Why does my precsription keep changing?

If you got glasses for the first time before graduating high school, there is a good chance you've wondered why your prescription continues to fluctuate. A changing prescription is such a common phenomenon that it doesn't even seem phenomenal. I'll assume the correct word for this situation is a "nomenon" but there's no time to look it up. We've got prescriptions to talk about. The urgent matter of why your prescription changes is what most of this article will address. But the question of whether your eyes are getting worse is easier to answer. If you graduated high school before 2016 and were born after Gerald Ford was president, odds are the answer is "no. "

That prescription of yours keeps changing, though, doesn't it? It seems impossible that a prescription can change while an eye isn't getting worse. But it's not only possible—it's super common. We connect a changing prescription with a worsening eye because with the first few changes, it's true. You are born with an eye about 80% the size it will be in adulthood. This means as your eye grows throughout your youth, the refractive error of your eye will change. That refractive error is what determines your actual prescription. Every millimeter the eye grows adds another -3.00 to its prescription. Little babies who grow up to have a prescription of 0 have a prescription of +6.00 (!) when they're staring up at the mobile rotating over their crib. There's a lot of buffer here to allow the eye to grow without becoming nearsighted.

Nearsightedness would have a minus prescription, meaning you have bad distance vision. If you're born with too little buffer (pretty much anything less than a +6.00 prescription), what happens? You get glasses at whatever young age your eye grows enough to become nearsighted. You hit 0 refractive error too early and move into a prescription starting with a minus sign. That refractive error will become larger as your eye gets larger. So a kid who gets his first pair of glasses in 4th grade (like I did) will need new glasses every couple years as his eyes grow. But at a certain age, eyes finish growing; that is 18 years old for 95% of people and 21 years old for everyone else. The same way your pants inseam doesn't change in your twenties, neither does your eye. That prescription kept changing though, I bet. How? Well, we get used to having a changing prescription as we get taller, so when the prescription keeps changing after we've stopped growing it doesn't strike us as odd. It becomes natural and common to need new glasses. So you and the person who prescribes your glasses in your 20s and 30s never have a reason to question it. Neither of you stop to ask, "How on earth is this happening if my eye has stayed the same size and shape?"We find this answer in the simple feature of acceptance.

Accepting that refractive error (your eye's needs) could change, means that a prescription (what an eye sees as optimal during an exam) often does change. In almost every case, your eye isn't changing—the prescription is. There's no mystery what allows this to happen. It's the only other variable we can introduce at this point: the natural crystalline lens inside your eye. Your lens was built to do one thing and do it well: focus. Without it, there would be no way to see objects any closer than about five feet away. We need a lens to autofocus and add extra power to see up close. It works perfectly in the real world. But that autofocus causes a lot of measurement error when you look through a phoropter. (That's the device with a bunch of lenses that someone flips through and asks "better one…or two" in a hypnotic tone). When

those lenses are being flipped in front of your eye, your autofocusing lens— God bless it—is giving its all. It is trying to focus through every lens it can. All your lens can do is add focusing power (because that's what you need for near vision, after all). It comes out to play even more as those minus power lenses get higher and higher. If your eye stopped changing at a refractive error of, say -4.00, then -4.00 is all you need to see as well as you can.

What happens when your well-meaning eye doctor shows you a prescription of -4.50, though? It's blurry for a fraction of a second before your natural crystalline lens says, "Wait, I got this!" That lens then adds its focusing power to bring the eye chart into clarity. That little bit of extra minus doesn't add even a hint of blur after that. Guess what it does add, though: an indistinguishable amount of shrink to the eye chart. That shrink is enough for those letters to be more compact making them a little bolder. And that contrast looks nice. It looks nice enough that most people choose that lens. Instead of the lens that only made things perfect, people pick perfect plus bolder. Now you wear those overpowered (technically called overminused) glasses for a couple years. Then, the next time you pick lenses, your starting point for "normal" is that little bit bolder version. The next lens up from there will be blurry for a fraction of a second. But when it snaps into focus… whoa!

Now you've got an eye chart that is even bolder and higher contrast. And you've got a prescription that's now two generations stronger than the one you actually need. This is so common, it's expected. We expect it when testing for LASIK. It's also considered when deciphering the true refractive error of an eye vs. the prescription in the current pair of glasses or contacts. I once had a patient in -6.00 glasses whose actual correct prescription was half that at -3.00! Her eyes felt a lot less tired all the time after LASIK.

For most people, the difference isn't as shocking. It is enough, though, that they've watched their prescription change over the years. It leaves many people wondering when their prescription will stop changing. In almost all cases, the answer is their eyes stopped changing years ago. Their prescription would have stopped changing then too if it was measured correctly. To be fair, the wonderfully accommodating lens does make it hard to measure prescriptions with the accuracy of an inseam. There's a reason it's such a common nomenon.