Mathematical Nights, Volume III

## Night of the Eerie Equations

**Revised Edition** 

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## Chapter One

The last bell rang at the end of a long school day. Lennie Miller sprang from her seat and hurried to her locker, eager to pack up her things and head for the school bus. It was already getting dark outside, between the short November day and the cold, gray rainclouds that hung over the little town of Bailey, Indiana. On a day like this, she was eager to get back to her warm, dry home.

She was finishing at her locker, just zipping up her backpack, when someone walked up to her—a thin girl about her own height, with wavy black hair and a pale complexion. Lennie recognized the girl but couldn't remember from where.

The other girl smiled shyly. "Hi," she girl. "I'm Ava. You're Lennie, right?"

"That's right," said Lennie. Her full name, Leonarda daVinci Miller, was much too embarrassing to use, so she went by Lennie with just about everyone, especially people she hadn't met before.

"I...I wanted to ask if you could help me with something," said Ava. "You're really good at math, aren't you?"

Lennie blinked, surprised by the question. In the months since her family had moved to Bailey, she'd been asked for help with math a lot—but rarely by anyone who was human. Lennie looked at the girl intently, searching for signs that she was not what she appeared.

Ava rocked back under Lennie's gaze. "I hope you don't mind my asking," she said quickly. "It's just...I'm in Mr. Brannan's algebra class, and I've seen you there before, talking to him about math."

So that's where she knows me, thought Lennie. "You know I'm a seventh grader, right?" she asked. "You're a year ahead of me. And in algebra."

"I know, but I'm not very good at it," admitted Ava. She held up her textbook. "The last chapter really confused me, and when you talk to Mr. Brannan, you sound like you understand him. He always gives us weird problems, like the ones you were doing."

Lennie groaned. "Do I have to help you right now? I don't want to miss the bus."

The other girl looked down, her eyes darting back and forth as she thought about what to do. "Could I email you something?" she asked, looking back up pleadingly. "You could check it out tonight and get back to me."

Lennie fidgeted uncomfortably. "Okay, but no promises," she relented. She exchanged email addresses with Ava, and then Ava went on her way, casting a hopeful look in Lennie's direction. Lennie wondered what she had done to make people think she was so good in math—well, what she had done to make *normal* people think she was good in math. She already knew why not-so-normal beings thought that way.

Lennie closed her locker and headed down the hallway. As she neared the exit, something that looked like a miniature orange pterodactyl zoomed through the door and flew over her head. Lennie ducked and jumped out of the way—and only then realized that no one else had seen the creature. Feeling self-conscious, she straightened up and tried to look as though nothing had happened, hoping that the kids nearby were too preoccupied with gathering up their coats and books to notice.

"Aw, would you look at that? You know they'll expect us to catch it!"

It was a tiny voice, but surprisingly deep. Lennie's eyes followed it to the side of the hallway, where she saw four tiny men, all with dark faces and long, black hair, and all wearing traditional Native American clothes. They were *payiihsa* small sprite-like beings who had once been magical helpers for the Algonquian tribes but who also liked to play tricks on people. At the moment, they were standing on one another's shoulders, with the top one reaching for the fire alarm on the wall.

"Hey!" Lennie cried out, eyeing the men suspiciously. "What are you guys doing?"

The little men turned their heads and looked up at her, all while somehow managing to keep from falling down in a heap. "Oh, hiya, Pattern Finder!" said the one on top. "We didn't see you there!"

"Yeah, I guessed that," said Lennie. "You're not about to pull the fire alarm, are you?"

"Who, us?" asked the *payiihsa* on the bottom with feigned indignation. "No, no, you've got it all wrong!"

"Yeah," said the next one up. "We're trying to fix this thing!"

Lennie looked at them skeptically. "Oh really?"

"Really!" cried the third one from the bottom. "There's a loose wire inside."

"That's right," the one below him agreed. "If we don't fix it, there could be a short circuit!"

The *payiihsa* on top waved his hand, and a small screwdriver magically appeared in it. "Good thing we're around, isn't it?"

"Good thing I can just ask the janitor to double-check it," said Lennie, narrowing her eyes at them. The little men held her gaze for a moment, but then their shoulders sagged in unison, and they all dropped to the floor.

"We've got to do something about our reputation," muttered the one who had been on the bottom.

