1. Sample answer: A graph of a system of linear equations will show whether the lines intersect. If they intersect, the solution is the point of intersection. If the lines are parallel, there is no solution. If the lines are the same, there are infinitely many solutions, meaning that any point on the line is a solution to the system.
2. Sample answer: The lines are parallel. They have the same slope, but different y -intercepts.
3. Sample answer: If the $y$-intercepts are the same, the system of linear equations has infinitely many solutions. If the $y$-intercepts are different, the system of linear equations has no solution.
4. $(-1,-2)$
5. Infinitely many solutions
6. No solution
7. $(-4,3)$
8. Infinitely many solutions
9. a. River $\mathrm{Y}: \mathrm{c}=33$;

River Z: $\mathrm{c}=5 \mathrm{n}+13$
b.

c. When the rental time is 4 hours; Sample answer: This is the point of intersection of the two lines. At 4 hours, both rentals will cost $\$ 33$.
10. No solution

11. (1.5, 3.25)

12. No solution


## Lesson 5-2: Solve Systems by Graphing

13. Infinitely many solutions

14. a. 15 copies
b. Store Z; Sample answer: Store W is less expensive if you make more than 15 copies.
15. B
16. $(2.5,-3)$
