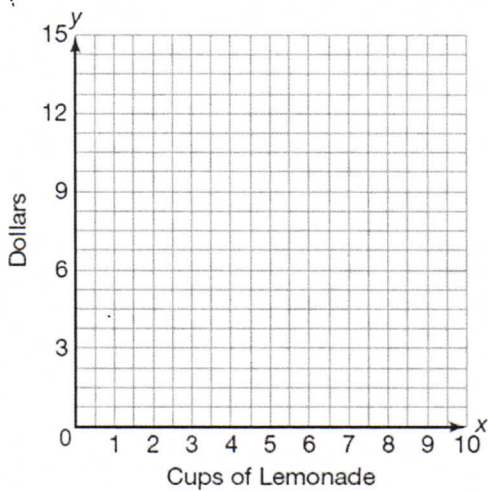


Write a system of linear equations to represent each problem situation. Define each variable. Then, graph the system of equations and estimate the break-even point. Explain what the break-even point represents with respect to the given problem situation.

Ramona sets up a lemonade stand in front of her house. Each cup of lemonade costs Ramona \$0.30 to make, and she spends \$6 on the advertising signs she puts up around her neighborhood. She sells each cup of lemonade for \$1.50.



Solve each system of equations by substitution. Determine whether the system is consistent or inconsistent.

$$\begin{cases} y = 3x - 2 \\ y - 3x = 4 \end{cases}$$

$$\begin{cases} \frac{1}{2}x + \frac{3}{2}y = -7 \\ \frac{1}{3}y = 2x - 10 \end{cases}$$