hard.

The television to his left flicked itself on a minute later. It was Europe. Europe had been hit. Germany and Austria were the most devastated.

It didn't take long for Joe to realize that his peer review was probably not going to go through. He rounded up the team of 28 scientists to call a vote.

"Alright guys, we don't have a choice. We've got to do something if there's to be any hope for humanity. Screw the peer review. We need to shift. *Now.*

"As you probably know, it is team policy to obtain unanimous consent before skipping peer review. All in favor of going through with the project without peer review, please raise your hand."

Everyone in the room raised his or her hand; everyone but two. The scientists who had fled from Asia were not holding their hands up.

"Justin, Gina... why do you insist upon obtaining peer review results? Where will we even have our work reviewed?"

"We can't *do* science without peer review. If no one else checks our work, is it even science? We could hurt ourselves, or engulf the entire world in flames. This is the first machine of this nature that anyone has ever built. We don't know what it will do," argued Gina.

"Everyone else agrees that we should do it. Please think rationally, Gina."

Someone else piped up. "I'd like to point out that while team policy requires unanimous consent to bypass peer review, it requires only three-quarters' vote to remove someone from the team."

Justin and Gina looked at each other, realized that their situation was hopeless, and walked out.

"I guess that's it, then," said Joe. "Let's do it."

They powered up the QSS.

Commentary on The Twelfth Root of Two

This one is still an explanation of a cool concept, but I promise it's different this time. It's actually *not* about programming! I know, that's weird. It's awesome, though. Trust me.

This one involves two of my favorite things in all of existence. It's got math, and it's got music! Even better, though, it's got *both... at the same time*. I can see your mind exploding right now.

This is one of my favorite concepts just because it's intuitive, useful, and fun (and easy!) to try out on your own. This entry refers to the application of math in music. There's absolutely no way that you could possibly not want to read this.

I say it in the first paragraph of the entry, but I'm going to say it here, too: the twelfth root of two isn't actually *special*. The number 'twelve' is insignificant, because that's just the number we like to use to say how many steps (half-steps, really) there are in between two notes in an octave. There are actually other cultures that use different music notation systems that *aren't* based on the twelve half-step model. Once you've modified the number, though, this math still works. Isn't that great?

The number 'two', on the other hand, is very significant. Doubling a frequency (or halving the length of a string, or a tube, or anything of the nature) is what makes the octave go up. That won't change no matter what culture you're in. You'll properly understand why I love this so much after you've read the entry, if you don't understand just yet.