

Name: _____

Date: _____ Per: _____

Lesson 6.1.4 Homework

6-42. Solve each of the following inequalities. Represent the solutions algebraically (with symbols) and graphically (on a number line).

a. $3x - 3 < 2 - 2x$

b. $\frac{4}{5}x \geq 8$

6-43. Determine if each of the numbers below is a solution to the inequality $3x - 2 < 2 - 2x$. Show all of your work.

a. 2

b. $\frac{1}{2}$

c. -3

d. $\frac{2}{3}$

6-44. Evaluate the expressions below using $x = -2$, $y = -5$, and $z = 3$.

a. xyz

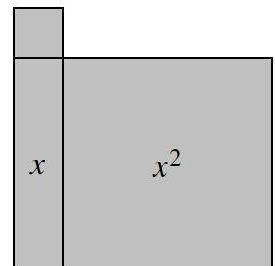
b. $3(x + y)$

c. $\frac{z+2}{y} + 1$

6-45. On your paper, sketch the algebra tile shape at right. Write an expression for the perimeter, and then find the perimeter for each of the given values of x .

a. $x = 7$ cm

b. $x = 5.5$ cm



6-46. Alden found a partially completed 5-D chart:

	Define			Do	Decide Target 74
Trial 1:	15	$2(15) = 30$	$15 + 2 = 17$	$15 + 30 + 17 =$	62 too small
Trial 2:	18	$2(18) = 36$	$18 + 2 = 20$	$18 + 36 + 20 =$	74 just right

- a. Create a word problem that could have been solved using this table.

- b. What words would you put above the numbers in the three empty sections in the “Trial” and “Define” parts of the table?

- c. What word(s) would you put above the “Do” column?

6-47. Beth is filling a small backyard pool with a garden hose. The pool holds 30 gallons of water. After 5 minutes, the pool is about one fourth full.

- a. Assuming that the water is flowing at a constant rate, about how much water is going into the pool each minute?

- b. About how long will it take to fill the pool?