

## Solve & Graph Compound Inequalities

1. Solve each compound inequality for  $x$ , and graph the solution on a number line.

a)  $1 + x > -4$  or  $3x - 6 > -12$

b)  $1 + x > -4$  or  $3x - 6 < -12$

c)  $1 + x > 4$  and  $3x - 6 < -12$

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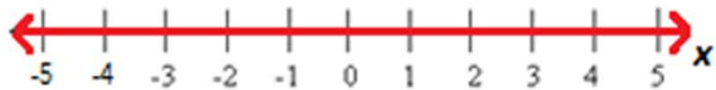
a)  $1 + x > -4$  or  $3x - 6 > -12$

$x > -5$



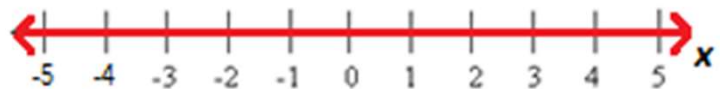
b)  $1 + x > -4$  or  $3x - 6 < -12$

$x$  can be any real number.



c)  $1 + x > 4$  and  $3x - 6 < -12$

$x > 3$  and  $x < -2$



*No solution (empty set) since there are no numbers that satisfy both statements*