Neg = Red

ADDING POLYNOMIALS
Algebra Tiles Problems

The value an Algebra tile has is based on the area the tile represents.

A ▯ small square tile represents a single unit, like the number 1. The sides of *constant* the square are 1 unit each, thus the area is 1 square unit. The color of the tile tells you if the value of the number is positive (yellow) or negative (red).

A ▬ long, rectangular tile represents a variable, like the letter x. The sides of the rectangle are 1 unit wide by unknown (x) units long, thus the area is $1x$ square units. More than one of these tiles represents the quantity you have; example $2x$ would be two, rectangular tiles. Again, the color of the tile represents the value of the tile. Red is always negative.
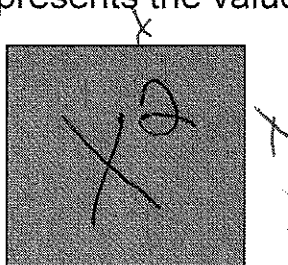
A ▢ large square tile represents a variable squared, like x^2. The sides of the square are x units wide by x units long, thus the area is x-squared square units (x times $x = x^2$). Negative tiles are still Red.

Combining Like Terms (CLT)

Use your tiles to represent solutions for the following sums:

1. $(-2x^2 + 1) + (-x^2) =$ $-3X^2 + 1$

2. $(x - 3) + (2x - 2)$ $3X - 5$

3. $-5x^2 + (2x^2 + 5x)$ $-3X^2 + 5X$

4. $(3x^2 + 2x + 5) + (x^2 - x - 4)$ $4X^2 + X + 1$

5. $(5x^2 - 3x - 6) + (x^2 + 3x + 6)$ $6X^2$

6. $(x^2 - x - 1) + (6x - 3)$

$X^2 + 5X - 4$