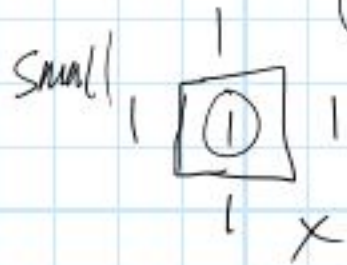
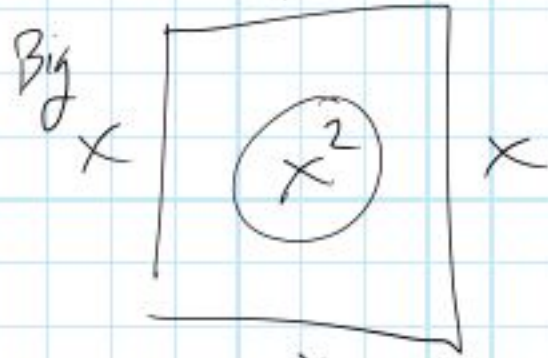


⊕ Other

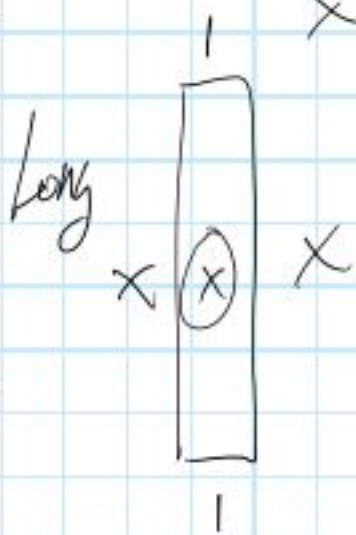
⊖ Red



$$\underline{\text{Area}} = l \cdot w = \underline{1}$$



$$\underline{\text{Area}} = l \cdot w = x \cdot x = \underline{x^2}$$



$$\underline{\text{Area}} = l \cdot w = 1 \cdot x = \underline{x}$$

1

⊕ Colored in

$$\begin{array}{c} \text{■} + \text{■} + \text{■} \\ | \quad | \quad | \end{array} = 1 + 1 + 1 = 3$$

$$\begin{array}{c} \text{■} + \text{■} + \text{■} \\ \times \quad \times \quad \times \end{array} = x + x + x = 3x$$

$$\begin{array}{c} \text{■} + \text{■} + \text{■} \\ \times^2 \quad \times^2 \quad \times^2 \end{array} = x^2 + x^2 + x^2 = 3x^2$$

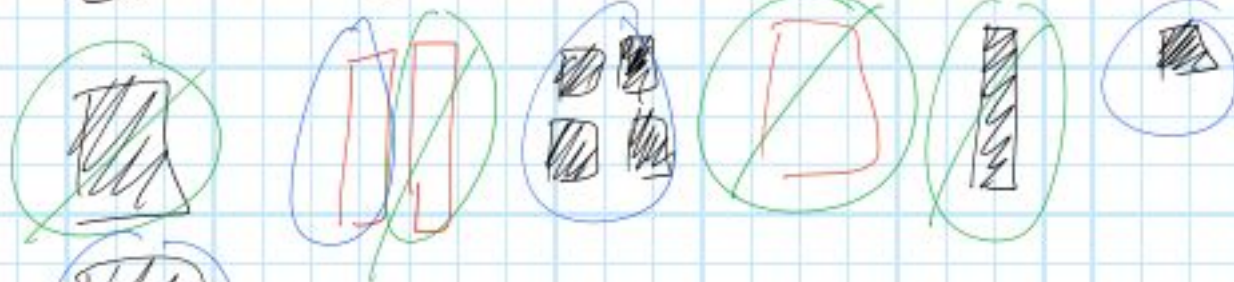
⊖ u.p.r. (relative)

Arrange/Draw the following:

(+) other (Colored in)

(-) Red (Empty)

