Name:

Date:

Lesson 4.1.3 Homework

* **4-25.** Two of the connections in your Representations of Patterns Web are pattern → table and pattern → rule. Practice these connections as you answer the questions below.
	1. Draw Figure 0 and Figure 4 for the pattern at right.
	2. Represent the number of tiles in each figure with a table.
	3. Represent the number of tiles in each figure with an algebraic rule.

**4-26.** Use the formula for the area of a circle to solve for the radius of the circle if the area is 78.5 cm2.

**4-27.** For each of the equations below, solve for *x*. Show all work and check your solution.

* 1. −2 + 2*x* = −*x +* 2 + *x*
	2. 2 − 3*x* = *x +* 2
*

**4-28.** Another one of the connections in your Representations of Patterns Web is graph → table. In Chapters 1 through 3, you developed tools to find a table from a graph. Consider this connection as you complete the table below. The table is based on the graph at right.



**4-29.** Joe drove 100 miles from San Francisco to Gilroy and used 4 gallons of gas. How much gas should he expect to use for a 3000-mile trip to New York City? What is the unit rate (miles per gallon)? Be sure to justify your reasoning.