

Teacher: Jennifer Gould

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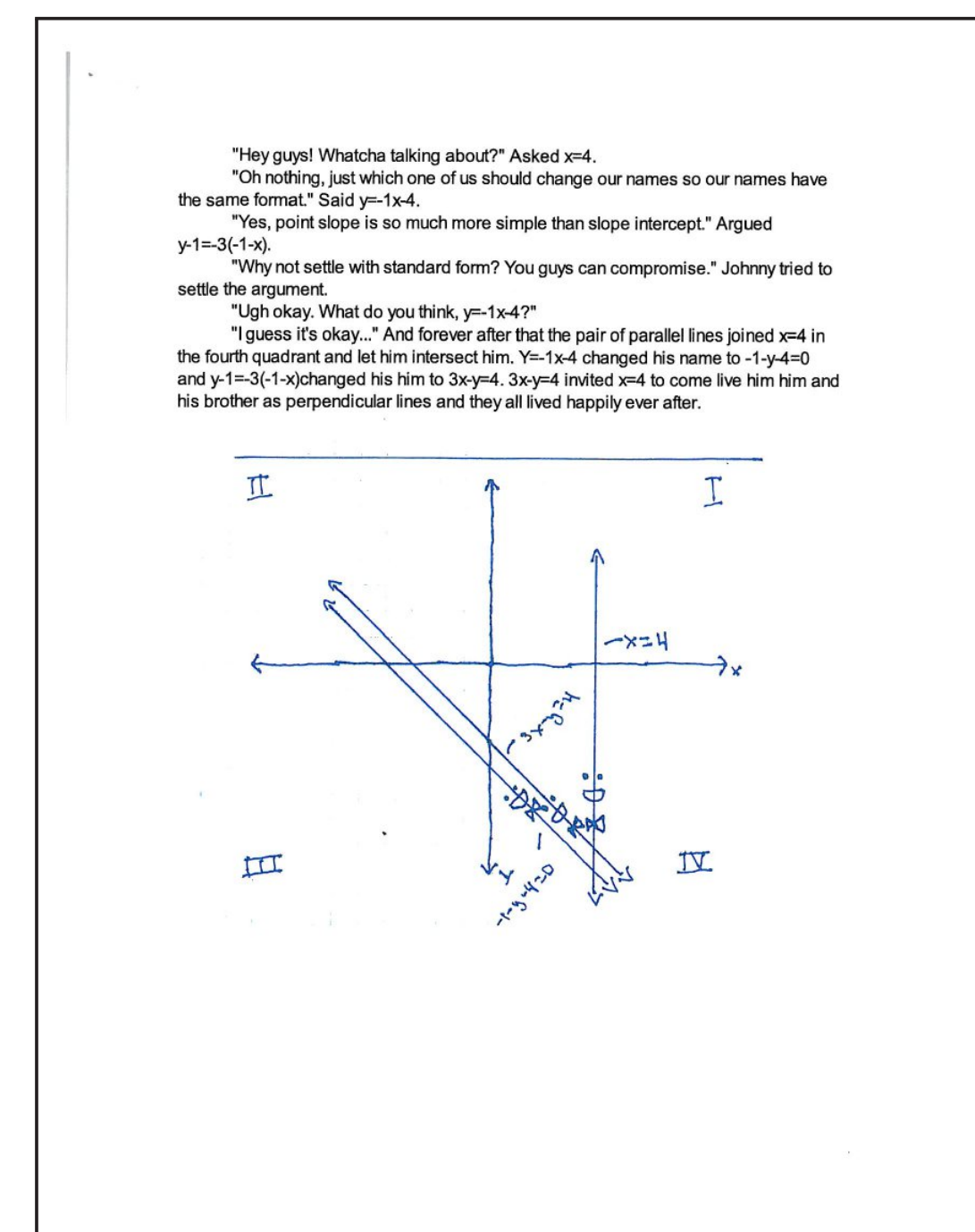
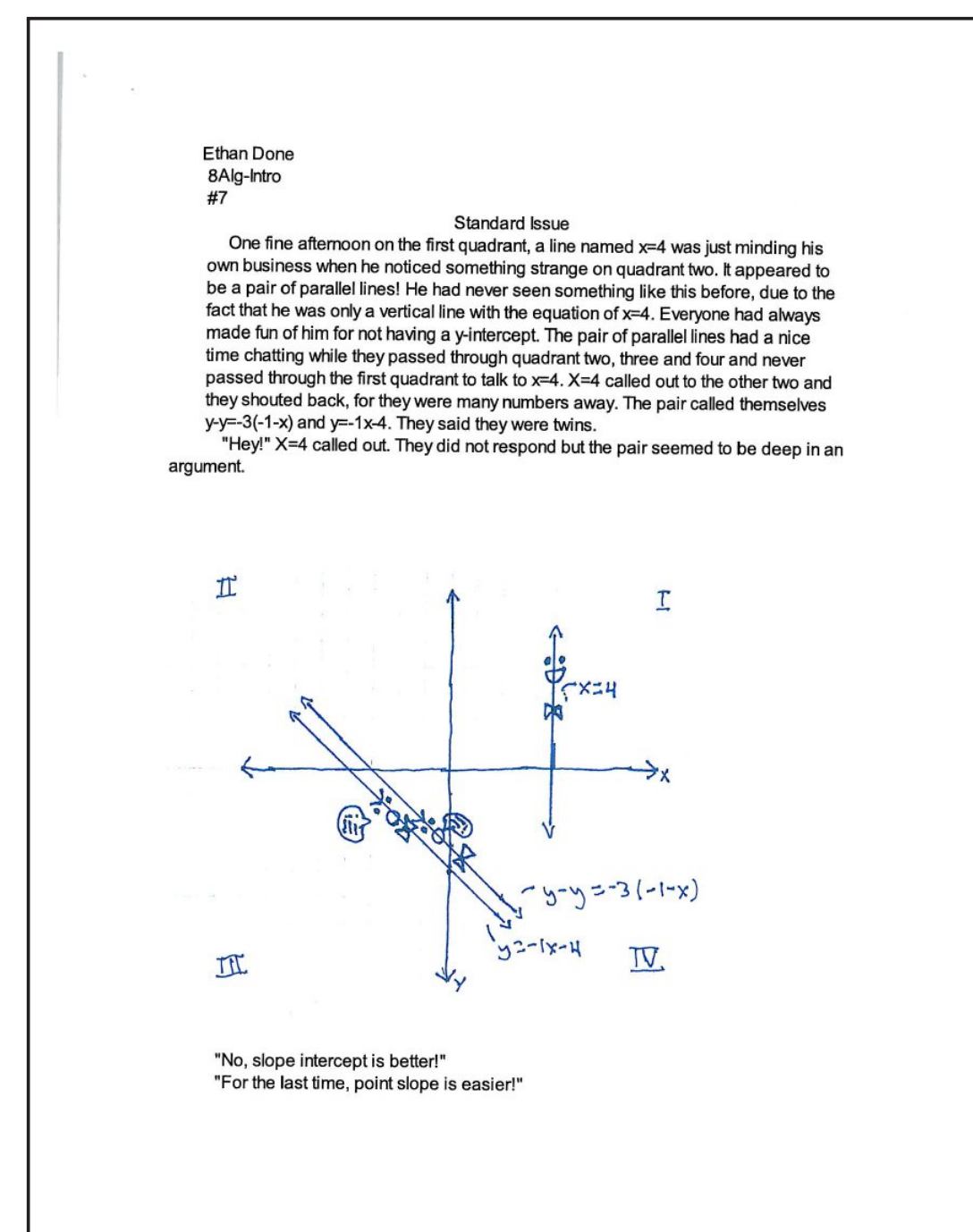
DIVERSE LEARNING