$$3x^2 - 2x + 4 - x^2 + x + 1$$

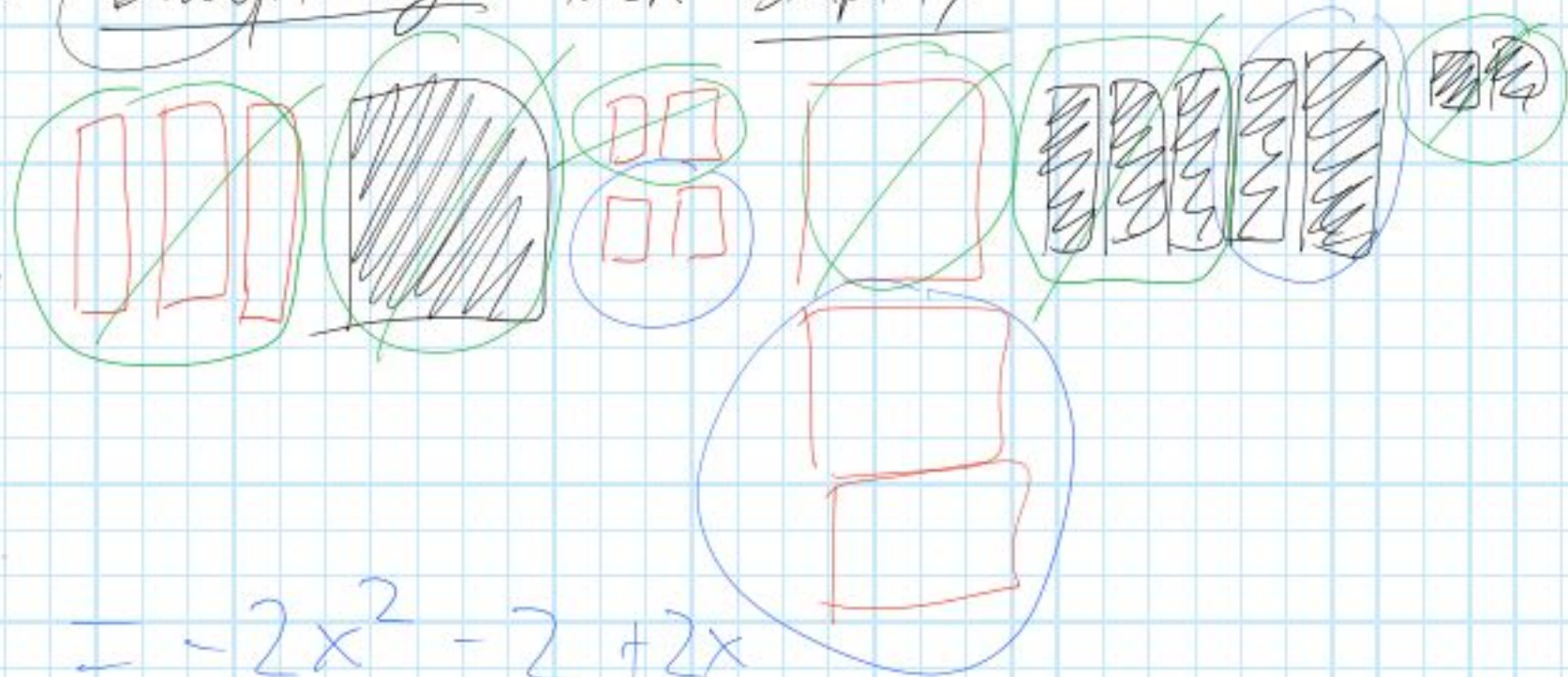


Simplify: Cancel out same shape with different color/shading

$$\underline{= 2x^2 - x + 5}$$

$$-3x + x^2 - 4 - 3x^2 + 5x + 2$$

Draw/Arrange then Simplify



$$= -2x^2 - 2 + 2x$$

Name: _____

Polynomial Vocabulary

Terms: Are separated by a + or -

Ex. $3x^2 + 4$
 $3y + 8y^4 - x$

Polynomial: expression with one or more terms

Ex. $x^2 + y^2$ ← Polynomial
 $4t + 8x - 15y^{10}$

Variable: An unknown quantity, usually written as a letter

$x, n, y, a, b, c, d, \phi, \delta$

Coefficient: the number multiplying a variable

$8y^5$ $-15xy^2$

Constant: A number without a variable

8 -4

Like terms: terms with the same variables and same exponents

$4x$ and $2x$ ✓
 $5y$ and $6y^2x$

$8x^2y^5$ and
 $-3x^2y^5$ ✓

	$5y + 1$	$-3x - 2x^2 + x^2$	$-7t + 3k^4 - k^2 + 5t - 2$
How many terms are there in this polynomial?	2	3	5
What variables are in this polynomial?	y	x	t, k
What are the coefficients?	5	-3, -2, 1	-7, 3, -1, 5
What is the constant?	1	0 (none)	-2
List the like terms in each polynomial	None	$-2x^2$ and x^2	$-7t$ and $5t$
Simplify the polynomial by combining like terms	$5y + 1$	$-3x - x^2$	$-2t + 3k^4 - k^2 - 2$

Write down polynomials with 2 terms when simplified using the variable 'y'

$$5y + (-2y^2)$$

Write down polynomials with 3 terms when simplified using the variable 'b'. Make sure they have a coefficient of -3 and a constant of -4

$$-3b + 5b^2 - 4$$

Write down 2 like terms for $3b$
Add them together and simplify

$$4b \text{ and } 5b \\ = 9b$$

Write down 2 like terms for $-7x^2$
Add them together and simplify

$$x^2 \text{ and } -10x^2 \\ = -9x^2$$

HW: Section 5.1 #6(all), 7(a-g), 8 (a-h), 9(all)

Remember: We can only combine when the tiles have the same shape (like terms)

