DOMAIN AND RANGE NOTATION: GUIDED NOTES

Notation

Algebraically	Graphically	Interval Notation
< less than	○ open circle	( ) parenthesis
> greater than	○ open circle	( ) parenthesis
≤ less than or equal to	● closed circle	[ ] bracket
≥ greater than or equal to	● closed circle	[ ] bracket

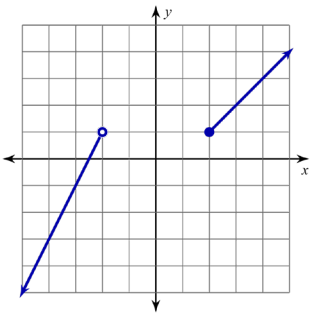
Example

Algebraic Notation	Set-Builder Notation	Interval Notation
$x \geq -4$	$\{x \mid x \in \mathbb{R},\ x \geq -4\}$	$[-4, \infty)$

Frayer Model

DOMAIN & RANGE NOTATION

Example



Algebraic Notation

$Domain: x < -2 \text{ or } x \geq 2$

$Range: All\ Real\ Numbers$

Interval Notation

reads from left to right

( ) *open interval*

[ ] *closed interval*

$Domain: (-\infty, -2) \cup [2, \infty)$

$Range: (-\infty, \infty)$

Set Notation

$\in$ *is an element of*

$\mathbb{R}$ *the set of real numbers*

$Domain: \{x \mid x \in \mathbb{R},\ x < -2 \text{ or } x \geq 2\}$

$Range: \{y \mid y \in \mathbb{R}\}$