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Introduction

Math Mammoth Add & Subtract 2-B is a continuation to the book *Math Mammoth Add & Subtract 2-A*. The 2-B book deals with addition and subtraction within 0-100 - both mentally and in columns, especially concentrating on how to carry when adding in columns (trading) and how to borrow when subtracting in columns (regrouping).

The book starts with some mental math - adding and subtracting whole tens. Next, are lessons about adding in columns - first with easy numbers without carrying, and then carrying, which is illustrated and explained in detail with the help of pictures.

As a "stepping stone" into the usual form of adding, you can show the child how to add like shown below. This could be used if the child does not readily understand how the 'little 1' corresponds to a ten. In the process below, the ten from adding the ones goes to the tens column.

	tens ones	tens ones	tens ones
	3 6	3 6	3 6
	+ 1 8	+ 1 8	+ 1 8
add ones first →	1 4	1 4	1 4

	tens ones	tens ones	tens ones
	3 6	3 6	3 6
	+ 1 8	+ 1 8	+ 1 8
add tens here →	4 0	4 0	4 0

	tens ones	tens ones	tens ones
	3 6	3 6	3 6
	+ 1 8	+ 1 8	+ 1 8
total →	5 4	5 4	5 4

After column-adding, comes a section of mental adding once again. In it, the child adds a single-digit number to a 2-digit number, but this time the sum goes over the next ten. This concept is studied with pictures, and comparing it to the addition of single-digit numbers.

The next lessons teach subtracting in columns. First we only look at the easy problems where you don't need to regroup (or borrow).

The next lessons, practice in detail the process of borrowing or regrouping. You can use either term with your child, or even choose not to use either if you feel it is confusing. It is good enough to just talk about 'breaking a ten into ten ones'.

First, the lesson *Regrouping* practices breaking down a ten into ten ones in cases where there aren't enough ones to do the subtraction. It is crucial that the child understands what happens here. Otherwise, he/she might end up learning the borrowing procedure only as a memorized algorithm and will probably at some point misremember how it was done. That is why this lesson is dealing with the regrouping process in detail with lots of picture exercises.

If you notice, the child does not understand how to borrow from tens when subtracting in columns, the reason may be that he/she has not had enough practice with concrete manipulatives or pictures. It is best then to go back to working with concrete materials and only proceed after he/she can do it easily with the manipulatives and in picture exercises. Remember, you can always reprint pages from the ebook.

After learning regrouping or borrowing, we practice mental subtraction with three lessons. One of them expounds on several methods for mental subtracting. Another is about Euclid's game - a fun game that also practices subtraction.

I wish you success with math teaching!

Maria Miller, the author