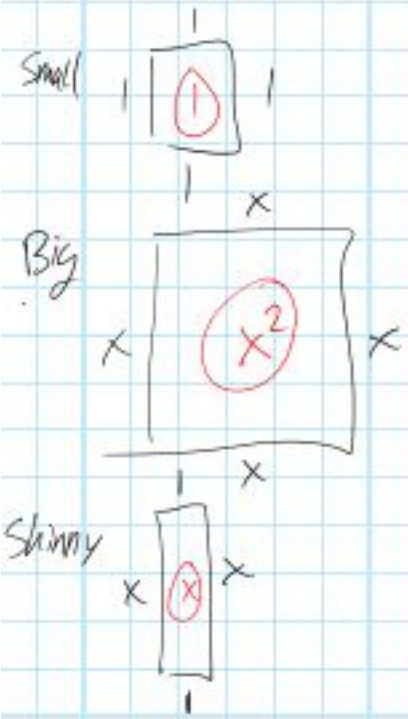


$\text{Area} = l \cdot w = 1 \cdot 1$

$= 1$

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

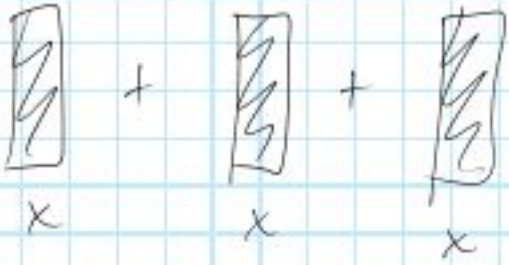
$= x^2$

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

$= x$

(+) Other (colored in) (−) Red (Empty)

$= 3$



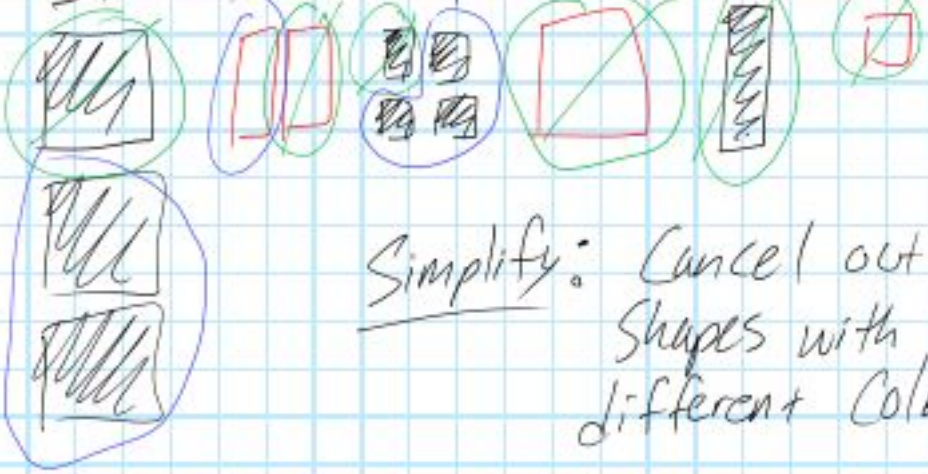
$= 3x$

$= 3x^2$

Draw or Arrange

(+) Other (Color in) (−) Red (Empty)

