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## Squate

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# Squate

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## 1.

In her first thirteen years, my sister Sara never had an imaginary friend. Nor was she particularly interested in math. That all changed when she met Squate. Then the trouble began. It was partly my fault, since I introduced them.

It began on a Friday night in November of her eighth grade year. Sara was in the midst of a grounding. She had tried some pot with her friends on Halloween, something she instantly regretted and swore she would never do again. But our parents, remembering what happened to our cousin Tim, felt the need to punish her anyway. For two weeks, there would be no television, phone calls or games. Consequently, there wasn't much else to do that evening but get a head start on next week's homework. She asked me for help on an algebra problem.

Neither one of us had ever been that great at math before, but that didn't stop our parents from placing us in the honors math classes. In fact, we were enrolled in every honors class that the school offered. They didn't want to admit that their children were somehow not smart enough to handle the challenges of the curriculum. Neither did most upper class parents in the district.

"Here it is, Problem 14," Sara pointed and read from her textbook. "Find the length of the diagonal of this square. " I looked at the problem and vaguely recognized it. It was the same problem from the same teacher in the same class I had two years before.

"Okay, you can do this," I said. "Each side of the square is two units long. See how the diagonal and the two sides make a triangle? It's a right triangle. Now use the Pythagorean Theorem."

"That Greek thing? A squared plus B squared equals C squared?"

"That's the one."

“Mr. Henderson says that’s what the Scarecrow in *The Wizard of Oz* tries to recite, but messes it up. The next time it’s broadcast we should—”

“Let’s focus on the problem,” I continued. “A and B are both equal to two. Now find C. That’s the length of the diagonal.”

After working things out with her pencil, Sara arrived at the answer. “The square root of eight,” she announced, then wrote down

$$\sqrt{8}$$

on her paper and put a box around it.

“Great. Now plug it into the calculator and see what it is.”

“Why? I already know what it is.” she pointed with her pencil. “It’s the number when multiplied by itself equals eight. What’s wrong with that?”

“We need to put it in its decimal form. You know, so it looks like a regular number.”

She shrugged and punched a few buttons on her calculator. Red neon digits appeared before her: 2.828427125. She stared at them for a moment, then looked at me. “Do I really have to write all these down?”

“Just round to three decimal places. That should be close enough. 2.828.”

Sara wrote this new number down. “I don’t know, Michael, this doesn’t look right. Besides, the directions say to find the exact value.”

“Hey, you asked *me* for help, remember? I passed Mr. Henderson’s class by rounding everything to three decimal places. That and laughing at his dumb army stories.”

## 2.

The next morning Sara came down for breakfast, a little earlier than usual.

“Hey, Michael, are you trying to get me to flunk?” she went off on me. “You were totally wrong.”

I looked up from my Cheerios. “About what?”

“Your answer to that math problem last night. 2.828. It was way off. Thanks for nothing. Turns out my answer was correct. He told me so himself.”

“Who? Mr. Henderson? You called him late at night? That’s creepy.”

Dad looked up from the newspaper. "Sara, I thought I made myself clear. Part of your punishment was no phone calls."

"Relax, Dad. No one called anybody. It was the number from my homework that woke me up. *My* number, not *your* number, Michael. The square root of eight. But he said I could call him Squate, for short."

"Squate," I repeated.

"You talked to a number?" Mom asked incredulously.

"He's very nice for a square root. I woke up to a gentle voice that said, 'Sara, I'm sorry to bother you, but you might want to have another look at your homework.' So I got up, went back, and looked at the problem. We plugged Michael's number into the calculator. When I squared it, I got 7.9975, nowhere near eight, almost one percent off." She took a sip of orange juice. "A funny thing, Michael. Squate said he remembered meeting you two years ago. You made the same mistake then. He tried to warn you, but you had your headphones on, listening to your stupid Doobie Brothers record."

"Shut up, that's crazy," I said. "Numbers don't talk."

"Well, this one does."

"And why is this number a 'he'?"

"Positive square roots are male, negative square roots are female. Like Squate's wife, Minus Squate. It's sexist, I know. But that's just how it is in Quadworld, where they live. Only they don't use terms like 'husband' or 'wife' there. They're called . . . conjugates, or something."

"That's funny, I don't remember Mr. Henderson saying anything about the gender of numbers," I said.

"Squate says there's a lot Mr. Henderson doesn't know."

