I've Got Problems: Chapter 1 of Sally Strange: And How She Learned to Stop Worrying and Love Grade 7 Math

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tuesday september 15th

If I was given the choice between going to math class or going to the orthodontist for a tightening, I'd probably choose the orthodontist. But I'm only 11 and I don't get to make those choices.

Yesterday, I had the painful tightening. Today, I'm here. Math class.

I move through the room towards my seat and say hi to Chin as I squeeze by his chair. Before I get a chance to sit, the bell goes, and the familiar voice of Niles comes on the PA: "Please stand for the national anthem." I plop my bag down in the little area between my desk and Arial's. The noise of everyone getting up from their chairs carries on into the first few bars.

O Canada!

Our home and native land!

While some decide to stand quietly, others are still kinda moving and continue their morning chat in whispers. I look over to Lindsay across the room and we make weird faces for a moment until Evan interrupts our friendly game by walking in late.

With glowing hearts we see thee rise.

I watch Lindsay's weird face turn into a cute smile, followed by a tiny, flirty wave pointed towards Evan. He smiles back but continues his march. He passes my desk and gives me a nod. My heart skips a beat. Or does it beat twice as fast? I'm not sure. I can't think for a moment. It's not even 9:05 and I'm already needing some help.

God keep our land glorious and free!

Oh, I'll be fine. Evan and I are close friends. We've known each other since Grade 1. We like to joke around and tell people we're cousins, even though, I don't know, this year—something's different. O Canada, we stand on guard for thee.

I try not to stare at him too obviously,

Ooooo Caaaa-na-da.

as he turns into his aisle,

we stand on guaaaard

and timed perfectly,

foooor

reaches for his chair,

theeeeeeeeeee

and sits.

Seemingly on his cue we all sit down.

"Good morning, Winona! Today is Tuesday, September 15th—a Day 6 on our cycle—and these are your morning announcements." Niles. Where does he get the energy to be so cheery in the morning?

The announcements continue as I look down and read the graffiti in my desk to see if there is anything new since Friday. I read over Gavin's name for the millionth time. He left me a few messages last week. One of them was simply *Good game!* No *Hello*. No *Sally.* Just *Good game!* He'd watched me play and wanted me to know. Both Evan and Gavin are trying out for the volleyball team, just like we are, and they're showing their support for the girls.

I pick at my teeth—the elastics are annoying and everything feels tight in the morning—before I reach for my pencil case. Today, we're starting something new because yesterday was the last of the so-called review.

After the announcements end, Mr Rowe slowly walks from his desk to the front of the room, faces the class and. with way more drama than needed, holds up two pieces of paper. He tries to make math fun. He tries. I'm half listening, not ready to fully commit my attention to my overly excited math teacher. It's too early, my mouth feels too tight, and two pieces of paper aren't going to do it for me.

Our room door is open and I see Niles in the hall, walking past. He pauses for a split second and looks to see if I'm okay before he continues to his Grade 8 homeroom class. He's like that. After the announcements, he checks in on me, every day. I'm not sure why, but maybe it's because it's still September. Maybe it's because I'm in Grade 7 and he's in Grade 8. Or, maybe it's because this is his second year at Winona Drive Senior School, and it's my first. But most likely, it's just what big brothers do—check on their little sisters.

Back to the action. I missed something. I turn to Chin. "What do we have to do?"

Chin is this tall, friendly giant in our class. I would say fat, but that seems rude. He's just big, I guess. He's not only friendly, he seems to pay attention just a little more than I do, so he's always there when I have one of my "zone-out" moments.

"Pay attention." He tries to sound upset. "We have to make a cylinder out of this piece of paper."

I grab the sheet from Chin and wrap one side onto the other, making a tube. "Ta-daaaa!" I throw my hands up and announce to my group, "I'm a math genius!"

"Sally, do you want to share with the class?"

Shoot. My hands went up just for show; now I'm booked. I'm totally not a math genius.

"Umm, ya."

at me in silence.

I feel like I'm getting smaller. I hate being on the spot. Reason number 24 to hate math.

| "1" | shrinking |
|-------------------------------|-----------|
| "folded it like this" | shrinking |
| "to make the thingy" | shrinking |
| "like you said "Mr Powe looks | |

"like you said . . ." Mr Rowe looks

Shrunk!

And then says, "Good. Perfect." And rolls up one of his sheets, just like mine, tapes it together and places it on the front ledge.

