4.1 Practice A

Write an inequality for the graph. Then, in words, describe all the values of \boldsymbol{x} that make the inequality true.





Write the word sentence as an inequality.

- **3.** A number x is at most 3.
- **4.** A number y added to 2 is greater than 7.
- **5.** A number c multiplied by 3 is less than -12.
- **6.** A number m minus 1.5 is no less than 2.

Tell whether the given value is a solution of the inequality.

7.
$$t-3 \ge 2$$
; $t=10$

8.
$$6w < -2$$
; $w = 1$

9.
$$p + 1.6 \le 4$$
; $p = 5$

10.
$$\frac{1}{2}d > -3$$
; $d = 0$

Graph the inequality on a number line.

11.
$$k > 1$$

12.
$$n \le -2.5$$

13. In order to try out for one of the parts in a play at the local theater, you must be at most 12 years old. Write an inequality that represents this situation.

Tell whether the given value is a solution of the inequality.

14.
$$3h - 7 < h; h = 2$$

15.
$$q + 8 \ge \frac{q}{4}$$
; $q = -12$

- **16.** Consider the inequalities -2x < 10 and -6 < -2x.
 - **a.** Is x = 0 a solution to both inequalities?
 - **b.** Is x = 4 a solution to both inequalities?
 - **c.** Find another value of x that is a solution to both inequalities.