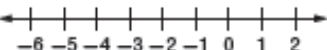
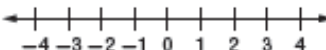




**5-4 Practice****Solving Compound Inequalities**

Graph the solution set of each compound inequality.

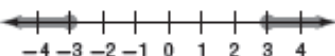
1.  $-4 \leq n \leq 1$  

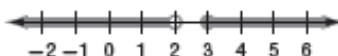
2.  $x > 0$  or  $x < 3$  

3.  $g < -3$  or  $g \geq 4$   


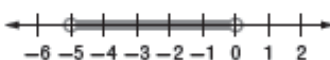
4.  $-4 \leq p \leq 4$   


Write a compound inequality for each graph.

5. 

6. 

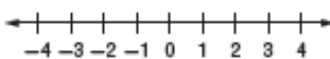
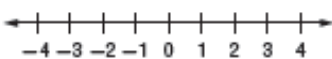
7. 

8. 

Solve each compound inequality. Then graph the solution set.

9.  $k - 3 < -7$  or  $k + 5 \geq 8$

10.  $-n < 2$  or  $2n - 3 > 5$



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

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  $40^\circ$  to  $60^\circ$  latitude in both the Northern and Southern Hemispheres.

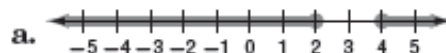
a. Write an inequality to represent the latitude of the prevailing westerlies.

b. Write an inequality to represent the latitudes where the 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?

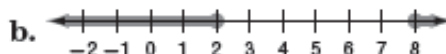
**5-5 Practice*****Inequalities Involving Absolute Value***

Match each open sentence with the graph of its solution set.

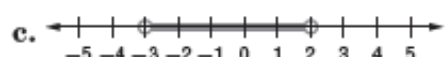
1.  $|x - 3| \geq 1$



2.  $|2x + 1| < 5$



3.  $|5 - x| \geq 3$



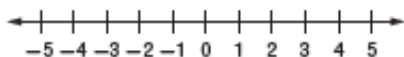
Express each statement using an inequality involving absolute value.

4. The height of the plant must be within 2 inches of the standard 13-inch show size.

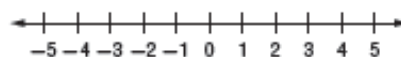
5. The majority of grades in Sean's English class are within 4 points of 85.

Solve each inequality. Then graph the solution set.

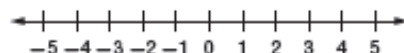
6.  $|2z - 9| \leq 1$



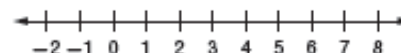
7.  $|3 - 2r| > 7$



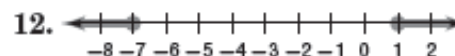
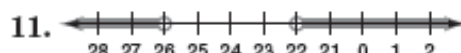
8.  $|3t + 6| < 9$



9.  $|2g - 5| \geq 9$



Write an open sentence involving absolute value for each graph.



14. **RESTAURANTS** The menu at Jeanne's favorite restaurant states that the roasted chicken with vegetables entree typically contains 480 Calories. Based on the size of the chicken, the actual number of Calories in the entree can vary by as many as 40 Calories from this amount.

- Write an absolute value inequality to represent the situation.
- What is the range of the number of Calories in the chicken entree?