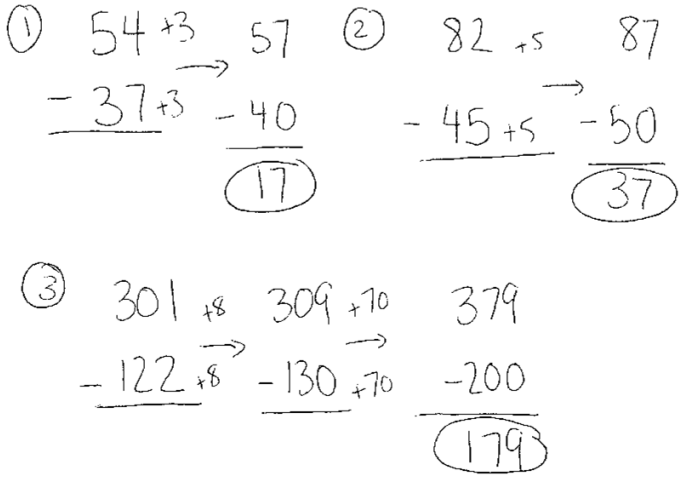
Name:

An Historic Shift in Subtraction

Until the 1940s, the ***Decomposition Method*** of subtraction ("borrowing" 10 from one place value and giving it to another) and the ***Equal-Additions Method*** were used about equally in the United States. However, a psychologist named William A. Brownell introduced an innovation in 1939, which he called a "crutch", that involved crossing-out numbers when borrowing. Brownell's Crutch became immediately popular, and the Equal Additions Method practically disappeared from textbooks within a decade. Now, the Decomposition Method with Brownell's Crutch is the standard method of subtraction in the United States.

1. Consider the following demonstrations of the Equal-Additions method of subtraction. How does it work?



2. Show how to use the Equal-Additions method of subtraction to calculate the following:

83	425
- 46	- 188

3. Now perform the same calculations using the standard method in the United States.

4. Which method do you prefer for Speed? Making Fewer Errors? Understanding subtraction?