Compound Inequalities

A compound inequality is an inequality formed by joining two inequalities with the word "and" or the word "or."

"AND" Inequalities

$x > 2$ and $x \leq 5$	
$x > 2$	
$x \leq 5$	
$x > 2$ and $x \leq 5$	

"OR" Inequalities

$y \leq -2$ or $y > 1$	
$y \leq -2$	
$y > 1$	
$y \leq -2$ or $y > 1$	

Written Statement	AND or OR?	Graph of Inequality	Written Inequality
I am thinking of a number that is greater than -8 and less than or equal to 4.			
I am thinking of a number that is at most 0 or at least 2.			
I am thinking of a number that is more than 0 and less than 10.			
I am thinking of a number that is fewer than -6 or no less than -3.			
I am thinking of a number that is less than 6 and greater than 2.			
I am thinking of a number that is less than or equal to -7 or greater than 12.