Name:

Date:

Lesson 3.1.4 Homework

* **3-37.** Complete a table like the one provided in problem 3-34 for the rule y = x + 2. Plot and connect the points on graph paper. Be sure to label the axes and include the scale.

**3-38.** For the following equations, draw a picture of the tiles on an Equation Mat.  Then use “legal” moves to simplify and solve for the variable.  Record your work.

* 1. −2 + x = −x + 2



* 1. 2 + 3x = x + 7

**3-39.** Evaluate each equation below.

* 1. For y = 5 + 8x  when x = 4, what does y equal?
	2. For a = 3 − 5c  when c = −0.5, what does a equal?
	3. For n = 2d2 − 5  when d = −2, what does n equal?
	4. For v = −3(r − 3)  when r = −1, what does v equal?

**3-40.** Peggy Sue decided to enter her famous “Five-Alarm Chili” at her local chili-cooking contest.  Normally, she needs five tomatoes to make enough chili for her family of seven.

* 1. How many tomatoes should she expect to use to make her famous recipe for 100 people?
	2. When she gets to the contest, she realizes that she only packed 58 tomatoes.  How many people can she expect to feed?

**3-41.** At the annual dog show, Chantel noticed that there were three more Scotties than Schnauzers.  She also realized that the number of Wirehaired Terriers was five less than twice the number of Schnauzers.  If there were 78 dogs in all (counting Schnauzers, Scotties, and Wirehaired Terriers), how many Schnauzers were there?  Write and solve an equation.