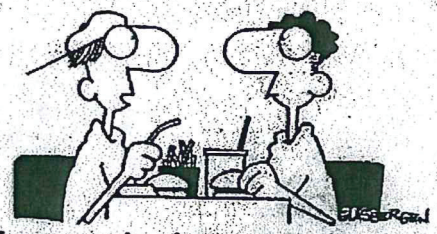
Algebra
Ch 7 Quiz

Name: _____



"I forgot to make a back-up copy of my brain, so everything I learned last semester was lost."

Determine if the given ordered pair is a solution to the system.

1. (5, 1)
$y = -x + 4$
$y = x - 6$

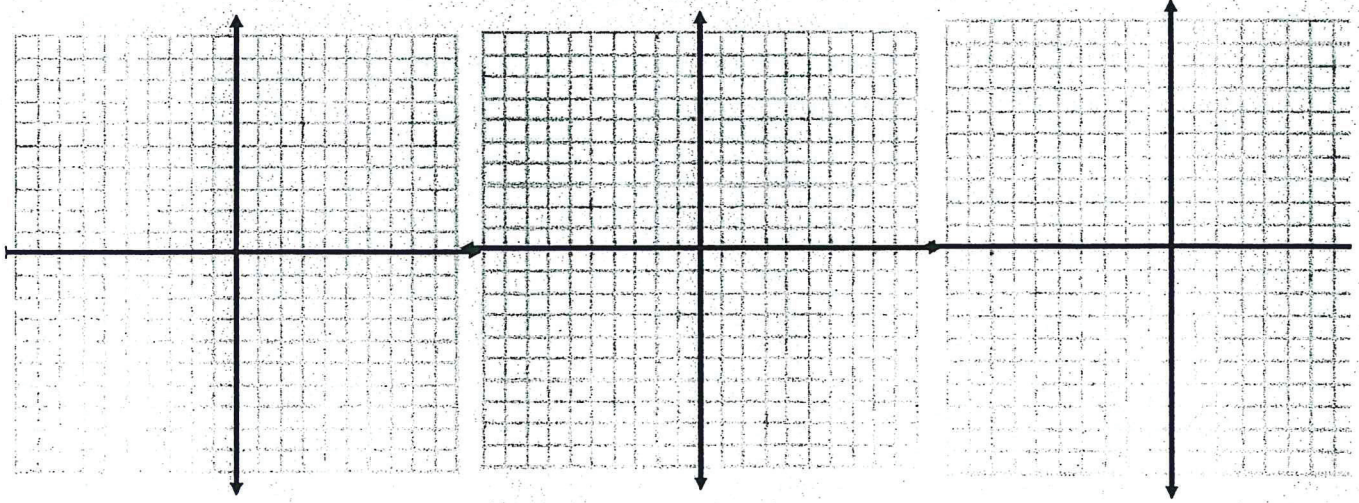
2. (4, 1)
$3x + 2y \geq 10$
$y < 3x - 4$

Solve by graphing. Label each problem as *one solution*, *no solution*, or *infinite solutions*.

3. $y = -x - 2$
$y = \frac{2}{3}x + 3$

4. $y = 3x + 2$
$6x - 2y = -4$

5. $4y = 2x + 12$
$-\frac{1}{2}x + y = -3$



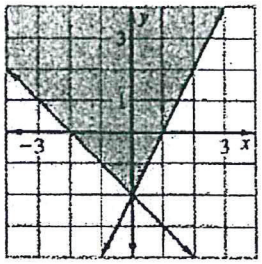
Match the system of linear inequalities with its graph.

A. $x + y \leq 4$
$x + y \geq -2$

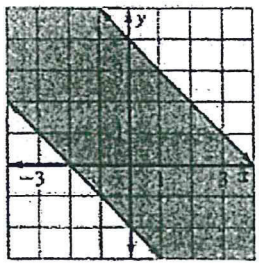
B. $x + 2y \leq 4$
$-2x + y \geq -2$

C. $x + y \geq -2$
$-2x + y \geq -2$

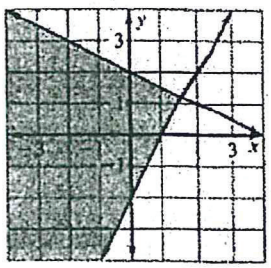
6.



7.



8.

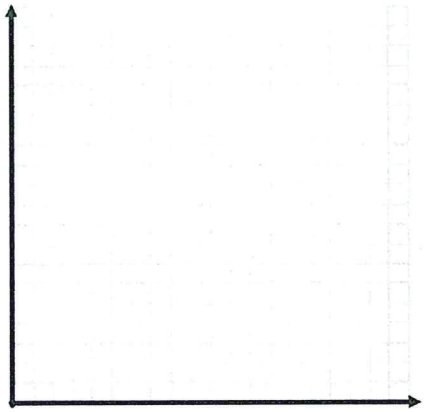


9. Your budget allows you to spend no more than \$24 on decorations for a party. Streamers cost \$2 per roll and tablecloths cost \$6 each. Make x represent the number of streamers and y represent the number of tablecloths.

Write an inequality to represent the situation.

Graph the inequality.

In words, give a solution.



10. You take care of neighbor's pets while they are gone. You charge \$15 per day to feed and walk a dog and \$5 per day to care for any other animal. You can care for at most 10 pets per day, but you want to earn at least \$30 per day. Make x represent the number of dogs and y represent the number of other animals.

Write a system inequalities to represent the situation.

Graph the inequality.

In words, give a solution.