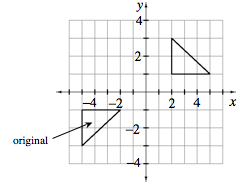
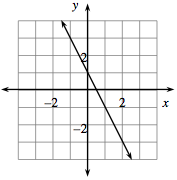
Name:

Date:

Lesson 6.1.1 Homework

* **6-2.**Describe what moves you could use to create the transformation of the original image shown at right.

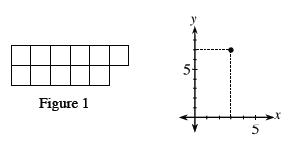
* **6-3.**Review what you know about graphs as you complete parts (a) through (c) below.
  1. Find the equation of the line graphed at right.
  2. What are its x- and y-intercepts?
  3. On the same set of axes, graph a line that is parallel to the line graphed at right and that goes through the origin (0, 0).  Find the equation of this new line.

**6-4.**Which equation below has no solution? Explain how you know.

* 1. 4(x + 1) = 2x + 4
  2. 9 − 5x + 2 = 4 − 5x

**6-5.** Rena says that if x = −5, the equation below is true.  Her friend, Dean, says the answer is x = 3.  Who is correct?  Justify your conclusion.

9(x + 4) = 1 + 2x

**6-6.**Find the rule for the pattern represented at right.

**6-7.** Homer the Hungry Hippo is munching on the lily pads in his pond.  When he got to the pond, there were 30 lily pads, but he is eating 5 lily pads an hour.  Henrietta the Hungrier Hippo found a better pond with 38 lily pads!  She eats 7 lily pads every hour.

* 1. If Homer and Henrietta start eating at the same time, when will their ponds have the same number of lily pads remaining?
  2. How many lily pads will be left in each pond at that time?