## Lesson 3.6, pg 204 #9-11,13,16-18,27-30 graphs only, 35-37, 53, 54

Write a compound inequality that represents each phrase. Graph the solutions.

- 9. all real numbers that are between -5 and 7
- 10. The circumference of a women's basketball must be between 28.5 in. and 29 in., inclusive.

Solve each compound inequality. Graph your solutions.

## See Proble

**11.** -4 < k + 3 < 8





**13.** 
$$3 < 4p - 5 \le 15$$

**16.** 
$$-3 \le \frac{6-q}{9} \le 3$$

Solve each compound inequality. Graph your solutions.

**17.** 
$$6b - 1 < -7 \text{ or } 2b + 1 > 5$$

**18.** 5 + 
$$m > 4$$
 or  $7m < -35$ 





Write each inequality in interval notation. Then graph the interval.

**27.** 
$$x > -2$$

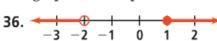
**28.** 
$$x \le 0$$

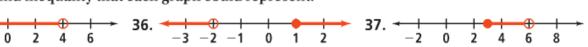
**29.** 
$$x < -2$$
 or  $x \ge 1$  **30.**  $-3 \le x < 4$ 

**30.** 
$$-3 \le x < 4$$

Write a compound inequality that each graph could represent.







- **53.** A taxi traveled 5 mi to John's home and then drove him to the airport 10 mi away. Which inequality represents the possible distances d of the taxi from the airport when it started traveling toward John's home?
  - $\bigcirc$  5  $\leq$   $d \leq$  10
- (B)  $5 \le d \le 15$  (C)  $0 \le d \le 5$  (D)  $0 \le d \le 10$

- 54. A student must earn at least 24 credits in high school in order to graduate. Which inequality or graph does NOT describe this situation?
  - (F)  $c \leq 24$
  - $\bigcirc$   $c \ge 24$

 $\stackrel{\frown}{}$   $24 \leq c$ 

