

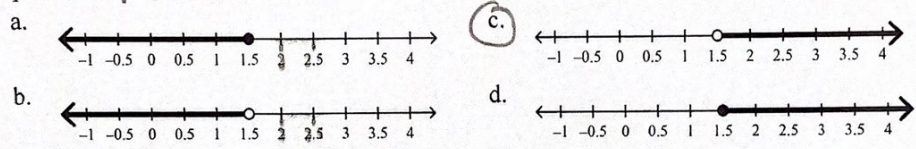
Inequality Test Review

Multiple Choice

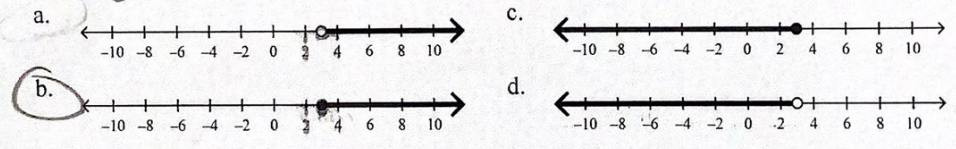
Identify the choice that best completes the statement or answers the question.

Graph the inequality on a number line.

C 1. $q > 1.5$ open dot to the right

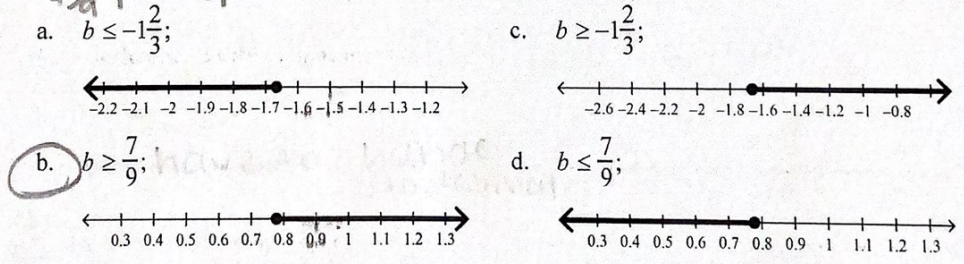


B 2. $g \geq 3$ closed dot to the right

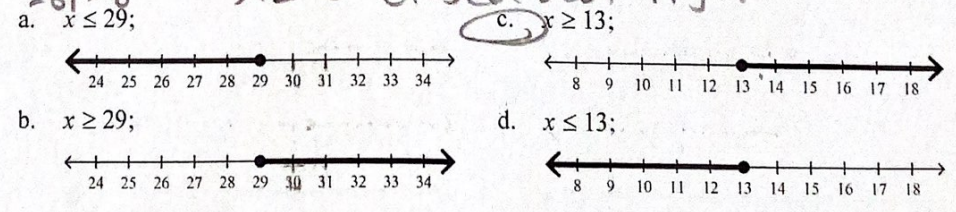


Solve the inequality. Graph the solution.

B 3. $b - \frac{11}{9} \geq -\frac{4}{9} + \frac{11}{9}$ $b \geq -\frac{7}{9}$ closed dot to right

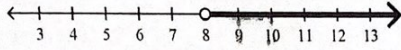


C 4. $x + 8 \geq 21$ $x \geq 13$ closed dot right

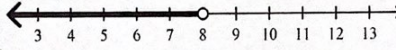


D

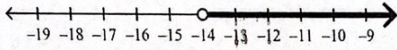
5. $k + 11 < -3$
 a. $k > 8$;



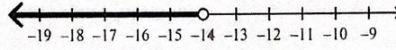
c. $k < 8$;



b. $k > -14$;



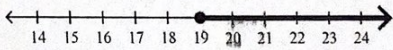
d. $k < -14$;



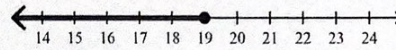
$k < -14$ open dot to left

C

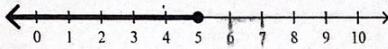
6. $g - 7 \leq 12$
 a. $g \geq 19$;



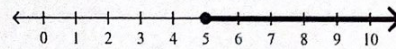
c. $g \leq 19$;



b. $g \leq 5$;



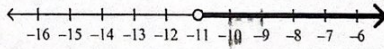
d. $g \geq 5$;



$g \leq 19$

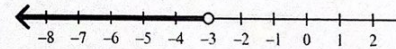
D

7. $-7 < m - 4$
 a. $m > -11$;

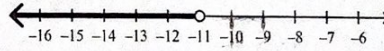


$-3 < m$ can rewrite $m > -3$

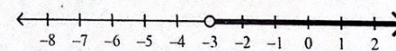
c. $m < -3$;



b. $m < -11$;

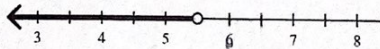


d. $m > -3$;



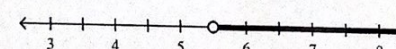
B

8. $6 < v - \frac{1}{2}$
 a. $v < 5\frac{1}{2}$;

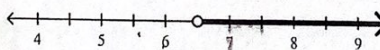


$6\frac{1}{2} < v$ can rewrite $v > 6\frac{1}{2}$

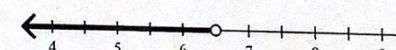
c. $v > 5\frac{1}{2}$;



b. $v > 6\frac{1}{2}$;