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

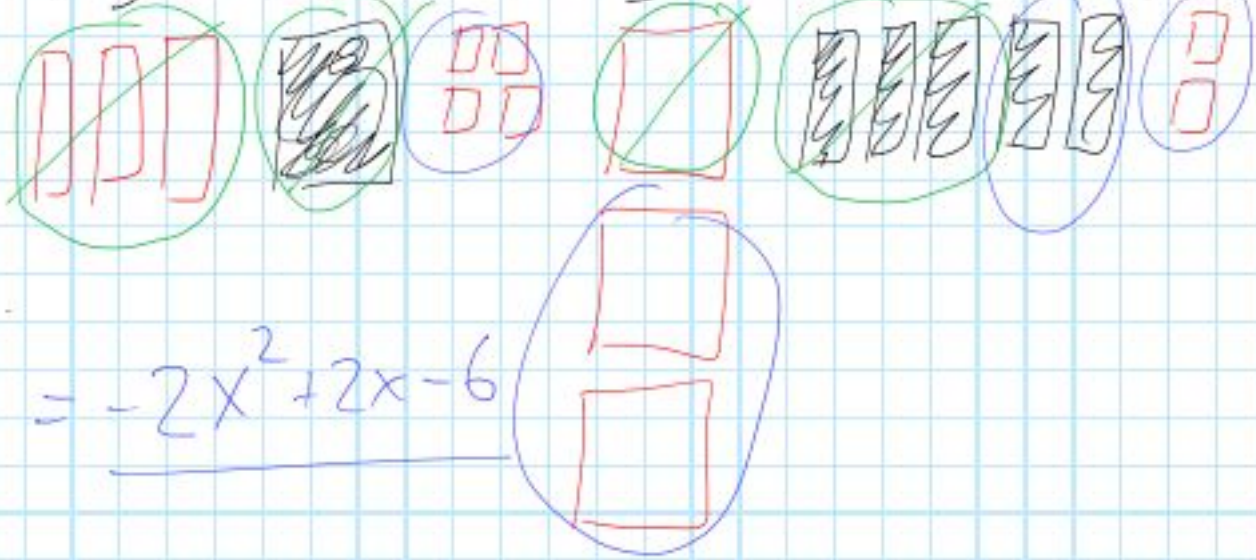


Simplify: Cancel out Same Shapes with different Color/Shading

$= 2x^2 - x + 3$

Draw or Arrange Then Simplify and write answer

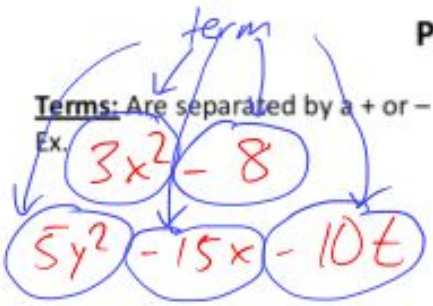
$-3x + x^2 - 4 - 3x^2 + 5x - 2$



$= -2x^2 + 2x - 6$

Name: _____

Polynomial Vocabulary



Terms: Are separated by a + or – Ex. $3x^2 - 8$

Polynomial: expression with one or more terms

Ex. $14xy - 8$ ← Polynomial → $\frac{3}{4}x - \frac{1}{2}$

$-8t - 15n^2 - 12x$ ← 4 ← $4x$ $\frac{3x-2}{2} = \frac{3}{2}x - 1$

Variable: An unknown quantity, usually written as a letter x, y, z, a, s, c, Φ, Ω, α

Coefficient: the number multiplying a variable 5x $-15x^2y$

Constant: A number without a variable $3x - 8$

Like terms: terms with the same variables ***and*** same exponents $4x$ and $-3x$ ✓ $8y^2$ and $2y^2$ ✓ $-15x^2y^5$ 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	None or 0	-2
List the **like terms** in each polynomial	None	x^2 and $-2x^2$	$-7t$ 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'

$2y^2 - 2y$ $\quad -15y^3 + (-6y)$

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

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

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

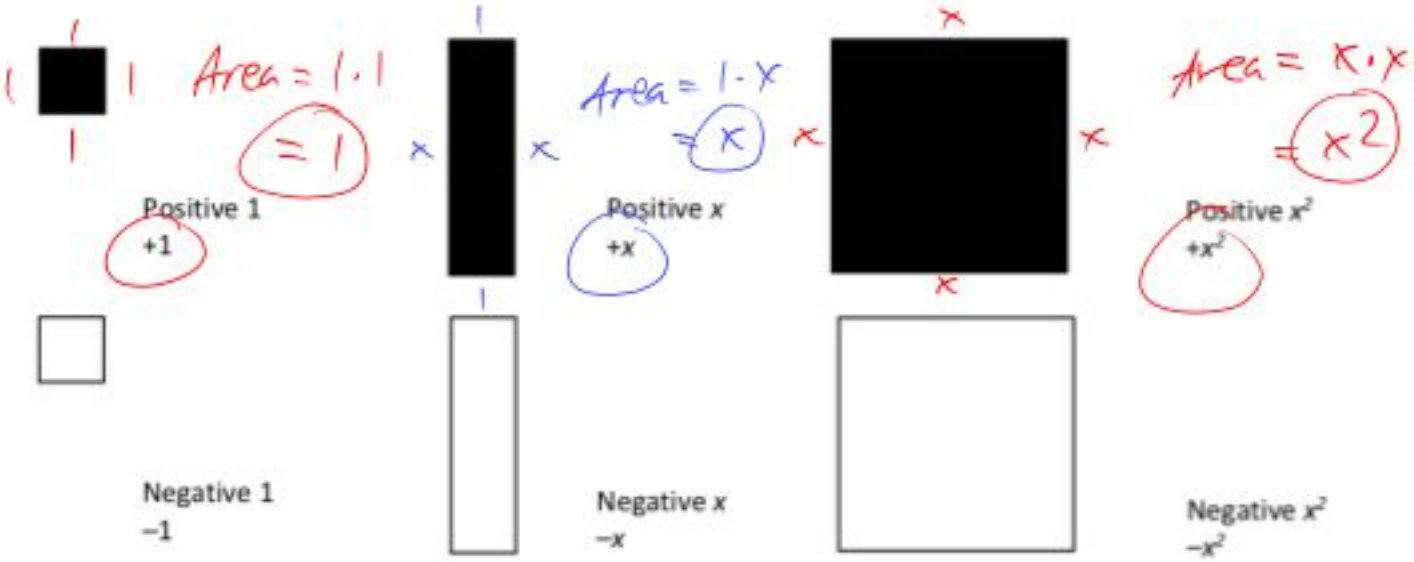
$2b$ and $-4b$

$= -2b$

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

$-7x^2$ and $6x^2$

$= -1x^2 = -x^2$

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)*