

Interval	Inequality	Graph
$[a, b]$ Closed Interval	$a \leq x \leq b$	A horizontal number line with arrows at both ends labeled $-\infty$ and ∞ . Two points, a and b , are marked on the line. At a , there is a solid blue bracket '['. At b , there is a solid blue bracket ']'.
(a, b) Open Interval	$a < x < b$	A horizontal number line with arrows at both ends labeled $-\infty$ and ∞ . Two points, a and b , are marked on the line. At a , there is a solid blue parenthesis '(' . At b , there is a solid blue parenthesis ')' .
$[a, b)$	$a \leq x < b$	A horizontal number line with arrows at both ends labeled $-\infty$ and ∞ . Two points, a and b , are marked on the line. At a , there is a solid blue bracket '[' . At b , there is a solid blue parenthesis ')' .
$(a, b]$	$a < x \leq b$	A horizontal number line with arrows at both ends labeled $-\infty$ and ∞ . Two points, a and b , are marked on the line. At a , there is a solid blue parenthesis '(' . At b , there is a solid blue bracket ']' .
$(a, +\infty)$	$x > a$	A horizontal number line with arrows at both ends labeled $-\infty$ and ∞ . A point a is marked on the line. At a , there is a solid blue parenthesis '(' . A solid blue arrow points to the right from a towards ∞ .
$[a, +\infty)$	$x \geq a$	A horizontal number line with arrows at both ends labeled $-\infty$ and ∞ . A point a is marked on the line. At a , there is a solid blue bracket '[' . A solid blue arrow points to the right from a towards ∞ .
$(-\infty, b)$	$x < b$	A horizontal number line with arrows at both ends labeled $-\infty$ and ∞ . A point b is marked on the line. A solid blue arrow points to the left from b towards $-\infty$. At b , there is a solid blue parenthesis ')' .
$(-\infty, b]$	$x \leq b$	A horizontal number line with arrows at both ends labeled $-\infty$ and ∞ . A point b is marked on the line. A solid blue arrow points to the left from b towards $-\infty$. At b , there is a solid blue bracket ']' .