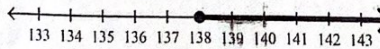


d. $v < 6\frac{1}{2}$;



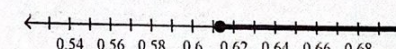
A

9. $\frac{w}{15} \geq 9.2$
 a. $w \geq 138$;

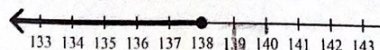


$w \geq 138$ closed dot to right

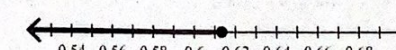
c. $w \geq 0.61$;



b. $w \leq 138$;

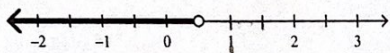


d. $w \leq 0.61$;

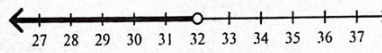


C 10. $-4 < \frac{1}{8}x$ FLIP $32 > x$ rewrite $x < 32$
 $\div -\frac{1}{8}$ $\div -\frac{1}{8}$

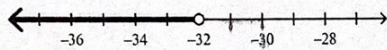
a. $x < 0.5;$



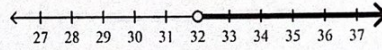
c. $x < 32;$



b. $x < -32;$

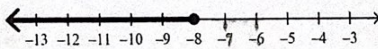


d. $x > 32;$

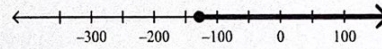


D 11. $4b \geq -32$ $b \geq -8$
 $\div 4$ $\div 4$

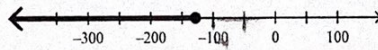
a. $b \leq -8;$



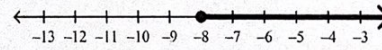
c. $b \geq -128;$



b. $b \leq -128;$

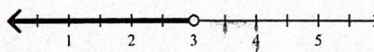


d. $b \geq -8;$

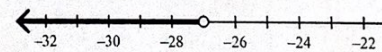


B 12. $-\frac{1}{3}n > -9$ FLIP $n < 27$
 $\div -\frac{1}{3}$ $\div -\frac{1}{3}$

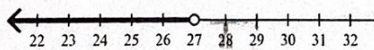
a. $n < 3;$



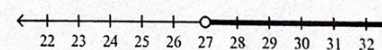
c. $n < -27;$



b. $n < 27;$

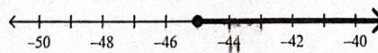


d. $n > 27;$

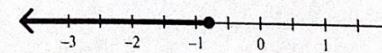


D 13. $6 \leq \frac{w}{-7.5}$ $-45 \leq w$ rewrite $w \geq -45$
 $\cdot -7.5$ $\cdot -7.5$

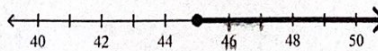
a. $w \geq -45;$



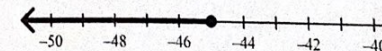
c. $w \leq -0.8;$



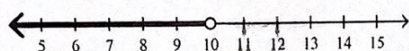
b. $w \geq 45;$



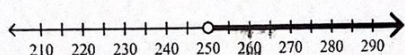
d. $w \leq -45;$



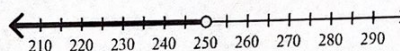
A 14. $-5p > -50$ *flip p < 10*
 a. $p < 10$;



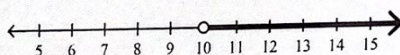
b. $p > 250$;



c. $p < 250$;



d. $p > 10$;



Write the word sentence as an inequality.

C 15. A number b multiplied by -14 is at most $3\frac{1}{2}$. *$-14b \leq 3\frac{1}{2}$*

a. $-\frac{14}{b} \leq 3\frac{1}{2}$

c. $-14b \leq 3\frac{1}{2}$

b. $-14b < 3\frac{1}{2}$

d. $-14b \geq 3\frac{1}{2}$

A 16. A number k minus 6.9 is greater than 43 .

a. $k - 6.9 > 43$

c. $k - 43 \leq 6.9$

b. $k - 6.9 \leq 43$

d. $k - 6.9 \geq 43$

$k - 6.9 > 43$

B 17. A number x is no less than 45 .

a. $x > 45$

c. $x < 45$

b. $x \geq 45$

d. $x \leq 45$

$x \geq 45$

Write the word sentence as an inequality. Then solve the inequality.

C 18. A number divided by 16 is less than -21 .

a. $\frac{x}{16} \geq -21; x \geq -336$

c. $\frac{x}{16} < -21; x < -336$

$\frac{x}{16} < -21$

b. $\frac{x}{16} \leq -21; x \leq -336$

d. $\frac{x}{16} > -21; x > -336$

D 19. Eight times a number is at least -80 .

a. $8x > -80; x > -10$

c. $8x \leq -80; x \leq -10$

b. $8x < -80; x < -10$

d. $8x \geq -80; x \geq -10$

$8x \geq -80$

D 20. Which inequality is represented by the graph shown below?



a. $x > 3$

c. $x < 3$

b. $x \geq 3$

d. $x \leq 3$

$x \leq 3$