

**Writing Equations and Graphing**

1. The Science Club started out with \$20 and has earned \$10 per week at bake sales. The Math Club has saved \$5 per week after starting out with \$50 at the beginning of the year.

a) Write an equation for each club. Let  $x$  represent the number of weeks and  $y$  represent the amount of money the club has each week.

**Science Club**

Starting amount \_\_\_\_\_

Increase each week \_\_\_\_\_

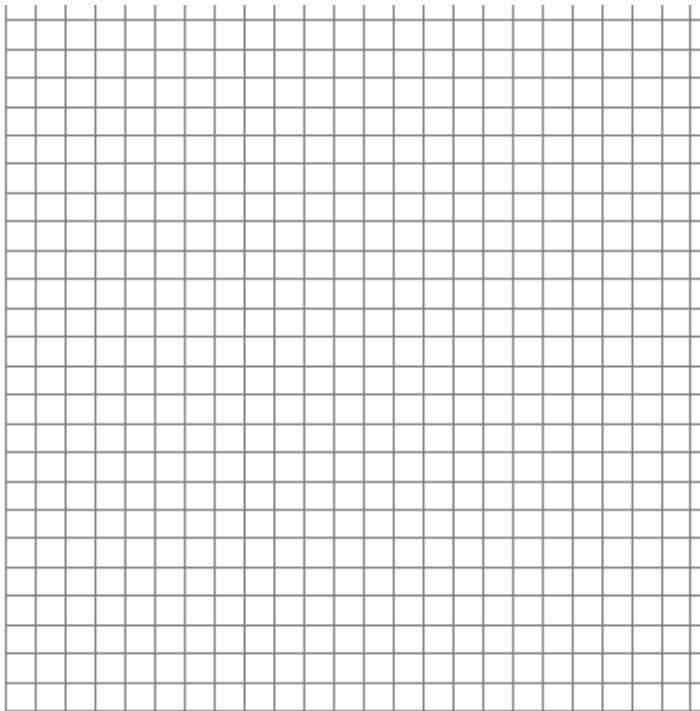
Equation \_\_\_\_\_

**Math Club**

Starting amount \_\_\_\_\_

Increase each week \_\_\_\_\_

Equation \_\_\_\_\_



b) Graph the equation. Label the  $x$  and  $y$  axes and write the increments for both axes.

c) When do the clubs have the same balance? \_\_\_\_\_

What is the balance? \_\_\_\_\_

d) Write a sentence combining the answers to c)

\_\_\_\_\_

Solve the system of equations using substitution. Then check your solution by graphing each line.

$y = x - 2$

$y = -2x + 7$

solution \_\_\_\_\_

