Name:

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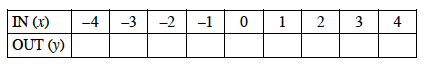
Lesson 3.2.1 Homework

* **3-74.** For the following equations, solve for x.  Be sure to check your answer, if possible.  Show all work.
  1. 3x + 7 = −x – 1
  2. −3x = x − (6 − 2x)
  3. Use a diagram of the Equation Mat or some other method to explain why −(x − 3) = −x + 3.

**3-75.** For each equation, a possible solution is given.  Check to see if the given solution is correct.

* 1. If 3x + 7 = x − 1, then does x = −4?
  2. If −2x − 4 = −4x + 3, then does x = 3?
  3. If −3x + 5 + 5x − 1 = 0, then does x = 2?
  4. If −(x − 1) = 4x − 5 − 3x, then does x = 3?

**3-76.** For the rule y = −2x + 1, calculate the y-values that complete the table below.



* 1. Graph your rule on a set of axes.  Be sure to create a complete graph.  If necessary, see the Math Notes box for this lesson to review what makes a graph complete.
  2. Describe your resulting graph.  What does your graph look like?

**3-77.** Simplify each expression below.

* 1. 4x + 7 + 3y − (1 + 3y + 2x)
  2. 16x2 − 4x + 5 − (16x2 − 8x) + 1
  3. (32x − 7y) − (28x − 11y)
  4. y + 2 + 2y + 2 + 2y − 2x + y

**3-78.** Burgers-o-Rama is the best hamburger place in town.  The owner, Ms. Hamm, buys two 5-pound packages of meat for $27.50.  Use proportional reasoning to determine the information below.  Be sure to explain your answer and organize your reasoning.

* 1. What should Ms. Hamm pay for 25 pounds of meat?
  2. How many pounds can Ms. Hamm buy for $55.00?