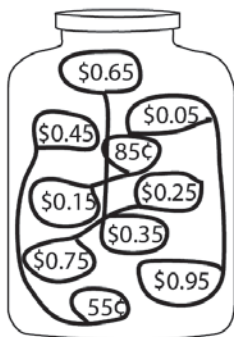


I wish I knew It Is Not Magic

Connie Rivera

BEFORE YOU READ:

1. Has it ever seemed to you like other people have access to some magical ability to do math? You know it's probably not magic. What do you think is really going on?
2. List some activities or skills you have gotten good at in your life. How did you get good at them?



I wish I knew the “magic” earlier — math is based on a few things that are true about math at all levels. Stick to those, and everything else is flexible.

AFTER YOU READ:

1. What are some of the math strategies Connie talks about in this article?
2. One of the strategies is “grouping” numbers so they’re easier

I used to think that something magical was happening in other people’s heads when they did math, and I wasn’t born with the ability to do magic.

I wish I knew that people with “magic” in their heads weren’t really doing magic at all. They just knew a secret that I did not.

For example, people with magic in their heads know that $5.00 - 3.46$ is easier if you count up from

$\$3.46$. People who have a job where they have to make change do this all the time. First you add 4¢ to $\$3.46$, which gets you to an easier number to work with: $\$3.50$. Then you add 50¢ to get to $\$4.00$. Then you add $\$1$ to get to $\$5.00$.

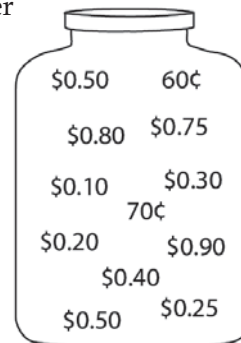


I learned that strategy working at the drive-thru. I wish I knew you were allowed to do things like that in school.

People calculating in their heads are taking advantage of place value instead of following “the” steps. While I was trying to keep my math in neat, written rows, they were seeing numbers in groups of ten or even dollars. I wish I knew I could move the numbers around and add in any order.

$$\begin{array}{r} \$5.00 \\ - \$3.46 \\ \hline \$1.54 \end{array}$$

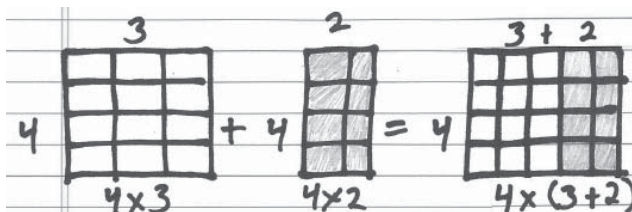
to add. See how she grouped the numbers in the jar above. Now you try grouping the numbers in this jar on the right. [Jar images: Copyright © 2016, TERC. All rights reserved. Material adapted and used with permission from EMPOWER Plus book *Everyday Number Sense: Mental Math and Visual Models*.]



3. Throughout the magazine, there are math strategies symbolized by this icon. Make a chart of the strategies that you like and put them on a poster to display in your classroom.



Connie Rivera provides professional development for teachers through SABES in Massachusetts, and she is a teacher at West Hartford Adult and Continuing Education in West Hartford, CT.



The distributive property (illustrated above) is one of those things that is true about math at all levels. Read more about the distributive property on p. 11.