Name:

Date:

Lesson 2.1.3 Homework

* **2-29.** Simplify the following expressions by combining like terms. Using or drawing sketches of algebra tiles may be helpful**.**
	1. 2x + 3x + 3 + 4x2 + 10 + x
	2. 4x + 4y2 + y2 + 9 + 10 + x + 3x
	3. 2x2 + 30 + 3x2 + 4x2 + 14 + x
	4. 20 + 5xy + 4y2 + 10 + y2 + xy
*

**2-30.** Find a simplified algebraic expression for each Expression Mat below.



**2-31.**Write an equation and solve it to find the answer to the question below.  Use the 5-D Process to help you write the equation, if needed.  Remember to define your variable and to write your answer in a complete sentence.

Susan is buying three different colors of tiles for her kitchen floor.  She is buying 25 more red tiles than beige tiles, and three times as many navy-blue tiles as beige tiles.  If Susan buys 435 tiles altogether, how many tiles of each color does she buy?

**2-32.** Without a calculator, compute the value of each expression below.

1. −14 + (−31)
2. −(−8) − (−2)
3. 
4. −11 · 24
5. 
6. 46 ÷ (−23)
*

**2-33.** To bake 100 of his favorite cookies, Mr. Wallis needs 350 grams of sugar.

1. How many grams of sugar would he need to bake 10 cookies?  What about 20 cookies?  Show all work.
2. What is the unit rate?  That is, how many grams of sugar are needed for 1 cookie?
3. To help him know how much sugar to use when baking cookies, Mr. Wallis started to make a table, as shown above.  Complete the table