

My Math Teacher Makes the Irrational Perfectly Rational

By Farren Stainton

From the first day of 7th grade math with Sandy Thorne, I knew class was going to be amazing because I could tell Sandy was a hard worker and a character. She was kind, energetic, and willing to persevere to make class the best it could be. She was also a volunteer middle school math teacher - she wasn't even getting paid for working with us! This fact told me that Sandy was unlike any other math teacher. Maybe she was a bit... irrational. This year Sandy taught me that the irrational can be... fascinating!

When Sandy was growing up she did not have the easiest life. She lived in Miami, Florida but moved when she was 9 to a small town, still in Florida. She lived with her Mother and Grandmother after her parents divorced and was the oldest girl of seven children. She had a very busy childhood. After taking the 40 minute bus ride to and from school, she had to do her chores, help her siblings with their homework, and complete her homework for the day to come. As she grew up she would be the first in her family to go to college!

As a kid Sandy did not enjoy math because it was just memorization of facts she would often forget. However, as she grew up and went to high school she finally found her love for math when she realized it was not just about memorizing fact cards and mad minutes but, it was a beautiful language that could be used to describe patterns, and rhythms, and music, and art, and graphs, and data. Sandy finally understood that there was a difference between being able to compute with numbers and being able to understand math. At that moment she fell in love with math and Algebra. She also realized that she wanted to become a computer scientist.

In college, Sandy was pioneering for her family. For this big step in her life she went to community college for two years before taking a break to allow her spouse to get his business off the ground. Once that happened, she did one more year of community college before going to the University of Florida for her final two years to get a degree in math education,

gaining her the first step towards becoming a computer scientist. She studied math education because at that time, it was a way for her to access a career as a computer engineer.

Later in her life, Sandy decided to go to Houston, Texas, and despite wanting to become a computer scientist, Sandy enrolled in a Montessori training program. Maybe some people would argue this was a bit irrational, but Montessori training helped Sandy learn how to teach children that allows them to learn in a way that is more hands on, allows for self-direction and collaboration. After taking this training she fell in love with math all over again and felt more compelled to lead students in math. Her desire to become a computer scientist fell away. Over time she found more and more that math education was what she loved.

Now, Sandy volunteers at The Sharon Academy Middle and High School. She helps with everything from Pre-algebra to occasionally working with the Calculus students. She does this because she feels passion for math and wants to spread that on to our generation. One might argue that Sandy is a bit irrational to volunteer with middle school students, but it makes her happy. One of her favorite things about teaching is when she talks to middle school students and when they learn about infinitely larger infinities. At first, student brains explode because they do not understand how you can have something that is infinitely bigger than infinite. Sandy loves watching this happen to the students she teaches.

Sandy loves one thing about math in particular that is the history behind it. Some might argue it is a little irrational to love the history of math.

But fact, Sandy's favorite number is the square root of two because she finds its history interesting. She tells the history of this irrational number this way: when you have a perfect square that is one unit by one unit, and you cut it diagonally in half, the hypotenuse is square root of 2. But, when this was discovered people did not want this to be told to anyone else. The person who discovered was never heard from again. The people refused to believe that numbers could go on infinitely. So, she really loves the meaty and sometimes bloody history behind math.

Sandy wants me to be the best I can be at math, and anything else I choose

to do. This biography is in honor of Sandy's love of volunteerism, middle school kids, fun math history, and so much more. I chose to write a biography about Sandy Thorne because she inspires me to look at the irrational in a whole new way.

About the student:

I'm a 7th grade student taking Advanced Pre-Algebra at The Sharon Academy Middle School in Sharon, Vermont. My mathematical interests include: graphing, understanding data, GEMA, and how numbers explain things in the real world. In addition to math, I enjoy running, alpine skiing, nordic skiing, reading, spending time outside, and volunteering at High Horses and the Sharon Elementary School.