"Yeah, it was easier to play tricks when people trusted us more," added the one who had been second from the bottom.

"You'd probably do your reputation some good if you caught that orange flying thing," Lennie suggested. She stared at them without blinking, which they knew meant that she wouldn't take no for an answer.

"What are you looking at?"

Lennie jumped at the unexpected voice. A tall, husky boy had stopped and was looking at her.

"Wha—what?" Lennie stammered. She knew that the little men were invisible to everyone around her, just like the pterodactyl was, but she had gotten too caught up in keeping them from pulling the fire alarm to notice the kids around her in the hallway. "Oh, nothing. I was...uh...just wondering how often they check these fire alarms. You never know when there might be a loose wire."

The boy snorted at her disdainfully and continued on his way. Lennie fumed to herself for a moment but then turned back to the *payiihsa*, only to see them scurrying down the hallway in the same direction the orange creature had flown.

I guess they got to play a trick after all, she thought. I'm sure it amused them to make me look like a weirdo. She shook her head slightly, marveling at the way such strange things had come to feel normal to her. They had become just another part of her life, ever since she had discovered that Bailey sat on the edge of a Mystical Realm, right next door but a magical dimension away. Ghosts, zombies, and other strange creatures could cross over into the non-magical world, but only a few people with special abilities could see them or hear them. Lennie hadn't discovered her gift until her family had moved to town. But soon after that, the mystical beings had told her that she had an even more extraordinary fate: she was a Pattern Finder—someone the Mystical Realm turned to for help with their math problems. And they needed a *lot* of help with their math problems. But at least they didn't need help with any math problems at the moment. Chasing a flying orange creature wasn't part of Lennie's job, and she had a bus to catch. There was still plenty of time for her to make it.

"Hey, there! Are you Lennie Miller?"

Lennie was just outside the front door of the school when she heard someone else calling her name. It was a boy's voice that cracked into a high tone every few syllables. She looked up and saw a boy she didn't recognize. He was taller than she was, with light, strawberry-tinted hair and a pale face dotted by faded freckles. His appearance made Lennie fret briefly about her own fiery red hair and more prominent freckles, as if she needed a way to turn down the brightness on herself.

"You *are* Lennie, aren't you?" asked the boy. "I'm Tim. Timothy North. Someone told me that you're the person to see for maths help."

There was something odd about the way the boy spoke. His vowels came out wrong, and he was stressing the letter r too much. And who on Earth said "maths"? But those thoughts crossed Lennie's mind only briefly. She was too irritated to pay much attention to them.

"You're not in the same class as Ava, are you?" she asked. "Because I already told her—"

"No, sorry," Tim interrupted. "I don't even know someone named Ava."

A group of kids came out of the school and pushed past them, heading for the buses. Lennie watched them, feeling her time running out. "Well, can I just give you my email address, and you can send me your problem? I really need to go."

The boy shook his head. "No, I'm afraid I don't use email," he replied.

"What?" asked Lennie in disbelief. "Who doesn't use email?"

The boy grinned at her, his eyes suddenly turning mischievous. "Maybe someone who doesn't like talking to drummies," he told her.

Lennie's eyes widened as she realized what was happening. Not only had Tim suddenly developed a British accent, he had used the word *drummie*. That kind of slang only meant one thing.

"Oh, no you don't!" Lennie cried. But she was too late. Tim raised his hand and snapped his fingers, and the two of them were promptly engulfed in a cloud of smoke. When it cleared, Lennie was standing on some kind of athletic field under a sky that had a greenish tint to it. At the edge of the field was a path leading to a castle. They were in the Mystical Realm—on the grounds, she guessed, of Backrazor Academy, a school for young wizards.

"Surprise!" cried Tim. "Sorry about tricking you, but we didn't think you'd come here otherwise."

"We?" asked Lennie. "I should have guessed—"

Before she could finish her thought, there were two more large puffs of smoke, heralding the appearance of two more young wizards—a boy with large, round glasses and a mop of straight, dark hair, and a girl with a pale complexion and long, wavy, rust-colored hair. Their names were Finley and Charlotte, and they had asked Lennie for help before.

"Spot on!" cried Finley. "It's us!"

"We thought you should come over to our side this time," said Charlotte. "Do you like it?"