This year, we have diversified our teaching methods to incorporate:

- investigative learning for the fast-paced seventh grade pre-algebra class,
- creative mathematical projects for an imaginative and high-energy algebra class,
- different ways of learning adding/subtraction of negative numbers for a sixth grade math class.

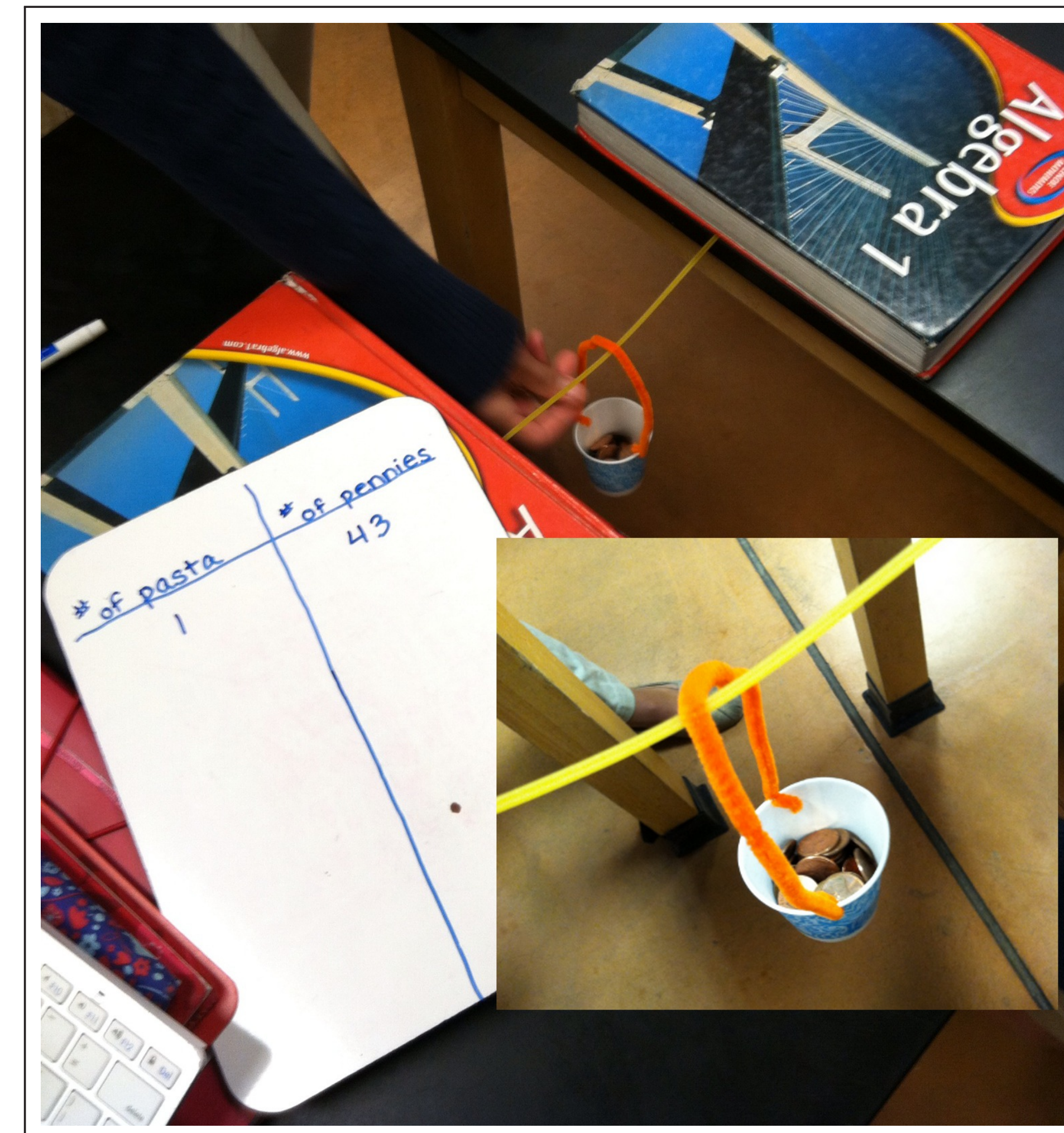
CREATIVE ALGEBRA STUDENTS

It was clear from the start that the eighth grade algebra class learned in much different ways than the other classes we taught. We decided to review linear equations after winter break by taking advantage of the students' enthusiasm for creativity. The students made up stories about different ways to write linear equations.

