

A TEACHER REFLECTS



Lab Gear Rules to Algebra Rules

At first I was concerned that students were developing Lab Gear rules but not making the connection to algebra rules. I was afraid that they wouldn't get "weaned" away from the Lab Gear. After teaching this unit, I realized that students became comfortable with the purely algebraic rules at different paces. Also, I saw that the payoff when using Lab Gear tends to come late; but it was worth it! My students were ultimately much more confident with symbol manipulation than any students I've had in the past.

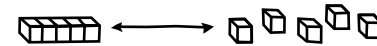
Recording the Rules

I posted a large sheet of butcher paper to record Lab Gear rules and algebra rules as students came up with them. It was very satisfying for everyone to see the chart fill up.

Stephen's Rule

You can "make change" by exchanging any of the "five" blocks for singles.

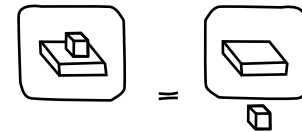
Example:



Mei-Li's Rule

You can move an upstairs block in the minus area to the downstairs outside the minus area.

Example:



$$-(x^2 - 1) = 1 - x^2 \text{ or } -x^2 + 1$$

Algebra Rule: When you're finding the opposite of an expression, the negatives become positives.