"Not when I'm trying to get home," answered Lennie. "Couldn't you have just called me or something?"

Charlotte frowned and wrinkled her nose. "We don't have phones," she replied, as if the idea was repulsive to her.

"They're not even allowed in the school," Finley added. "Why do you keep expecting us to act like drummies?"

*Yes, how silly of me*, thought Lennie with a sigh. *Drummie* was slang for *humdrum*, and the wizards used it for anything in the non-magical world that they didn't like—which was just about everything.

"Look, you're here now," said Tim. "That means you have to help us, doesn't it?"

Lennie scowled at the boy. "It's not like I'm a genie," she said crossly. "You don't get three wishes just because you caught me."

"Actually, genies are a lot more complicated than that," corrected Finley.

"Not really my point," Lennie replied through clenched teeth.

"You'll have to forgive Tim," said Charlotte. She had softened her tone and even flashed Lennie a smile. "He doesn't know you like we do. He doesn't understand how things work."

Lennie rolled her eyes, not at all impressed with Charlotte's attempt to seem friendly. "I'd guess 'how things work' is that you won't send me home until I agree to help you. Right?"

Charlotte's gaze instantly went cold again. Behind her, Finley looked down at the ground. "Well, pretty much, yeah," he muttered.

"We don't have time to mess about," said Tim. "We've got to turn in our contest entry tomorrow!"

"Contest?" asked Lennie. Now they were getting somewhere. "What kind of contest?"

"Our divining teacher is having a contest," Charlotte explained. "He put some magical objects into a dimensionally transcendental shopping bag."

"A reusable one, of course," Finley added.

Charlotte shot him an impatient look. "Yes, a reusable one," she continued. "We have to figure out how many objects there are without opening the bag or even touching it. Only by magic."

"And that involves math because ...?" Lennie ventured.

"Because we can only figure out parts of the answer," said Finley. "We need you to put them together."

"Okay," said Lennie, sighing again. She opened her backpack and took out a notepad, a pencil, and her reading glasses—the tools of her Pattern Finder trade. "So how much did you find out?"

"Our teacher told us that there are three kinds of magical objects in the bag," said Tim. "Malaprops, platinum pinches, and duct tape."

Lennie raised an eyebrow. "Duct tape?" she repeated. "What's so magical about that?"

"Not the drummie kind," said Charlotte. "You use magical duct tape to spy on people."

"Right," said Finley. "Put some on a ventilation duct, and it'll record whatever people are saying in all the rooms the duct runs to!"

"Great," Lennie remarked sarcastically. "Do I want to know what the other things are?"

"Malaprops look like things you'd use for a practical joke," said Tim. "You know, rubber chickens or whoopie cushions or wing-sprouting pie plates. But they're really magic wands in disguise!"

"And a platinum pinch is part of a magical game we play," said Finley. "When you're trying to score a goal, your teammates have to watch out for you, or the platinum pinch will come along and pinch you on the bum." *Okay, I'm officially glad I stuck with soccer*, Lennie thought. "So what do you know about these things?" she asked.

"I found out how much everything costs," said Charlotte. "Platinum pinches cost four yellers each, rolls of duct tape cost two each, and malaprops cost six each. The total cost of everything in the bag is one hundred yellers."

Lennie nodded as she wrote down all the numbers. She already knew that a "yeller" was what the mystical beings called their money. She hadn't asked why, and she wasn't going to now either.

"I found out how much everything weighs," said Finley. "Platinum pinches weigh three pounds each, rolls of duct tape weigh three quarters of a pound, and malaprops weigh one and one quarter pounds. The total weight of everything in the bag is thirty pounds."

"And I found out the total magical strength," said Tim.

"How do you measure that?" asked Lennie.

"In bolts, of course!" Tim replied impatiently. "Bolts, lamps, and gloams. Everyone knows that."

"Of course they do," said Lennie wryly. "So what are the strengths of the objects in the bag?"

"The strength of a platinum pinch is two bolts," said Tim, "a roll of duct tape is four bolts, and a malaprop is two bolts. The total strength of everything in the bag is sixty-two bolts." Lennie finished writing and then looked up to find all three wizards staring at her. "You want it right now?" she asked. Tipping her head toward Tim, she asked Finley and Charlotte, "Didn't you tell him it doesn't work that way?"

