library.

At the same old place, Chen Yushan sat next to Lu Zhou. She took out her exercise book and started to read it. Having a makeover was only to experience a change and to satisfy her roommate. It did not change her pace of studying at all.

On the other hand, Lu Zhou took out his laptop and started to edit his thesis.

The calculation method that Professor Tang showed him yesterday was crucial for the development of his thesis. With the memory fresh in his mind, he decided to choose the most important parts of the thesis to write.

After that, there were only three difficult sections left to figure out. If he pushed himself, he could try to finish the thesis by the end of the month!

The science journal review process was very slow and it often took up to three months. Even for a crappy journal like AMC, it was still slow. He did not want to take half a year just to finish his mission.

Time flew by quickly and it was already noon.

Chen Yushan spent the whole morning doing practice questions when she looked over at Lu Zhou and lightly tapped his arm.

"Little brother, little brother, how about we get lunch together?"

She was almost addicted to calling him little brother that she even said it twice.

Lu Zhou hesitated and shook his head, "I'm good. I'm not that hungry. You go first."

Today was Sunday and the food card top-up service was closed. Not to mention, he left his phone in his dorm. How could he let her treat him again?

"Are you sure? I'll treat you," said Chen Yushan.

Lu Zhou was drooling as he thought of the cafeteria's barbecue meat.

Finally, the temptation of food overcame logic. He said apologetically, "Oh... Let's go then. I'll treat you next time."

His buns were already cold anyway. It would taste the same if he kept it for dinner.

"Ah, I'll remember what you said. Let's go then. It'll get too crowded if we don't hurry up," said Chen Yushan. She stood up, turned around and felt confident.

*Who cares if your IQ is high? You're still suppressed under my elegant goddess-like appearance!*

Meanwhile, Lu Zhou was walking next to her and oblivious of her satisfaction. This was because he was debating a very important question.

*Should I eat cumin flavored meat?*

*Or pepper flavored meat?*