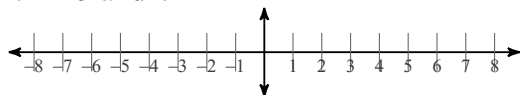


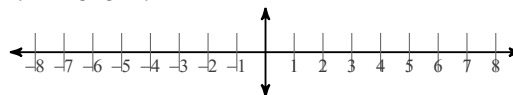
Compound Inequalities

Graph each compound inequality.

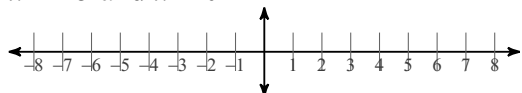
1) $n \geq -5$ and $n \leq 2$



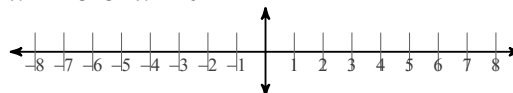
2) $n \leq -5$ or $n \geq 2$



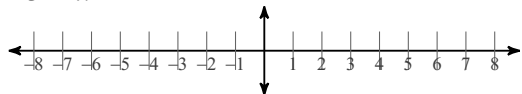
3) $x < -5$ and $x \geq 0$



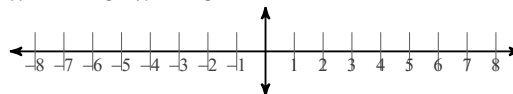
4) $x < -5$ or $x > 0$



5) $-3 < x \leq 2$



6) $x < -2$ or $x > -5$



7) What compound inequality represents the phrase "all real numbers that are greater than or equal to 0 and less than 8"? Graph the solutions.

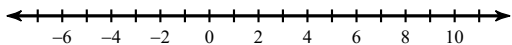


8) The acidity of the water in a swimming pool is considered normal if the pH reading is between 7.2 and 7.8 inclusive. Write a compound inequality that describes an ABNORMAL pH reading. Label and graph your solutions on a numberline below.

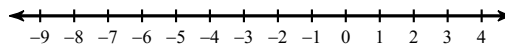


Solve each compound inequality and graph its solution.

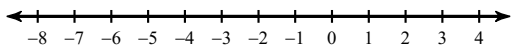
9) $b + 2 < -1$ or $b - 4 > 2$



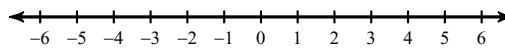
10) $-4 < b + 2 < 3$



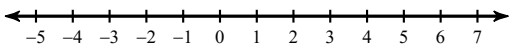
11) $2v > -8$ or $v - 6 \leq -6$



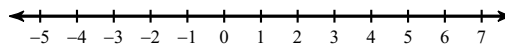
12) $-1 \leq -1 + x < 1$



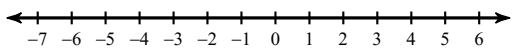
13) $-1 \leq 3 + x \leq 4$



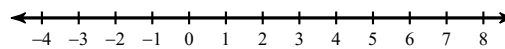
14) $-9 \leq 3k \leq -12$



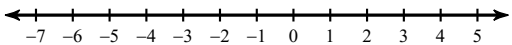
15) $3x + 2 > 8$ or $4x - 4 < -16$



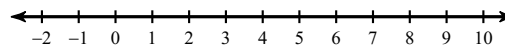
16) $1 - x > 0$ or $-5 - 4x \leq -21$



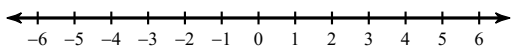
17) $23 \leq 3 + 5n < 23$



18) $3 + 4v < 15$ or $4v + 1 > 17$



19) $4r + 5 \leq 2 + 3r$ or $4 - 5r \leq 2r - 3$



20) $3 - 4r \geq 1 - 6r$ and $4r + 1 \leq r + 1$