"Oh yes, the Pattern Finder needs time to practice her craft," said Charlotte with a huff.

"What's wrong with that?" asked Lennie. "You said you aren't turning in your answer until tomorrow."

The wizards looked at one another. "She does have a point," Tim admitted.

"Yeah, I do," said Lennie. "And here's another point: I'll find the answer a lot quicker at home. Do you think you can send me back now?"

"Yes, I suppose we can," said Finley grumpily. "But we'll be looking in on you!"

"Just meet me outside my school before class starts tomorrow," Lennie assured them. "I'll have the answer ready."

Tim nodded and then snapped his fingers. Just as before, a large cloud of smoke erupted from nowhere and surrounded Lennie. When it cleared, she was back in Bailey.

More specifically, she was back in front of Bailey Community Middle School—just as the last bus was driving away and a few raindrops were starting to fall.

*That's just great*, she thought as she ducked into the building's entrance. When it came to wizards, three weren't any better than two.

Chapter Two

A cold drizzle fell all the way home to the Miller family's small farm—soon to become an artists' retreat—on the outskirts of Bailey. As her mother pulled up to the house, Lennie noticed that her father's car was already there. He had gone to visit a client that morning, but apparently he had been able to get away early. That made her feel more relaxed. Dinners alone with her mother could be stressful.

Her father was still unpacking his laptop bag from the trip when Lennie went inside. She greeted him with a hug and then sat down at the table as he pulled out something wrapped in a bag from a college bookstore.

"I'm glad you're home," her father said. "I've got something that might interest you. I found it when I stopped by the campus after my meeting."

"What is it?" asked Lennie as she took the package. It was flat and rectangular, about the same size as the pads of paper she always carried. For a moment, she had a hopeful thought that it might be her own computer tablet, but that hope faded quickly. It was just paper—three pads of light green-tinted sheets.

Her father noticed Lennie's expression. "You're underwhelmed," he said. "I just thought those might come in handy."

"What are they for?" asked Lennie. As she took a closer look, she could see that the pages were blank on one side, apart from a thin line around the edges, and that they had a grid for graphing on the other side.

"It's called engineering paper," her father explained. "We used it when I was in school, and some of my clients still use it now. You've really gotten into studying math since we moved here, so I thought I'd encourage you a little."

"Oh, you noticed that?" asked Lennie. Her stomach fluttered, but she tried not to let it show. Her parents didn't know she'd been doing so much math only because of all the magical creatures asking for help. There was no way she could explain it to them.

"We're always looking for ways to bring out your talents, dear," interjected Lennie's mother. "You shouldn't try to hide the things that make you special."

*Some things make me a little too special*, thought Lennie with a wry smile. If creatures from the Mystical Realm recognized her math skills, that was one thing, but now normal people were noticing, too—even her parents. It was a nightmare coming true. At this rate, she would be known as "the math girl" twenty-four hours a day.

After dinner, Lennie went to her room. She was planning to work on the wizards' problem, but she was too preoccupied by her conversation with her parents to do anything with it. Instead, she went to her computer and logged into her email. Sure enough, there was a math problem from Ava among the messages. Lennie read it over quickly, then closed her email and logged in to her favorite online game instead, determined to show herself that there was still more to her life than math. But she had only been playing for a few minutes when a message popped up from an old friend back in Philadelphia—a girl named Reshma. Lennie knew her from several soccer camps that they had both attended. She switched over to video chat, and before long, she was getting caught up on all the latest gossip.

"So what are all those farm boys like?" Reshma asked after a while. "Any cute ones?"

Lennie rolled her eyes at the screen. "Puh-*leeze*," she replied. "We just had a dance for Halloween, but everyone was wearing costumes." *Besides, my life's complicated enough without adding boys to it.* Then she grinned and asked, "How about you? Meet anyone interesting?"

"I wish," said Reshma. "I've got this one little creep who keeps borrowing my history notes, just because he can't think of another way to talk to me."

Lennie laughed. "Are you sure that's what he's doing?" she asked. "Maybe he really wants help with history."

"If he does, then he shouldn't be asking me," said Reshma. "I'm no history genius."

"You sound like me," said Lennie, "only I've got people thinking I'm a math genius."

"Really?"

"Yeah," said Lennie. "You should see this problem someone gave me today. I can't figure it out."