## **5-4 Practice**

## Solving Compound Inequalities

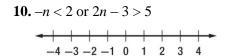
Graph the solution set of each compound inequality.

4. 
$$-4 \le p \le 4$$

$$-4 -3 -2 -1 \ 0 \ 1 \ 2 \ 3 \ 4$$

Write a compound inequality for each graph.

Solve each compound inequality. Then graph the solution set.



11. 
$$5 < 3h + 2 \le 11$$

$$-4 - 3 - 2 - 1 \quad 0 \quad 1 \quad 2 \quad 3 \quad 4$$

12. 
$$2c - 4 > -6$$
 and  $3c + 1 < 13$ 

Define a variable, write an inequality, and solve each problem. Check your solution.

- 13. Two times a number plus one is greater than five and less than seven.
- **14.** A number minus one is at most nine, or two times the number is at least twenty-four.
- **15. METEOROLOGY** Strong winds called the prevailing westerlies blow from west to east in a belt from 40° to 60° latitude in both the Northern and Southern Hemispheres.
  - **a.** Write an inequality to represent the latitude of the prevailing westerlies in the Northern Hemisphere.
  - **b.** Write an inequality to represent the latitudes where the Northern prevailing westerlies are *not* located.
- **16. NUTRITION** A cookie contains 9 grams of fat. If you eat no fewer than 4 and no more than 7 cookies, how many grams of fat will you consume?