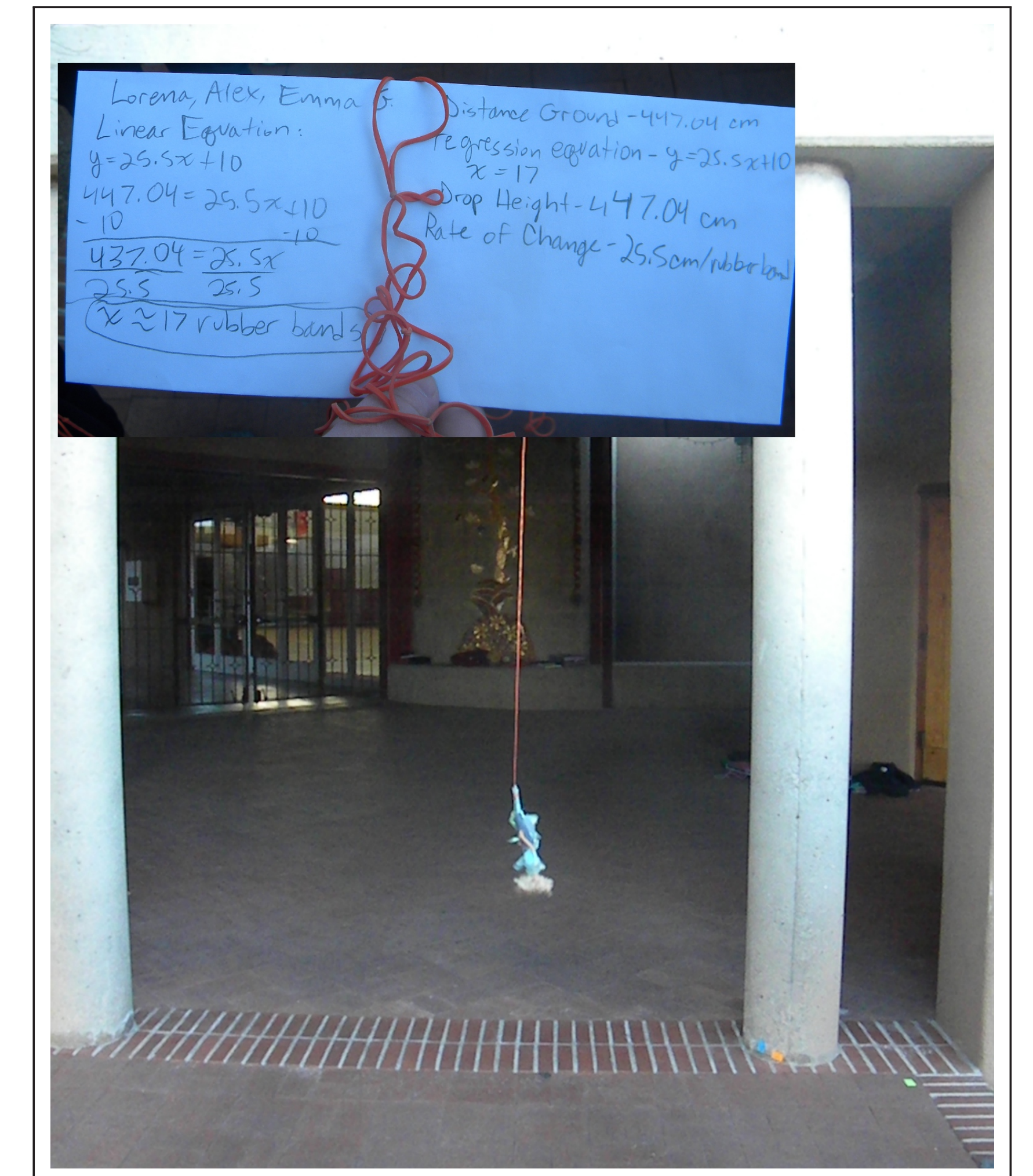


EXTRAPOLATION PROJECTS FOR PRE-ALGEBRA

The seventh grade pre-algebra class thrives when given a problem to discuss and tinker with at their discretion. To introduce the idea of line of best fit we gave them dry spaghetti, pennies, and cups and had them record how many pennies x -amount of spaghetti strands could hold. The students then put their knowledge to the test in the “Barbie Bungee” activity.