What? I think to myself.

"What?" Arial says, half laughing at me.

"Anyone come up with a different solution?" he asks.

I'm in shock. My short tube sits proudly on the ledge, looking a little fat (not to be rude). Lindsay shoots up her hand and responds with her own solution. Her butt almost leaves her seat as she shows off her answer. Her tube is the same as mine, just the longer ends coming together.

"Very good, Lindsay," he says as he turns to showcase Lindsay's solution beside mine.

"So, the question is . . ."

Here we go. I knew it couldn't have been that easy. Here comes the question only the math teacher actually cares about.

Mr Rowe raises his hand slowly as he asks, "Which cylinder would hold the most water?" His hand clearly indicates we're not supposed to yell this one out.

The usuals raise their hands with confidence (how do they know this already?), followed by a few stragglers. Then Evan calls out, "They're the same!"

Our math teacher looks directly at him with no sign of emotion. Keeping his hand up, he slowly walks over to Evan.

"Someone with their hand up, please," and he calls on Gloria while whispering something to Evan.

"The taller one holds more," comes a shy answer from Gloria, sounding more like a question.

"Why?" the math teacher's favourite response to any unsuspecting student.

"Because"—but she is not the type to just say because—"because it's bigger, taller, so it holds more."

"Good." He leaves Evan and now moves to the back of the class. Most of us turn to follow him except for Evan, who now might be regretting walking in late *and* blurting out his answer.

"Anyone agree with Gloria?" More than half the hands go up.

"Anyone disagree?" No hands.

Wait. One hand. It's Evan, back from his momentary mental detention.

"Evan." He calls on him as if to say, "Thank you for putting up your hand this time."

"Uhh, I think they're both the same."

Mr Rowe nods his head, satisfied that he has our attention. "Good." He walks back to the front of the class.

Good? What kind of answer is "good"? That doesn't answer anything. Which tube holds more? I didn't care before, but now I want to know. The taller tube must hold more, right? Gloria agrees. More than half the hands in the class agree. I wait a sec to see what Mr Rowe is about to say.

Standing in front of the board, he begins again. "Good. Now here's your challenge for today."

Challenge? What the . . .? What happened to the tubes?

Before he can continue, it's Arial who asks (on behalf of most of the class), "So, which cylinder holds more, Mr Rowe?"

"Oh. Right. Ummm, I don't know yet. We'll have to figure that out. Should we have a quick discussion before our challenge?"

So there's a discussion all right, but it doesn't give us the answer, and neither does our teacher, just some more questions. *Oh, Mr Rowe.* I guess he sets it up this way. It's a week into school and although I haven't figured out any of the math yet, I think I'm beginning to figure him out a little.

This time it's a "challenge," but it's always a different word with teachers. *Challenge, task, questions, problems*. Problems, really. *I have a problem for you. Work on these problems. Did you finish your math problems*? It all sounds so negative. I clearly have a problem with the word *problem*.

Homework:

Write an explanation as to why one tube holds more than the other tube.

Sally Strange 7-1

In class you said to find how much a tube holds:

Multiply the size of the circle by the height: circle × height

You also said that circle size is done in Grade 8, so you gave us the size of both circles:

Short tube Long tube circle = 62 cm^2 circle = 37 cm^2

Then I measured the height:

height = 22 cm height = 28 cm circle × height

Short = 62 × 22 = 1,364 Long = 37 × 28 = 1,036

The short tube holds more. Because the number is bigger.

I did most of the math myself (with a calculator), but Niles helped me figure out what to do. He also said that I haven't explained *why*. I hate "explain why" in math. I would like Mr Rowe to explain why we need to explain in math. I wrote, "Because the number is bigger," which is right. Don't ask me to explain why!

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Born in Uruguay, Nico Rowinsky grew up in Mississauga, Ontario, and studied mathematics at the University of Toronto. His first novel, Sally Strange: And How She Learned to Stop Worrying and Love Grade 7 Math, which began as a writing assignment for a student, is a real yet sensitive look at relationships in Grade 7. The novel is available through Leanpub at https://leanpub.com/Sally_Strange_ Grade_7. Nico is a middle school math teacher and lives in Toronto with his wife, also a teacher: Follow Nico on his blog (http://ynaughtmath.blogspot.ca) and Twitter (@NicoRowinsky).