



GUIDED PRACTICE

See Example 1 Write an inequality for each situation.

- There are no more than 60 people in the theater.
- The temperature of the water is above 72°F.

See Example 2 Write an inequality for each statement.

- A number m increased by 7 is at least 15.
- Twice a number x is less than 18.

See Example 3 Graph each inequality.

5. $x < -2$

6. $w \geq -1$

7. $2.5 < y$

8. $m \leq 3\frac{1}{2}$

See Example 4 Write a compound inequality for each statement.

- A number s is either less than -5 or greater than or equal to 3.
- A number t is both greater than -10 and less than 1.

INDEPENDENT PRACTICE

See Example 1 Write an inequality for each situation.

- Fewer than 10 students rode their bikes to the game.
- No more than 18 people may ride the roller coaster at one time.

See Example 2 Write an inequality for each statement.

- A number x decreased by 11 is less than 35.
- Three times a number n is greater than $4\frac{1}{3}$.
- A number y divided by 7 is at most 10.

See Example 3 Graph each inequality.

16. $m \geq -3$

17. $s < 1.5$

18. $-2 < x$

19. $4 \geq y$

20. $b < -1$

21. $x \geq 0$

22. $n \leq \frac{1}{2}$

23. $-2\frac{1}{2} < c$

See Example 4 Write a compound inequality for each statement.

- A number x is both less than 1.5 and greater than or equal to 0.
- A number c is either greater than or equal to $\frac{1}{2}$ or less than or equal to -7 .

PRACTICE AND PROBLEM SOLVING

Extra Practice

See page EP7.

- Suly earned 87 points on her first test and p points on her second test. She needs a total of at least 140 points on the two tests to pass the class. Write an inequality for this situation.