"Sara, are you sure you weren't imagining this? Or hallucinating?" Mom asked. There was more than a trace of concern in her voice. "You didn't try those drugs again, did you?"

"No, Mom, of course not."

"Just how long did this number talk to you?" I asked.

"Only a few minutes, then I went back to sleep."

“You sure you weren’t asleep the whole time?”

“It wasn’t a dream, Michael. Anyway, I told him that we could talk later on today. You know, since I can’t do much else here.”

“You’re not talking to anyone until you do your chores,” Dad said, buttering his toast. “Those leaves in the yard aren’t going to rake themselves.”

### 3.

That morning she cleared the front and back yards in record time. She formed a giant pile of brown, crisp leaves on the tree lawn in front of our house, right under the streetlight. Then, just like she did when she was younger, she plopped herself in the middle of it. Only this time, she had a notebook and pencil. There she remained, pretty much all day long. She came back into the house only twice: once for a hurried lunch, and once to borrow some books from Dad’s study: one about philosophy and one about calculus, both from his college days.

I still remember looking at her through the window, seeing Sara staring up at the clear sky. Her lips were moving, but I couldn’t hear what was coming out. Every once in a while she would turn to her notebook, write something down, stare at it, move her lips again, and resume her previous position. She was oblivious to the passersby, some of whom gave her a strange look. For a short time at least, she seemed to have achieved a sense of peace, something that had eluded all of us for some time.

### 4.

That evening, just before dinner, she announced that she had invited a friend to join us. Before anyone could object, she produced an index card with a large  $\sqrt{8}$ , drawn in thick purple magic marker.

“This is Squate, everyone. He said it’s been a long time since he’s been at a meal with humans. Most of the time, he’s written down by people at school or work, not at dinnertime. Don’t worry, you don’t have to set a place for him. Numbers can’t eat, after all.” Sara propped the index card against her water glass, so that Squate was facing us.

For the next twenty minutes, a square root dominated the conversation without ever saying anything himself, using my sister as his medium.

“Squate says the meatloaf looks great, Mom. He’d have two helpings if he could eat.”

“Dad, Squate wishes he had met you in college, but your textbook didn’t have any of his problems. But his friend, the square root of five, remembers meeting you there.”

“Michael, Squate forgives you for your rounding error, even though in Quadworld it’s an insult to be mistaken for a rational number. But humans make that mistake all the time. We are so attached to our calculators.”

“Dad, can we go to Greece for our next vacation? Squate says he’d be our guide, and he’d show us the house where the Pythagoreans discovered him. Or at least where it used to be. It burned down a long time ago. Pythagoras and his group did some really weird stuff and pissed off the wrong people.”

“Squate also met this Greek guy named Socrates, who I guess is much more famous. I read the story in your book, Dad, after Squate told me to check it out. Get this, Socrates actually used Squate in a geometry lesson, while teaching a slave! Without a calculator! How come you never told us about Socrates, Dad?”

“Squate met lots of other celebrities, most of them before they became famous. Like Jodie Foster, Carl Sagan, Jimmy Stewart. And whoever played Luke Skywalker in Star Wars. They all met him doing homework, just like me. But Squate said his closest human friends were these two dead math guys named Euler and Gauss, whoever they were. He’s going to tell me more about them tomorrow. Squate even met Jimmy Carter, a long time ago, when he was an engineer.”

“Yeah,” I shook my head. “a hell of a lot of good it did him with Iran.”

Finally Sara paused, took a bite of mashed potatoes, then looked at me.

“You know Mr. Welty? The other algebra teacher at school?” she asked.

“Yeah, what about him?” I quickly answered, hoping the conversation was finally moving on.

“And you know Mrs. Brooks? The history teacher?”

“Yeah, what about them?”

Sara leaned over and smiled. “Squate says they’re having sex.”

Dad slammed his fist on the table. Plates rattled. Mom’s jaw just dropped.

“Stop it!” Dad scolded. “You don’t talk like that in front of your mother or me, do you understand?”

“Sara, why on earth would you say such a thing?” Mom asked. “Make a serious accusation about two teachers you’ve never had?”

“Yeah, besides Mrs. Brooks and Mr. Welty are both married,” I said. “to other people.”

“Apparently not happily. I’m just telling you what Squate told me,” Sara said.

“That’s a copout and you know it.” Dad shot back.

