

# INTERVALS



**TEXAN**  
**GLOBAL SCHOOL**  
 Global Online Learning

TYPE OF INTERVAL	NOTATION	GRAPH	DESCRIPTION
OPEN	$(a, b) = \{x \mid a < x < b\}$		The variable $x$ represents all values greater than element " $a$ " and less than element " $b$ ".
CLOSED	$[a, b] = \{x \mid a \leq x \leq b\}$		The variable " $x$ " represents all values greater than or equal to element " $a$ " and less than or equal to element " $b$ ".
MIXED	$(a, b] = \{x \mid a < x \leq b\}$		The variable $x$ represents all values greater than element " $a$ " and less than or equal to element " $b$ ".
MIXED	$[a, b) = \{x \mid a \leq x < b\}$		The variable $x$ represents all values greater than or equal to element " $a$ " and less than element " $b$ ".
INFINITE	$(a, +\infty) = \{x \mid x > a\}$		The variable $x$ represents all values greater than element " $a$ ".
INFINITE	$[a, +\infty) = \{x \mid x \geq a\}$		The variable $x$ represents all values greater than or equal to element " $a$ ".
INFINITE	$(-\infty, b) = \{x \mid x < b\}$		The variable $x$ represents all values less than element " $b$ ".
INFINITE	$(-\infty, b] = \{x \mid x \leq b\}$		The variable $x$ represents all values less than or equal to element " $b$ ".



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