Ch 7.1 Worksheet

Name:_____

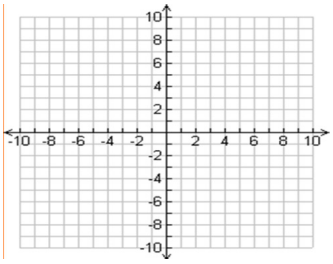
Is $(-1, 5)$ a solution of each system? Explain.

1. $x + y = 4$
$x = -1$

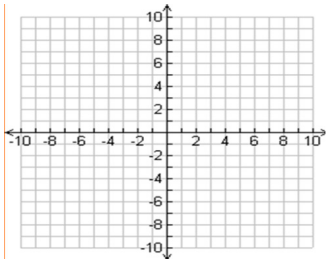
2. $y = 5$
$x = y - 6$

Solve by graphing. Check your solution.

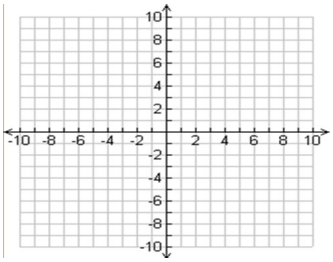
3. $y = x + 2$
$y = -2x + 2$



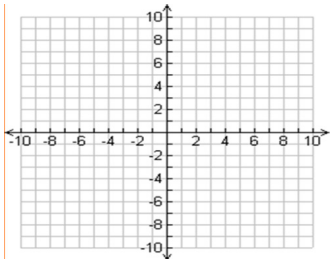
4. $y = 1$
$y = x$



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

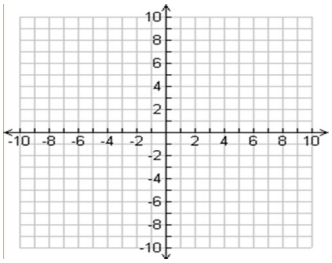


6. $y = \frac{1}{2}x + 1$
$y = -3x + 8$

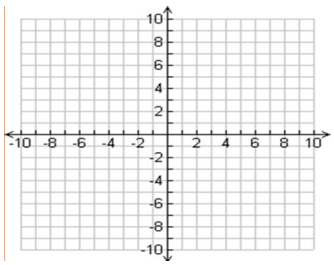


Graph each system. Tell whether the system has *no solution* or *infinitely many solutions.*

7. $y = -2x + 1$
$y = -2x - 3$



8. $y = 3x + 4$
$-12x + 4y = 16$



Without graphing, decide whether each system has *one solution, no solution,* or *infinitely many solutions.* Explain.

9. $y = 2x$
$y = 2x - 5$

10. $x + y = 4$
$2x + 2y = 8$

11. $x + 2y = 10$
$2x + 4y = 10$

12. **Communications** A communications company offers a variety of calling card options. Card A has a 30¢ connection fee and then costs 2¢ per minute. Card B has a 10¢ connection fee and then costs 6¢ per minute. Find the length of the call that would cost the same with both cards.

13. The advertisements at the right are for two jobs you are considering.

a. Write a system of equations that relates the amount of sales x to the money y earned in a week at each job.

b. How much would you need to sell in a week at each job to earn the same amount of money at both?

c. After talking with salespeople, you estimate weekly sales of about $600 at either job. At which job would you earn more money?