

LESSON
7.6

Name _____ Date _____

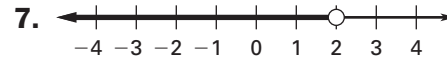
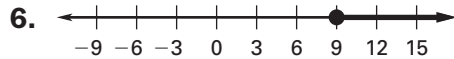
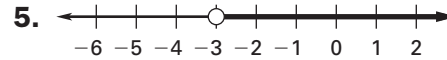
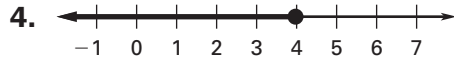
Practice

For use with pages 366–370

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

1. $x - 7 \leq -5$; $x = -8$ 2. $4a \geq 36$; $a = 9$ 3. $-3m < 4$; $m = -\frac{3}{2}$

Write an inequality represented by the graph.



8. Describe and correct the error in finding the solution to $8p \geq -7$.

~~$8p \geq -7$~~
 ~~$\frac{8p}{8} \leq \frac{-7}{8}$~~
 ~~$p \leq -\frac{7}{8}$~~

Write an inequality to represent the situation. Then graph the inequality.

9. To ride an amusement park ride, you must be 48 inches tall or taller.
10. A restaurant can hold at most 40 people.
11. To run for the President of the United States, you must be at least 35 years old.

Practice

For use with pages 366–370

Solve the inequality. Then graph the solution.

12. $x + 8 < 15$

13. $c - 12 \geq -38$

14. $m - 24 \leq -30$

15. $14 + r > 43$

16. $-63 + w \geq 120$

17. $-5a < 20$

18. $\frac{x}{8} \geq \frac{1}{4}$

19. $\frac{n}{-3} > 15$

20. $\frac{2}{3}q < -18$

21. A wheelbarrow can carry at most 400 pounds. Write and solve an inequality to find the greatest number of 50-pound bags of concrete that the wheelbarrow can carry.

22. A book store sells used paperbacks for \$3.75 each. You receive a \$2 discount if you spend at least \$30 in the store. Write and solve an inequality that represents the least number of paperbacks you must buy in order to receive the discount.

23. You are mailing a 42-pound item by parcel post. The total weight of an item and its packaging cannot be greater than 70 pounds. Write and solve an inequality that represents the heaviest the packaging can be without exceeding the 70-pound weight limit.