Name:

Date:

Lesson 2.1.7 Homework

* **2-67.** Sylvia simplified the expressions on the expression comparison mat shown below. Some of her work is shown. Are all of her moves “legal”? Explain.

* **2-68.**Read the Math Notes boxes in this lesson and for Lesson 2.1.5.  Then examine the work below that shows one way to simplify the expression 3*x*+ 8 + (*x* +10).  Decide which property was used for each step.



* **2-69.** Examine the tile pattern at below.

	1. On graph paper, draw Figures 4 and 5.
	2. What would Figure 10 look like?  How many tiles would it have?  What about Figure 100?
	3. Cami has a different tile pattern.  She decided to represent the number of tiles of her pattern in a table, as shown below.  Can you use the table to predict how many tiles would be in Figure 5 of her tile pattern?  How many tiles would Figure 8 have?  Explain how you know.

**2-70.** Examine the shape made with algebra tiles below.

* 1. Write an expression that represents the perimeter of the shape. Then evaluate your expression for *x* = 6 and *y* = 10 units.
	2. Write an expression that represents the area of the shape. What is the area if *x* = 6 and *y* = 10 units?

**2-71.** Match each result to an answer in the right-hand column**.**

|  |  |
| --- | --- |
| a.     −3 + 16 − (−5) | 1.     −16 |
| b.     (3 − 5)(6 + 2) | 2.     327 |
| c.     17(−23) + 2 | 3.     0.5 |
| d.     5 − (3 − 17)(−2 + 25) | 4.     18 |
| e.     (−4)(−2.25)(−10) | 5.     −90 |
| f.     −1.5 − 2.25 − (−4.5) | 6.     0.75 |
| g.    4-5/6 | 7.     −389 |