Name _____ Class _____ Date _____

Practice 4-1

Inequalities and Their Graphs

Is each number a solution of the given inequality?

1. $x \leq -8$ **a.** -10

2. $0.65 \geq y$ **a.** 0.43

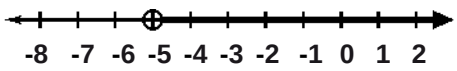
3. $2y + 1 > -5$ **a.** -4

4. $7x - 14 \leq 6x - 16$ **a.** 0

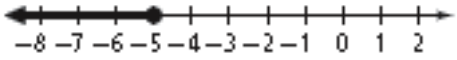
7. $n(n - 6) \geq -4$ **a.** 3

Write an inequality for each graph.

8.



9.



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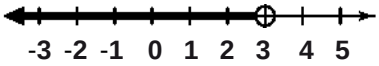

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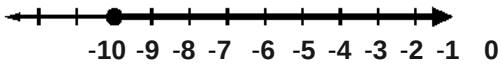


Graph each inequality.

12. $x > 6$

13. $y \leq -10$

14. $8 \geq b$

15. $-4 < w$

16. $x < -7$

17. $x \geq 12$

Define a variable and write an inequality to model each situation.

18. The temperature in a refrigerated truck must be kept at or below 38°F.

19. The maximum weight on an elevator is 2000 pounds.

20. A least 20 students were sick with the flu.

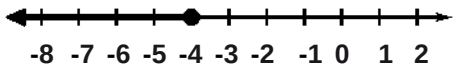
21. The maximum occupancy in an auditorium is 250 people.

22. The circumference of an official major league baseball is at least 9.00 inches.

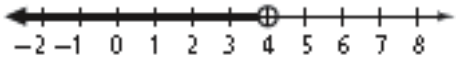
Match each inequality with its graph.

23. $6 < x$ **26.** $-6 \geq x$ **27.** $4 > x$ **28.** $x \leq -4$

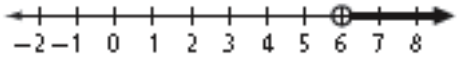
A.



B.



C.



D.