



Welcome fellow Recovering Traditionalists to Episode 45. Today we are looking at 13 Rules That Expire.

Welcome to Build Math Minds the podcast, where fidelity to your students is greater than fidelity to your textbook. I'm your host, Christina Tondevold, the recovering traditionalist and BuildMathMinds.com Founder, where my mission is to change the way we teach elementary math to our kiddos. Are you ready to start building math minds and not just creating calculators? Let's get started.

I've been guilty of telling my students tips or rules that I thought were helping them get to an answer quicker, because in the past I used to think my job was to help my students get answers. Now, I see my job of a teacher, as helping students make sense and many of those tips had no "sense" behind them. They really were just rules to help my students get an answer.

But another reason I discovered for why I don't want to teach those tips and rules is that they don't last. They work for right now. They work for the types of problems the students are working on in the moment, but as they progress into other types of problems the rules don't work anymore.

The article I want to share with you today was published almost 6 years ago but so many of the things mentioned in this article are still being used in classrooms today. I can honestly say I probably would still be doing many of them if I hadn't read this article - but once we know better, we do better.

[13 Rules That Expire](#) by Karen S. Karp, Sarah B. Bush, and Barbara J. Dougherty forever changed my teaching. Not only do they share the 13 rules but there is also a section about expired math language that we use and they give alternatives to use instead. This article is seriously a MUST READ. To give you a glimpse into the article I'd like to share with you just one of the rules today.

On p.21 they write,

**"1. When you multiply a number by ten, just add a zero to the end of the number.** This "rule" is often taught when students are learning to multiply a whole number times ten. However, this directive is not true when multiplying decimals (e.g.,  $0.25 \times 10 = 2.5$ , not  $0.250$ ). Although this statement may reflect a regular pattern that students identify with whole numbers, it is not generalizable to other types of numbers. Expiration date: Grade 5 (5.NBT.2). "

I was so guilty of telling kids this rule. It made multiplying by 10 so easy. In fact it was so easy that my oldest son came home when he was in Kindergarten and told me he could multiply by 10. He did a few examples and then I asked him how he knew those.

Well, it turned out that an older kid on the bus told him the rule: you just add a zero. My husband thought it was awesome that our 5 year-old knew this and could solve those problems. Until I explained how it doesn't work as he

will get into multiplying with decimals. And of course he is probably asking the same thing many of you are asking which is “What should we do instead of saying you just add a zero??”

This isn’t a quick thing that happens with your students, but the quick answer is teach them about place value and how when you are multiplying by ten you are making the number ten times bigger which moves the number into the next place value.

Now, for those of you who are members of the Build Math Minds PD site, I have a video about helping kids understand what happens when you are multiplying (or dividing) by a power of ten and how it’s all linked to helping them understand place value. I’ll link to that on the show notes page [buildmathminds.com/45](http://buildmathminds.com/45). Also on the show notes page I’ll link to a [video training](#) I did about fraction rules that expire as well as the link to the article [13 Rules That Expire](#) so that you can go read all of the 13 rules.

If you want more in-depth math professional development I’d love to have you come join me inside the Build Math Minds PD site. Enrollment opens only once a year to the public, but a little birdy told me that we might be opening up enrollment soon for people who are on the Build Math Minds waitlist. Since you give up your time each week to spend it with me here on the podcast I thought I’d give you the inside scoop. So head on over to [buildmathminds.com/bmm](http://buildmathminds.com/bmm) to get details about the PD site and get yourself added to the waitlist.