“But Squate saw them, Dad. It was like, two hours after school ended. Mr. Welty was teaching square roots to his last class of the day. He wrote Squate on the board and never erased him. So he saw Mrs. Brooks enter the room and close the door. Then they started kissing and hugging and making out, and then Mr. Welty’s hands went—”

“That’s enough!” Dad shouted. “I hoped this grounding would help you grow up, but you’re just getting worse. Go to your room.”

“But Dad—”

“GO TO YOUR ROOM!”

Sara sighed, picked up the index card and went upstairs.

## 5.

The next day was Sunday, and Sara spent most of it in her room with the door shut. As I passed by, I heard only fragments of one side of a conversation: “It must be so hard for you, believe me, I know.” “What’s a discriminant?” “A boy in Turkey is writing you down? What’s his name? What does he look like?” “Why don’t they teach us this cool stuff instead of long division?” “How could Mr. Euler see you if he was blind?”

## 6.

When Sara went back to school on Monday, she brought her “Squate card” with her. She set Squate on the edge of her desk in every class, so he could see what was going on. She even brought him to lunch with her friends, although she didn’t

introduce him to anyone. On Tuesday, she raised her hand in math class, where Mr. Henderson was teaching about conics. “Yes, Sara?” he called on her.

“Mr. Henderson, is seven really a prime number?”

“Sara, I’m not sure what this has to do with today’s lesson,” Mr. Henderson said.

“A prime number has only one and itself as its positive factors, right? So seven is prime?”

“We’ve gone over this before.” he sighed. “Yes, seven is prime. Now can we—”

“So explain this.” She went to the board, with Squate in her left hand. She erased the ellipse that was there, took a piece of chalk, and wrote

$$7 = (\sqrt{8} - 1) \times (\sqrt{8} + 1)$$

“See? Two factors, neither of them is one or seven or a fraction. Not prime.”

“Uh, those factors aren’t integers. They don’t count.”

“Why don’t they count? They might not be regular integers, but they’re certainly algebraic integers. You know what algebraic integers are, right, Mr. Henderson? Roots of a monic polynomial with integer coefficients?”

“Sara, I think you should sit down.”

“Lots of so-called primes can be written this way. Seventeen, twenty-three, thirty-one, forty-one, forty-seven. They all factor, once you allow the square root of eight to get involved. I checked them out myself.” Some students in the back of the room began to snicker. She put the chalk down. “Mr. Henderson,” she asked. “why did you lie to us?”

Our parents got a call from the school principal that day.

## 7.

On Wednesday, she confronted Bill Tarrington in the hallway. “Bill, you’re a cheater,” she accused the ninth grader who was repeating algebra. “You had your brother Sam do your homework for you, didn’t you?”

“What the hell are you talking about?” Bill Tarrington said.

“You gave him your math homework last night and told him to do it for you. Sam wrote the answers down on a separate sheet of paper, and then you copied it. Also, you have a half naked picture of Bo Derek on your wall. Very tasteful.”

“What? I didn’t do anything like that.”

“Here, if I’m wrong, do problem 14.” she took out a sheet of paper and a pencil and shoved it in front of his face. “Do it right now. Find the diagonal of this square. Don’t give me any approximations. The answer is a square root. Just tell me which square root. Then I’ll believe you.”

“Bitch, get out! I don’t have to prove anything to you.”

“I knew it!” she shouted.

“What’s going on here?” Mr. Urban, the geography teacher and hall monitor that day, stepped in.

“Mr. Urban, she’s crazy!” Bill protested. “I was just minding my own business and then she gets in my face, accusing me of cheating on homework I haven’t even done!”

“Mr. Urban, I know for a fact that Bill’s cheating. Not for the first time.”

“All right, move along, Sara.” Mr. Urban said. “You’re in enough trouble this week already.”

## 8.

As the week went on and the due date for the homework assignment approached, Squate told many stories to Sara, who passed them on to me. Valerie Blaser found Squate in all his glory. Eric Mumford found him, but gave an inaccurate decimal approximation, just like me. David Scranton, Nina Taylor and Kelly Galvin somehow made a common mistake and concluded Squate was equal to four. Becky Collins wrote Squate as  $2\sqrt{2}$ , which offended Squate to no end.

“It reduces his identity to that of his rival, the square root of two. It’s mathematically correct, but rude. It would be like saying my name is Claire Hudson’s daughter.”

But some things she reported had nothing to do with math.