Students place pennies in the cup to see when the spaghetti breaks.

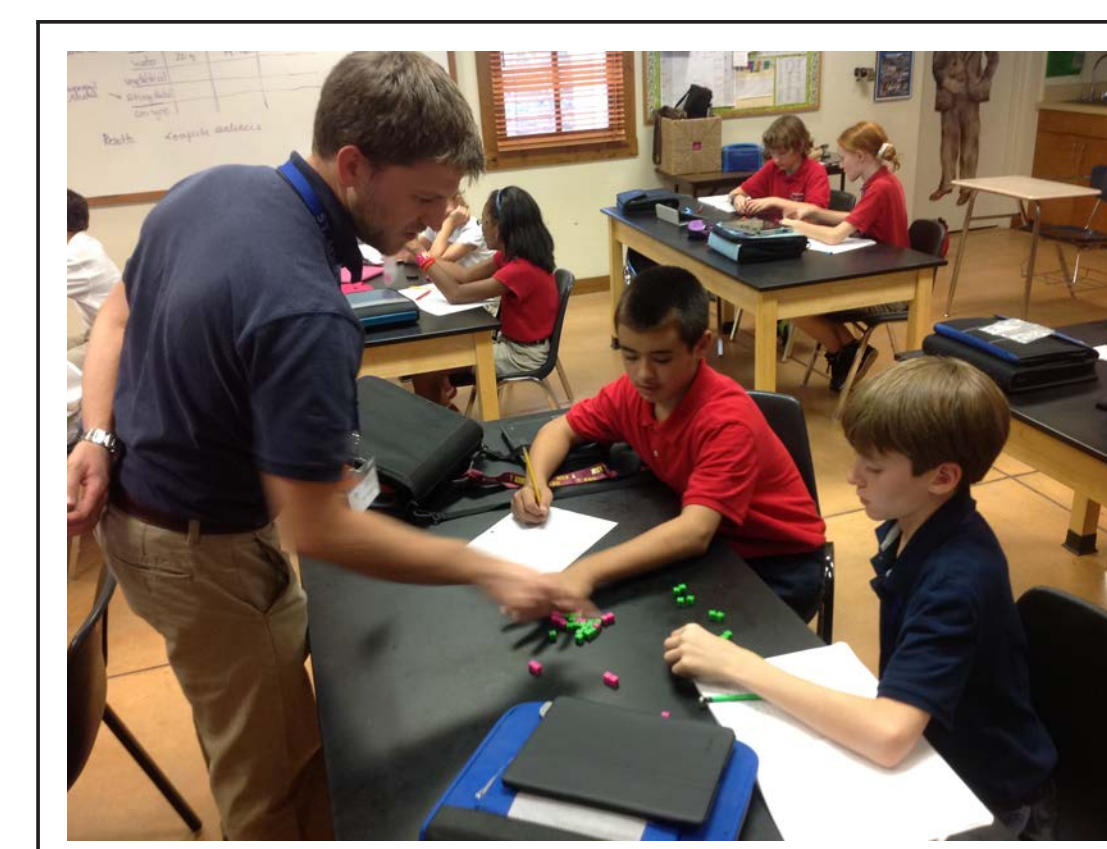


A Barbie is dropped from the roof of St. Michael's to see if the students' calculations are correct.

