



The University of Chicago
The University of Chicago School Mathematics Project
Chicago, Illinois 60637
U.S.A

March 29, 2006

Grade 4 Class
Upper Canada Preparatory School
Canada

Dear UCC Students:

Thank you for your letters postmarked January 12, 2006. In your letters, you pointed out that the numbering system used for the lessons in *Fourth Grade Everyday Mathematics* is incorrect if those numbers are interpreted as decimals.

In the first edition of *Everyday Mathematics*, we numbered lessons consecutively, starting with 1, and running through the final lesson. This system was correct in terms of counting, but made it difficult for teachers to tell which unit a lesson was in without consulting the table of contents in the teacher's manual. In response to teacher feedback, our publisher decided to switch to the current system when we wrote the second edition. The idea is that the first part of the number represents the unit and the second part represents the lesson. So, for example, "4.1" means "Unit 4 Lesson 1," and "4.10" means "Unit 4 Lesson 10." Many computer software manuals and other types of instruction manuals use similar systems for page or chapter numbering, so we hoped that this system would be familiar to teachers.

But, as you noted, although we don't mean them as ordinary numbers, "4.1" and "4.10" **look** like ordinary numbers. We mean them as identification codes, similar to the numbers you see on license plates or bar codes. One way to see that our lesson numbers are not ordinary numbers is to think about whether adding Lesson 4.1 and Lesson 4.10 would give you Lesson 8.2. Such non-numerical uses of number are actually quite common. If you look around, we're sure you'll find that you come across many such uses every day. In phone numbers, for example, the digits are not used in the same way as in measurements or counts—people don't think about the "tens place" in a phone number. Sometimes in identification labels and codes you see a mixture of numbers and letters. Library call "numbers", for example, include both letters and numbers. So it's a little easier in these cases to see that we're not dealing with normal numbers.

The "error" of the lesson numbering has been reported to us several times. We will definitely change it in any future edition of *Everyday Mathematics*. But the economics of publishing does not permit us to change it in reprints of the current edition, since every page, and hence, every printing plate, would have to be re-done.

It is very exciting to hear that you are noticing and questioning the way numbering is used. We are very proud that *Everyday Mathematics* students would be so observant and articulate and we hope that you will continue to use mathematics to interpret and question what you see in the world around you. Again, thanks for writing. We would like, if you would give us permission, to include your letters in the Museum of Student Work on our web site at everydaymath.uchicago.edu. If you would like us to do that, please let me know.

Sincerely,

Diana Barrie
UCSMP *Everyday Mathematics* Center