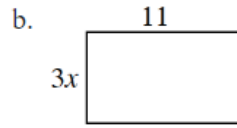
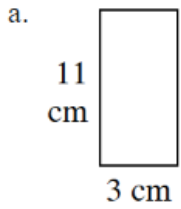


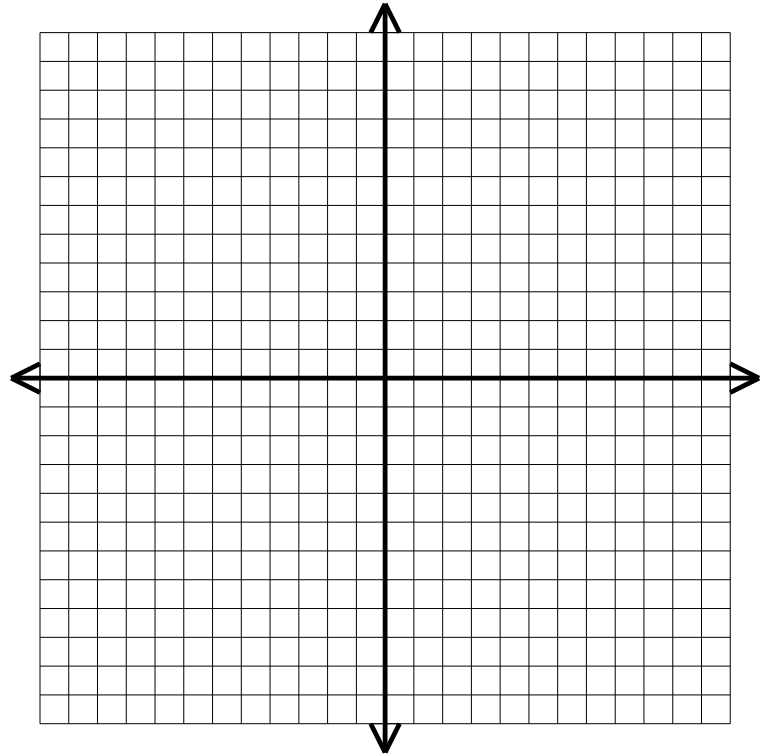
Homework 1.2.2

1. Write an expression for the area of each rectangle below.



2) Consider the equation $y = \frac{1}{2}x - 4$

a) Graph the above equation by either using a table or noticing that it is in slope-intercept form



b) From the graph, what is the x-intercept?

c) How could you find the x-intercept without graphing?

3) Solve each equation, if possible.

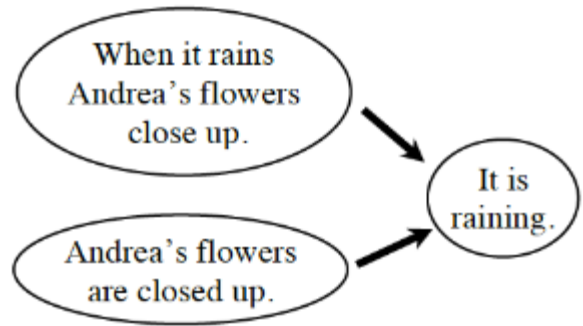
a) $\frac{3x-1}{4} = -\frac{5}{11}$

b) $6 - 5(2x - 3) = 4x + 7$

c) $\frac{3}{4}x + 2 = 4x - 1$

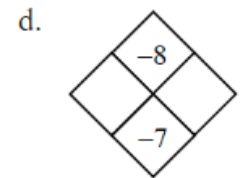
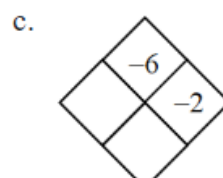
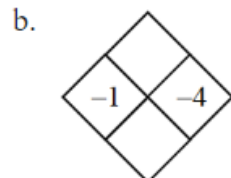
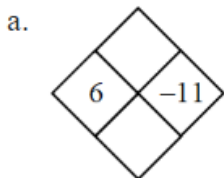
4) Determine whether or not the reasoning in the flowchart to the right is correct.

If it is wrong, redo the flowchart to make it correct.

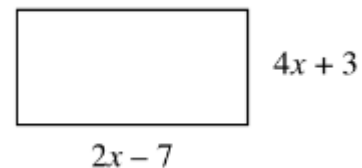


5) Finding and using a pattern is an important problem-solving skill necessary for your study of mathematics. The patterns in Diamond Problems are used later in the course to solve other types of algebraic problems.

Use the pattern you discovered to complete each Diamond Problem below



6) If the perimeter of the rectangle at right is 112 cm, which equation below represents this fact?



Once you have selected the appropriate equation, solve for x.

a. $(2x - 7) + (4x + 3) = 112$

b. $4(2x - 7) = 112$

c. $2(2x - 7) + 2(4x + 3) = 112$

d. $(2x - 7)(4x + 3) = 112$