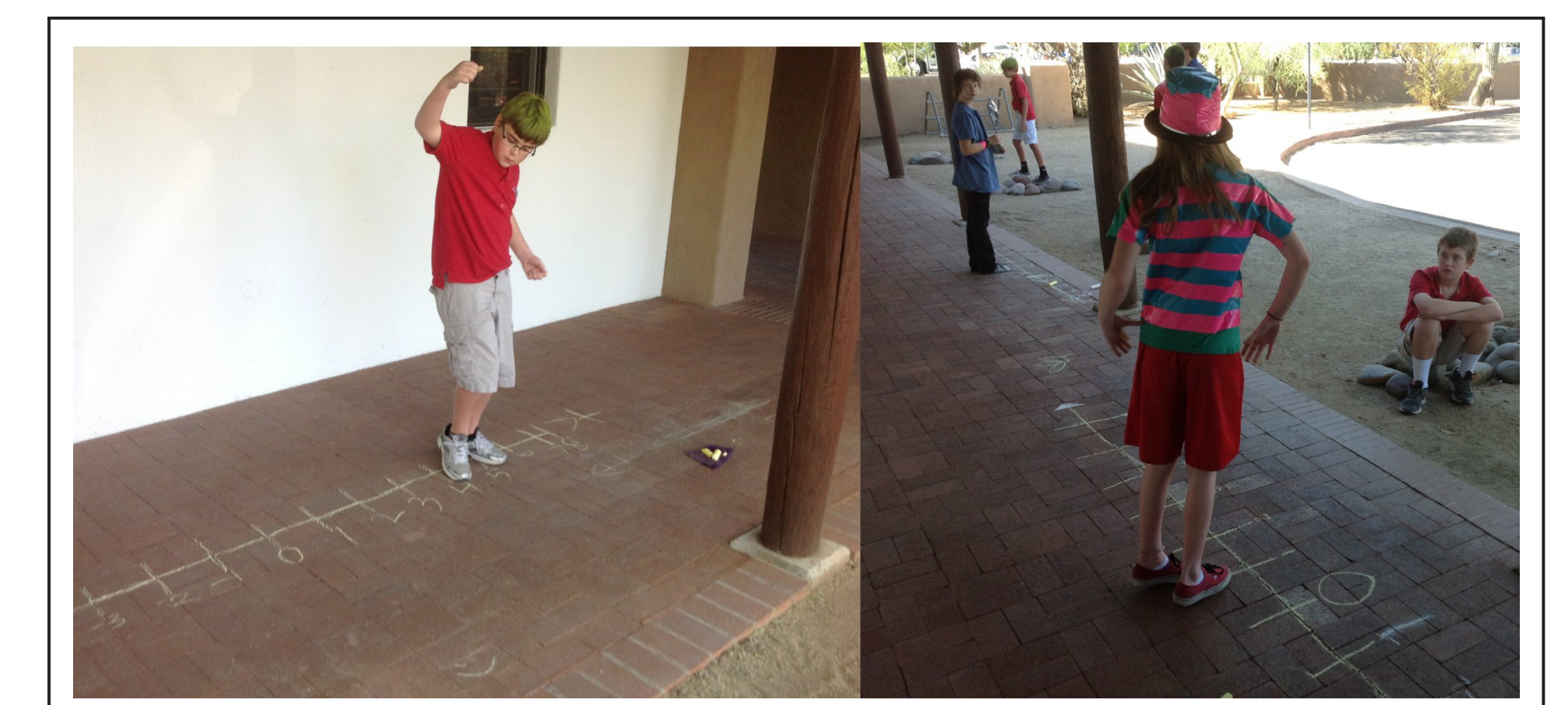
HOW DO YOU LEARN NEGATIVE NUMBERS?

With such a diverse class of sixth grade math students, who all learn differently, we implemented different methods to teach adding and subtraction of integers. These methods include writing the rules, using implements like blocks, and having the students act out adding and subtracting negative numbers.

Addition Rules	
When the signs are the same,	<u>add and keep the sign</u>
When the signs are different,	<u>subtract and keep the sign of the number with greater absolute value</u>
Subtraction Rule	
When subtracting,	<u>add the opposite. Then, follow the rules for addition</u>
Multiplication and Division Rules	
If the signs are the same,	<u>the answer will be positive</u>
If the signs are different,	<u>the answer will be negative</u>



Blocks of two colors were used to signify positive and negative integers. Students combined equal numbers of positive and negative blocks to form 'zero pairs' to simplify the problem.



Students put themselves in the number line and coached each other how many spaces to walk and which direction, sometimes using the written rules.