Algebra, Linear Relations & Graphing

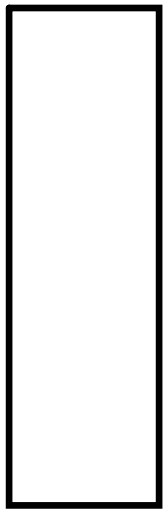
What do we want to know?

Marie received three stock certificates when she was born. Her grandmother promised to give her 2 stock certificates each year after that for her birthday.

1. Write an algebraic expression that shows how many stock certificates Marie has, if *n* represents Marie's age in years.

2. Use your equation to find out how old Marie will be when she has 13 certificates.

Algebraic Tiles Legend

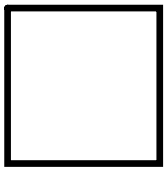


-x

(A negative unknown number)

x

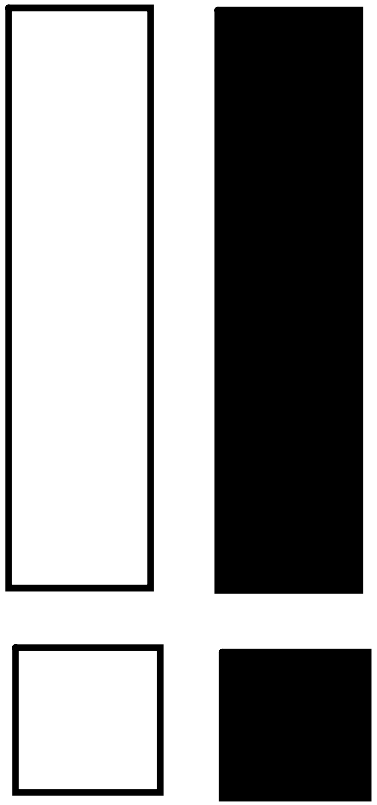
(A positive unknown number)



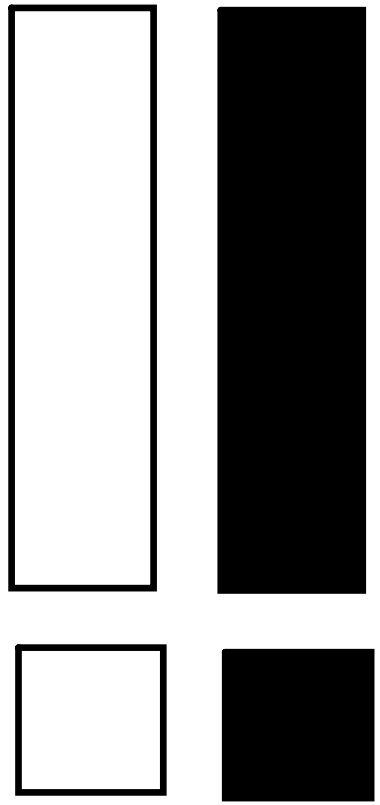
-1

1

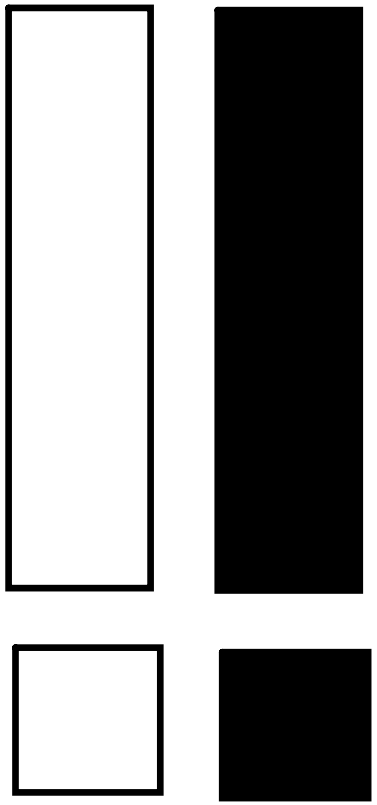
$$2n + 3 = 13$$



$$3x - 1 = 8$$



$$-9 = 3x$$

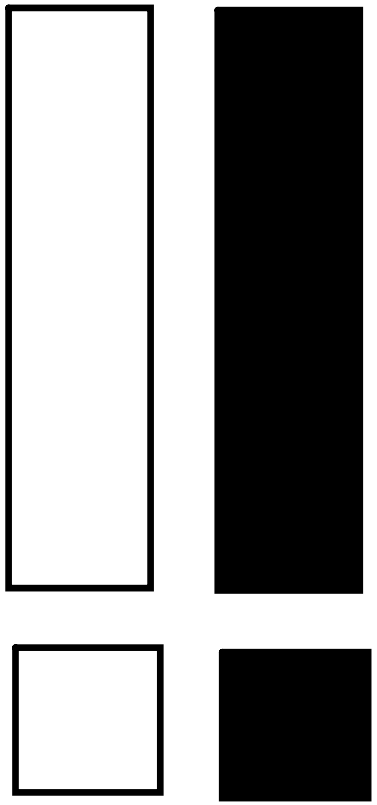


Try it on your own!

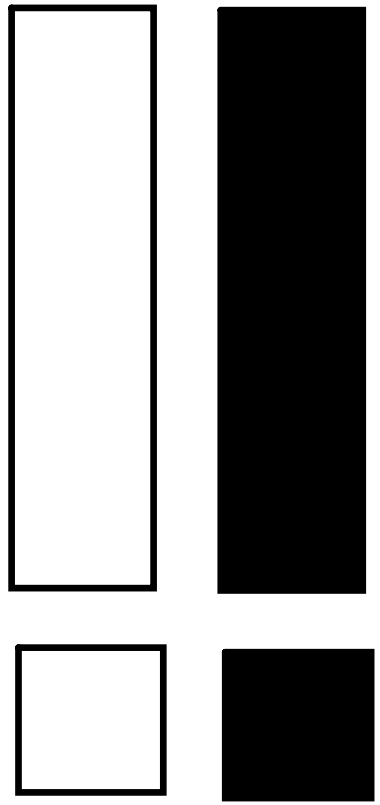
In your notes, represent each equation with tiles and find a solution.

a) $7 + 2x = 1$

b) $5x - 7 = 28$



$$2n + 3 = 13$$



Assignment:

Come up with three algebraic equations (all the numbers you use should be under 15). Model the equations using algebraic tiles. Fold the paper, covering your answers, and have a partner also draw tiles to answer the equations you have created. Then, they can check their answers by unfolding the paper to look at yours.