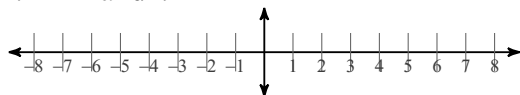


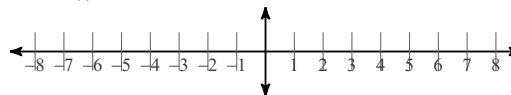
# Compound Inequalities - CLASS EXAMPLES

**Graph each compound inequality.**

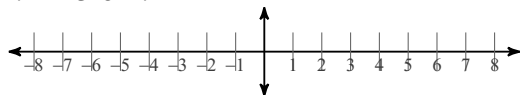
1)  $n \geq -2$  and  $n \leq 4$



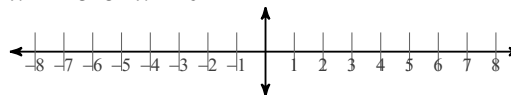
2)  $-4 \leq x < 2$



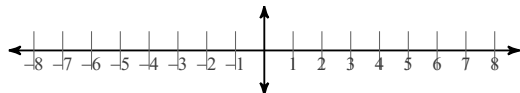
3)  $n \leq -3$  or  $n \geq 4$



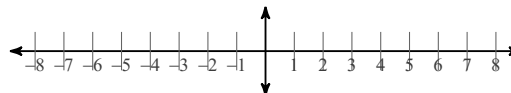
4)  $x < -5$  or  $x > 0$



5)  $-3 < x \leq 2$



6)  $x < -2$  or  $x > 0$



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.

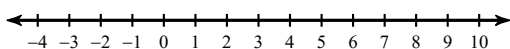


8) The acidity of the water in a swimming pool is considered normal if the pH reading is between 7.2 and 7.8 inclusive. Write a compound inequality that describes a NORMAL pH reading. Label and graph your solutions on a numberline below.

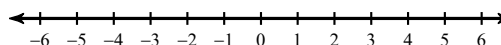
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**Solve each compound inequality and graph its solution.**

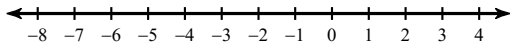
9)  $-5x \leq -30$  or  $-6x \geq 0$



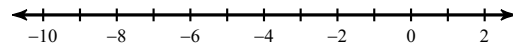
10)  $-1 < \frac{b}{2} \leq 1$



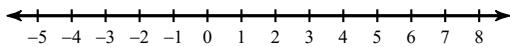
11)  $4x > -4$  or  $\frac{x}{2} < -2$



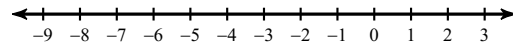
12)  $2 < x + 6 \leq 4$



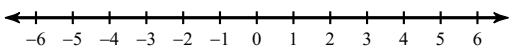
13)  $1 + a < 1$  or  $\frac{a}{5} \geq 1$



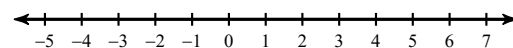
14)  $-2 < a + 2 \leq 2$



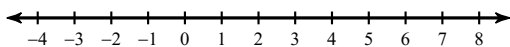
15)  $-3 \leq m + 2 \leq 3$



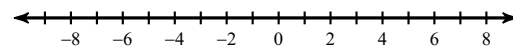
16)  $3x - 1 \leq -1$  or  $5 + 3x > 14$



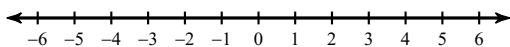
17)  $1 - n \geq 1$  or  $4n - 1 > 7$



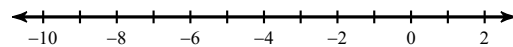
18)  $4 - 4x > 20$  or  $-4 + 3x \geq 8$



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



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



## Answers to Compound Inequalities - CLASS EXAMPLES

1)

3)

5)

7)