“Roger Thales has a crush on Sharon Seaver. At least that’s what Squate seems to think, judging from their phone conversation.”

“Cliff Murphy is doing his homework while naked! And he has a tattoo on his butt.”

“Ally Rosen is on drugs. Worse than the kind that I tried.”

“Oh, shit.” she suddenly jumped to her feet and ran out of the family room into the kitchen. “Mom!” Sara cried. “Craig Johnson’s father just hit him. Hard. They were having an argument in his room. His Dad just knocked him to the floor, then kicked him. We gotta do something!”

Mom turned off the water faucet and turned around. “Just how do you know this? Did you see it?”

“Squate did.”

“Really. Sara, I’m concerned about you.”

“You should be concerned about Craig. He was doing his homework, did Squate’s problem, and wrote him down. That’s how Squate saw the whole thing.”

“You’re still on this again? Look, I know Angela Johnson very well, and she would never let that happen to her son.” Mom said.

“Well, it happened anyway. Shouldn’t we call the police?”

“And tell them what? We have a witness, but it’s my pot smoking daughter’s imaginary friend, that’s also a number?”

“I keep telling you, Mom. I’m not doing any pot, and Squate’s not an imaginary. The number under his radical is eight, not negative eight. Squate is real, in every sense.”

“Please. This isn’t funny anymore.”

“I’m not trying to be funny. I’m telling you facts.”

Mom crossed her arms. “Can’t this number friend of yours tell someone else, someone who has more credibility? You yourself said it’s talked to other humans.”

“I said Squate *met* other humans. He’s only *talked* to a few of them, and that was a long time ago. Most humans don’t listen, and the few that do think they are going psycho. Plus, talking to humans is against the rules in Quadworld. Squate is kind of a rebel. He’ll get in trouble if he does this too much and the other numbers find out.”

Mom shook her head.

“Of all the people he could contact, he chose you. Not scientists, not engineers, not world leaders. Just you, someone who never liked math before. Why is that?”

Sara shrugged. "I don't know, I guess he just likes me."

"Of course," Mom turned back to wiping the counter.

"So what about Craig? What are we going to do?"

"Nothing."

"I give up. I thought you would understand." She started walking away.

"Sara, wait." Mom called after her. Sara turned around.

"This nonsense doesn't leave the house. Understand?"

## 9.

Friday arrived, the due date of the homework assignment. We had hoped the stories would end, but they didn't. It turned out that many classes throughout the country were using the same textbook, and other students in other schools were doing Squate's problem. Squate met many of them. In the span of one hour, he was written down by a pregnant sixteen year old in Philadelphia, a junior varsity football player in Omaha, and a boy in Sacramento doing homework in his father's hospital room. "Luis' father has lung cancer and probably won't last more than a month," Sara said sadly.

Nor were the stories just about people her own age. A group of math majors at Purdue University were working together to find Squate's continued fraction representation, whatever that was. In Massachusetts, Squate appeared on a transparency as part of someone's presentation at a math teachers conference. In New Mexico, an engineer was using Squate in a calculation to build a bridge. "I hope he doesn't make a roundoff error like you did, Michael," Sara said. "Otherwise that bridge will come crashing down someday."

## 10.

Late Saturday evening, Mr. Henderson began grading his students' assignments. At least, that's what Sara said, who of course heard it from Squate. As she and Squate sat in the recliner in the family room, they teamed up to give a live report.

"He's using a red pen. He's putting a big checkmark next to Squate right now . . . Rob Bussfeld got it right. That's fifteen correct answers out of twenty-one so far. And none of them are approximations, Michael. Mr. Henderson wanted Squate's

exact value. Squate says he has new respect for Mr. Henderson, and that maybe we were too hard on him. Unlike numbers, people change. By the way, Squate says he gave me full credit despite our little spat this week. And . . . ”

She lifted up Squate to her ear again. “So far Valerie Blaser and I are the only ones who have all the answers completely right. I always thought she was smarter than most people thought.”

She suddenly grinned. “Ha! Bill Tarrington got the answer wrong! Ha! He couldn’t even copy his brother’s work correctly.”

## 11.

Things finally came to a head the next week when Sara called the police and reported the Johnsons on child abuse. Needless to say, the only one who got in trouble was Sara. The fact that Dad and Hal Johnson worked in the same firm didn’t help things. Another grounding wouldn’t be enough this time. My sister was on her way to the psychiatrist.

