| Assignment 6.1_2	Period (circle one): 5 7	Date:	Name:

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.

- Olivia is building birdhouses to raise money for a trip to Hawaii. She spends a total of $30 on the tools needed to build the houses. The material to build each birdhouse costs $3.25. Olivia sells each birdhouse for $10.

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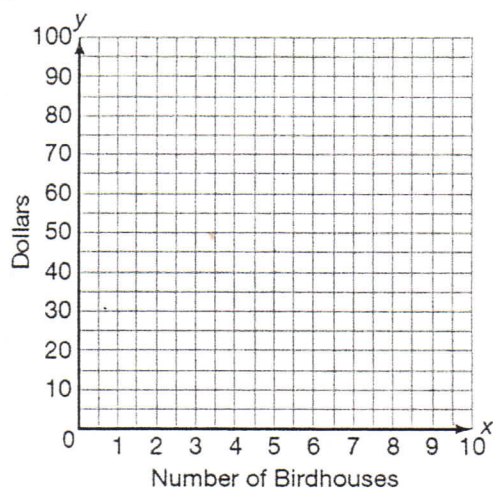
Solve each system of equations by substitution. Determine whether the system is consistent or inconsistent.

$$\begin{cases} 0.5x + 1.2y = 2 \\ 3.3x - 0.7y = 3 \end{cases}$$

$$\begin{cases} 2x + y = 9 \\ y = 5x + 2 \end{cases}$$