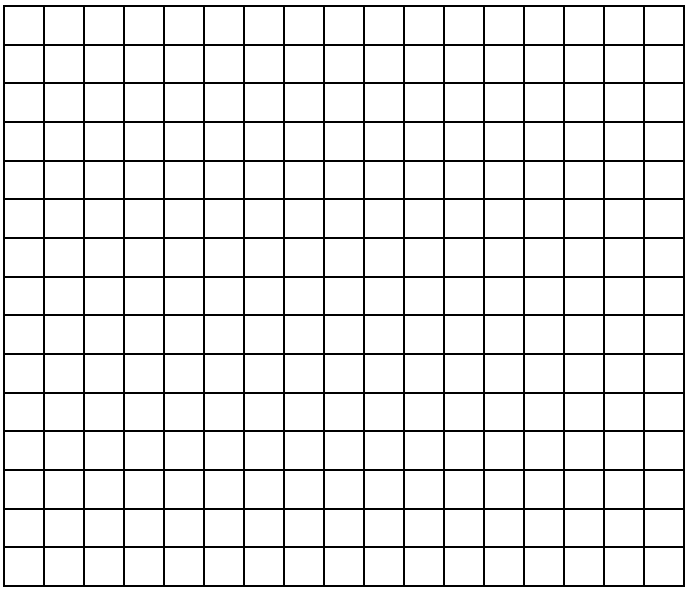
Practice Problems #12

4-44. Identify the growth and starting point (y-intercept) in each representation below.

Complete a table for the rule $y = 3x - 2$

x	-2	-1	0	1	2
y					

Draw a **complete** graph for this rule.



Write the algebraic rule for the pattern:

Is (−50, −152) a point on the graph? Explain.

4-48. Simplify each of the expressions below.

a. $-(5x + 1)$

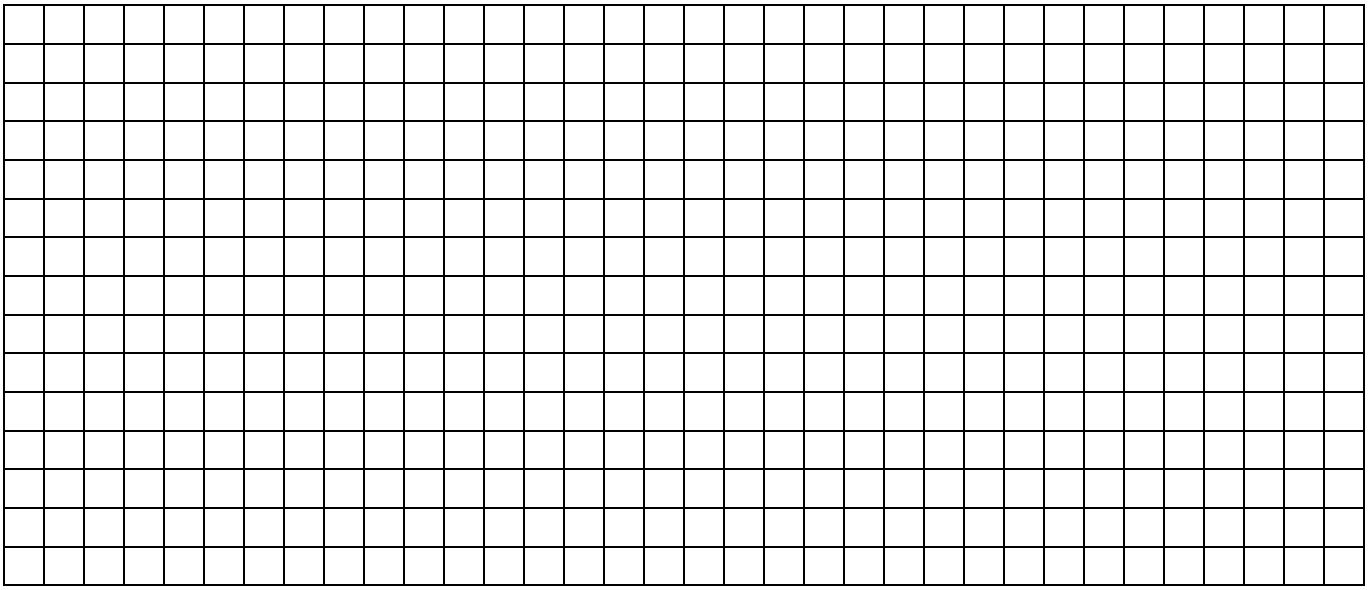
b. $6x - (-5x + 1)$

c. $-(1 - 5x)$

d. $-5x + (x - 1)$

CL 4-77. Solve the equation. $2 - (3x - 4) = 2x - 9$.

4-49. Invent a tile pattern that grows by 3 each time. Figure 2 has 8 tiles. Draw Figures 0, 1, 2, and 3. Identify the growth and the starting point.



4-51. For each equation below, solve for the variable by isolating it.

a. $3p - 7 + 9 - 2p = p + 2$, solve for p

b. $-2x + 5 + (-x) - 5 = 0$, solve for x

4-52. Solve each equation below for x. Then check your solutions.

$$\frac{x}{8} = \frac{3}{4}$$

$$\frac{2}{5} = \frac{x}{40}$$

$$\frac{1}{8} = \frac{x}{12}$$

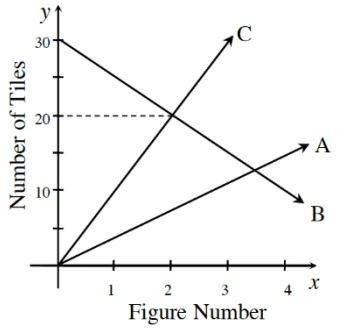
$$\frac{x}{10} = \frac{12}{15}$$

4-59. Use what you know about m and b to graph each rule below without making a table. Draw a growth triangle for each line.

$y = 2x - 3$

$y = -2x + 5$

4-60. Examine the graph at right, which displays three tile patterns.



a. What do you know about Figure 0 for each of the three patterns?

A-

B-

C-

b. Which pattern changes most quickly?

c. Which figure number has the same number of tiles in patterns B and C? Explain how you know.

d. Write a rule for pattern B.