## 12.

“Well, after talking to Sara, it’s clear she’s in a fantasy world,” Dr. Warm told my parents in his office. “She is convinced that this number friend of hers is real, is thousands of years old, can be in many places at once, and she believes everything it tells her without question. It’s also clear that she is using it as a crutch, a coping mechanism for something. She insisted in bringing that index card with her to our session, and only agreed to put it away after I asked her five times. You said this started recently?”

“Yes, she never acted like this before,” Mom said. “not until she tried marijuana with her friends.”

“And she hasn’t done any drugs since then?”

“I hope not,” Dad said. “I search her room regularly and haven’t found anything. Just papers with math scribbles.”

“What are her friends like?”

“Except for the ones she smoked pot with, they seemed all quite normal.” Mom said. “But since this whole Squate thing, she hasn’t had much interest in them.”

Even after we reinstated her phone privileges. Do you have any theories, Doctor? What's so special about this number?"

"Actually, I was hoping you could tell me."

"Excuse me?"

"I was thinking about this number, this square root of eight." Dr. Warm leaned back in his chair. "To be honest, I was never that great at math, but I remember there are some numbers that go on forever, just like Pi. Irrational numbers, they're called, ironically." Dr. Warm chuckled. Mom and Dad just stared at him.

He cleared his throat. "So anyway, I used the computer to print the first hundred digits of the square root of eight." He handed Mom a sheet of paper. "Do you see anything that might set her off? Some pattern? Bear in mind, only the first few digits would have appeared on her calculator, but she could have found more using a computer at school."

Mom looked at the numbers on the green and white paper. After about thirty seconds, she gasped. "Oh my God, Bob. I see it."

"See what?"

She pointed. "Miriam."

"What about her?"

"The numbers up at the top. Starting with the second digit." She pointed. "2842712."

"So?"

"So, that was her phone number!"

"Oh, yeah, It's been so long, I forgot."

"Of course, she wasn't *your* family."

"Miriam?" Dr. Warm asked.

"My aunt," Mom explained. "Sara was quite close to her, and called her on the phone a lot when she was young. She died of cancer two years ago. It was a really terrible situation, and Sara was right in the middle of it. Do you think this is what set her off? That she invented a substitute for her great aunt?"

"Either that, or it awakened some hidden grief." Dr. Warm said, scribbling notes furiously on his pad. "Or both. Sara never mentioned Miriam." He looked up.

“Come to think of it, neither did you, until now. I wish you had told me this before.”

“I never thought there would be a connection.” Mom replied. “After the funeral she seemed to move on, a lot better than other family members.” After they talked for a few more minutes, the doctor finally picked up the phone. “Karen, would you send Sara in, please?”

### 13.

Sara wandered into the office, holding Squate tightly in her hand.

“Sara, honey, it’s all right. We think we know what’s going on.” Mom said.

Sara sat in the worn chair against the wall. “Okay, what’s going on?”

“Aunt Miriam. You still miss her, don’t you?”

“Of course I miss her. She was like a grandmother to me. But what does she have to do with why we’re here now?”

“This whole number obsession,” Mom gestured at Squate. “You saw her phone number in the digits, didn’t you?”

“Right here,” Dad held up the computer printout and pointed.

Sara squinted at it for a moment, then said. “Oh, yeah. I noticed that, too. A funny coincidence, but Squate told me that’s all it was.”

“You’re sure it’s only a coincidence, Sara?” Dr. Warm prodded. “Or maybe you saw your aunt’s phone number, missed talking to her, and invented this friend to fill the void?”

“No,” she shook her head. “I told you, he contacted *me*, not the other way around.”

“Maybe subconsciously . . . .”

“Maybe not subconsciously. Squate says there’s nothing special about his digits, other than they go on forever and don’t repeat. They really don’t represent who he is, only his place on the number line. I don’t know why people are so obsessed with his digits. Same with Pi. Lots of bozos memorize the digits of Pi, but if you ask them how many radians there are in one revolution, they have no idea. You want to know something?” She leaned forward. “Squate said almost every-one’s phone number appears somewhere in his digits. Don’t take my word for it.

One of Squate's human friends, some English guy named Hardy, found this out a long time ago. In fact, Squate told me *our* phone number appears in his digits several times. Starting at ... " she looked down at Squate "... where is it?" After a short pause she said "His six billionth ... eight hundred ninety two million ... seven hundred and five thousand ... three hundred and ninety-fourth digit."

