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$\qquad$ Lesson

## Practice B

For use with the lesson "Solve Systems of Linear Inequalities"

## Tell whether the ordered pair is a solution of the system of inequalities.

1. $(3,0)$

2. $(2,2)$

3. $(-2,2)$


## Match the system of inequalities with its graph.

4. $\frac{1}{2} x+y \geq 3$
$x>-1$
5. $y-\frac{1}{2} x \leq 3$
$x<-1$
6. $y \leq \frac{1}{2} x+3$
$x>-1$
A.

B.


## Graph the system of inequalities.

7. $x>-1$
$x<1$
8. $y \geq 2$
$y<3$


9. $x \geq y+2$
$2 x+y<4$
10. $y \geq 2$
$x+y \leq-3$

11. $x+y>1$
$x \leq y$

12. $x \leq-y$
$2 x-y<4$


## Algebra 1

Chapter Resource Book

Practice B
continued For use with the Iesson "Solve Systems of Linear Inequalities"

Write a system of inequalities for the shaded region.
13.

14.

15.

16.

17.

18.

19. Cookout You are planning a cookout. You figure that you will need at least 5 packages of hot dogs and hamburgers. A package of hot dogs costs $\$ 1.90$ and a package of hamburgers costs \$5.20. You can spend a maximum of $\$ 20$ on the hot dogs and hamburgers.
a. Let $x$ represent the number of packages of hot dogs and let $y$ represent the number of packages of hamburgers. Write a system of linear inequalities for the number of packages of each that can be bought.
b. Graph the system of inequalities.

c. Identify two possible combinations of packages of hot dogs and hamburgers you can buy.
20. Chores You need at least 4 hours to do your chores, which are cleaning out the garage and weeding the flower beds around your house. It is 1:30 P.M. on Sunday and your friend wants you to go to the movies at 7:00 P.M.
a. How much time do you have between now and 7:00 p.m. to do your chores?
b. Let $x$ represent the number of hours spent cleaning out the garage and let $y$ represent the number of hours spent on weeding the flower beds. Write and graph a system of linear inequalities that shows the number of hours you can work on each chore if you go to the movies.

c. Identify two possible combinations of time you can spend on each chore.

