

**AA – WS 3.1**

Name: \_\_\_\_\_

**Write an inequality that represents each verbal expression.**1.  $x$  is greater than or equal to 52. 3 less than  $x$  is less than or equal to 173.  $y$  is less than 44. The quotient of  $x$  and 9 is greater than 4**Determine whether each number is a solution to the given inequality.**

5.  $3y - 8 \geq 22$

a. 10

b. 0

c. 5

6.  $4x + 2 < -6$

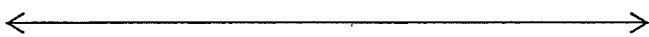
a. -5

b. -2

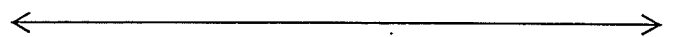
c. 1

**Graph each inequality.**

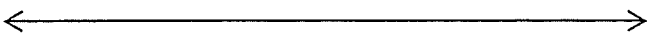
7.  $y > 2$



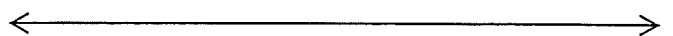
8.  $x < -4$



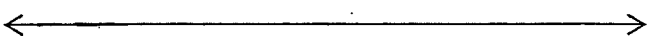
9.  $x \geq -2$



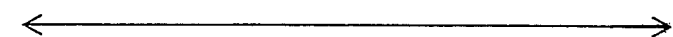
10.  $8 \geq y$



11.  $5.75 > x$

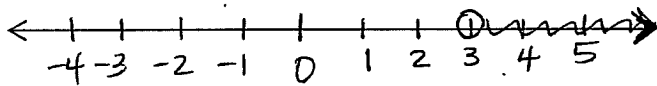


12.  $x \leq \frac{1}{2}$

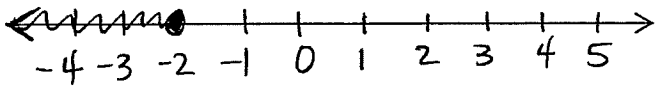


Write an inequality for each graph.

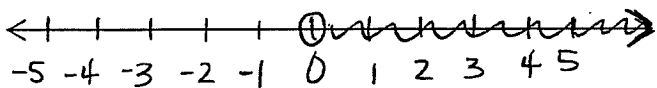
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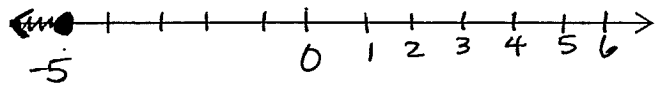
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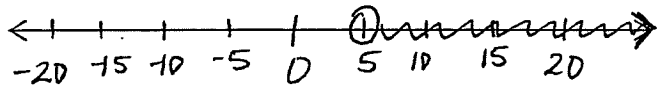
17.



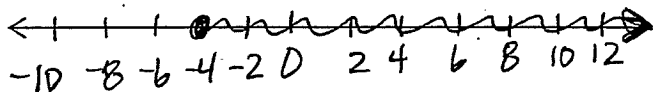
14.



16.



18.



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

19. A person must be at least 35 years old to be elected President of the United States.
20. The restaurant can seat at most 172 people.
21. For a certain swim meet, a competitor must swim faster than 23 seconds to qualify.

**Write each inequality in words.**

22.  $x < 5$

23.  $x \geq -3$

24.  $x \leq 22$

25.  $x > 0$