She looked up. "Aren't you going to write that down?"

"Why would we write that down?" Dad asked.

"So you can check it yourself, on a computer. So you can see I'm not lying."

Dr. Warm laughed. "It would take years to find all those digits."

"Yes, how convenient." Dad said. "You just made that up. Just like you made up that story about Craig Johnson, and all those other people. Do you even care about the position you put me in at the office?"

"But it's true, Dad. The police must have covered it up because Craig's dad did some work for the department. To be honest, I've noticed Craig acting a little funny at school lately. And Mrs. Brooks and Mr. Welty? I could have sworn they were holding hands at the assembly last week."

"Sara, I think what we have here is your own confirmation bias. You're seeing things you want to see to confirm your story." Dr. Warm said.

"Believe me, Dr. Warm, I don't *want* to believe these things. Why would I? They're awful. I haven't even told you the worst."

"Why don't you tell us now?" Dr. Warm invited.

"There are a lot of people using numbers in bad ways. Some are making bombs, and planning attacks and other bad things. Not just military people. Then there's the statisticians, politicians and news people. They make it look like Squate and the other numbers are saying something that's not true. But of course, everyone else believes them because we don't know enough math to know the difference.

"And that's just what's happening here on Earth. I haven't even told you about the creatures on Alpha Centauri, who are looking at us. They have triangles there too, so Squate and his kind are there as well. As different symbols, of course."

"Okay," Dr. Warm sighed. "Let's proceed."

14.

"I don't know, Claire. I don't think this helped." Dad said on the way home. "This didn't help at all. Five hundred dollars, and all this shrink does is state the obvious, print out numbers, and ask us to make more appointments."

Mom said nothing. Neither did Sara, sitting in the backseat silently talking to Squate. It was only when the car was pulling into our driveway that Mom made her move.

"Okay, Sara," she faced her daughter. "Enough is enough. We're putting you in the regular classes."

Sara opened her mouth in disbelief. "Regular math class?"

"All classes."

"No, you wouldn't."

"We will."

"But I'm finally getting good at math. I love math. It's beautiful. And I'll work really hard to bring my grades up. I mean, shouldn't I be getting the best possible education?"

"It sounds like you're already getting a great education from Squate."

"But Mom—"

"It will be you and Squate," Mom said. "and some new students."

Dad turned off the engine. Sara swallowed hard.

"Mom, no, please. All my friends are in the honors classes."

"Oh, so now you care about your friends? Friends you've all but ignored the past two weeks?"

"I don't want to start all over and make new friends. I'm not sure I can."

"It sounds like Squate is the only friend you need."

"What will people think? Maybe that I'm stupid, or a loser, or psycho, or something?"

"Psycho? I'm sure some are already thinking that, given your recent behavior. And really. *Now* you care about what people think about you?"

Sara just sat there, trapped. She began to cry.

“Now we’re getting to the heart of the matter, aren’t we?” Mom said. “Don’t give me this business about quality education. You’re not as enlightened as you think. If you want to be a trouble maker, you have to face the consequences.”

“I can’t deal with this. Mom, please don’t do this.” Tears were running down her cheeks. “Please Mom, I’ll do whatever you say. Just please, don’t put me in the regular classes.”

“Consequences.” Mom repeated. After a few more minutes of Sara’s sobs and protests, Mom finished things. “I never want to hear Squate’s name again. I don’t want to hear any more wild stories. I don’t want any more incidents at school. Most of all, I never want to see that card with that number on it. Promise me this right now, or I’m calling the school the moment we get inside.”

Tears rolling down her cheeks, Sara took Squate’s card, mouthed a silent goodbye, and folded it. Then she surrendered it to her mother, who tore it up.

## 15.

So Sara had her first breakup. When I asked her about Squate, all she said was that it was his idea, and it was amicable. For a long time, she never mentioned him. Even when she went off to college and double majored in mathematics and history.

She faced her reckoning. Just as others faced their reckonings in the forthcoming months and years.

So it was more than fifty years later when Sara, myself, and a few surviving family members found ourselves in an underground lab. We watched as the newest computer finally displayed the 6,892,705,394th digit of the square root of eight, one of the first irrational numbers known to humanity.

Then came the next digit, and the next — until, to no one’s surprise, there appeared our family’s long since disconnected phone number.