EDITORIAL

Sometimes school mathematics scares me. At the recent Math Matters seminar that I organize at my home university, one of our department members brought in his daughter’s Grade 12 math binder. We saw pages and pages of exercises on completing the square, dozens of proofs of trigonometric identities, and quite literally hundreds of exponential and logarithmic equations (I am not actually exaggerating). There was some graphing and a couple of word problems sprinkled here and there. But what was more stunning than the amount of purely procedural work is how the binder was organized: every section consisted of problem sets with blank spaces for solutions. Pre-determined and pre-fixed blank spaces big enough to write the solution to the above problem. There was no room for anything but the one solution, no room for exploration, for mistakes and corrections, for drawing connections or drawing doodles. No room for creativity.

We expect painters to get paint all over their clothes and cooks to get flour all over the kitchen. Learning is messy. So if you’re a teacher: give your students scrap paper and encourage them to explore. If you’re a student, then don’t let a careful planned lecture or presentation fool you: no one ever produces an immediately clean and polished mathematical product.

Be messy, be creative, write in circles and draw lots of pictures. Just make sure to hand in a clean, well-organized final copy.

Kseniya Garaschuk