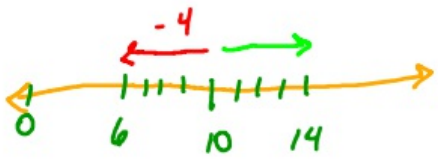
Please do the following problems in your spiral

$5 - 2 = 3$

$5 - (-2) = 5 + 2 = 7$

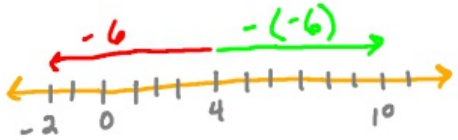
$10 - 4 = 6$

$10 - (-4) = 10 + 4 = 14$



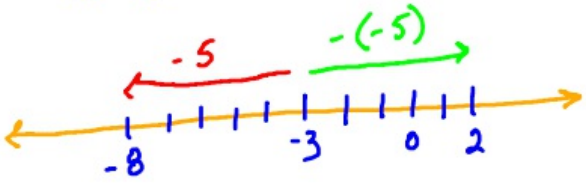
$4 - 6 = -2$

$4 - (-6) = 4 + 6 = 10$



$-3 - 5 = -8$

$-3 - (-5) = -3 + 5 = 2$



NAME _____ DATE _____ PERIOD _____

Lesson 7 - Subtract Linear Expressions

When subtracting expressions, subtract like terms. You can use models or the additive inverse.

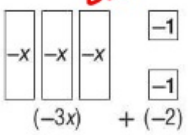
Example 1

Find $(-3x - 2) - (4x)$. $= (-3x + -2) + (-4x)$

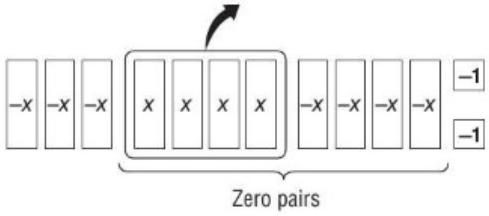
x	CONSTANTS
-3x	+ -2
-4x	

$-7x + -2 = -7x - 2$

Step 1 Model the expression $-3x - 2$. ADDING THE OPPOSITE



Step 2 Since there are no positive x-tiles to remove, add four zero pairs of x-tiles. Remove four positive x-tiles.



So, $(-3x - 2) - (4x) = -7x - 2$.

Example 2

Subtract $(4x + 6) - (-7x + 1)$. $= +(7x + 1)$

x	CONSTANTS
4x	+6
7x	+ 1

$11x + 5$

The additive inverse of $-7x + 1$ is $7x - 1$.

$$\begin{array}{r} 4x + 6 \\ +\ 7x - 1 \\ \hline 11x + 5 \end{array}$$

Arrange like terms in columns.
Add.

So, $(4x + 6) - (-7x + 1) = 11x + 5$.

Exercises

Subtract. Use models if needed.

1. $(9x + 10) - (2x + 4)$ $= 7x + 6$
2. $(3x + 4) - (2x + 5)$ $= x + 9$
3. $(6x + 3) - (-1x + 2)$ $= 7x + 5$
4. $(4x + 1) - (x + 3)$ $= 3x + -4$
5. $(3x + 1) - (2x + 6)$

$3x - 2x = x$

$4 - (-5) = 9$

$3 - (-2) = 3 + 2$