

Interval Notation

[or (Smallest value , Biggest value) or]

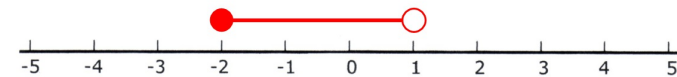
This end has either

[used if small end is a closed circle
or
(used if small end is an open circle
or an arrow.

This end has either

[used if big end is a closed circle
or
(used if big end is an open circle
or an arrow.

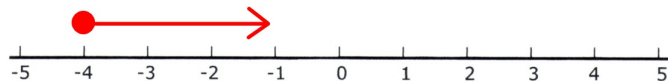
Inequality Notation vs. Interval Notation



Inequality Notation $-2 \leq x < 1$

Interval Notation $[-2, 1)$

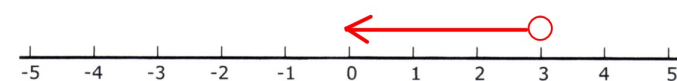
Inequality Notation vs. Interval Notation



Inequality Notation $x \geq -4$

Interval Notation $[-4, \infty)$

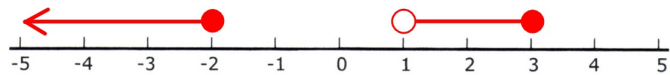
Inequality Notation vs. Interval Notation



Inequality Notation $x < 3$

Interval Notation $(-\infty, 3)$

Inequality Notation vs. Interval Notation



Inequality Notation

$$x \leq -2, \quad 1 < x \leq 3$$

Interval Notation

$$(-\infty, -2] \cup (1, 3]$$

All Real Numbers:

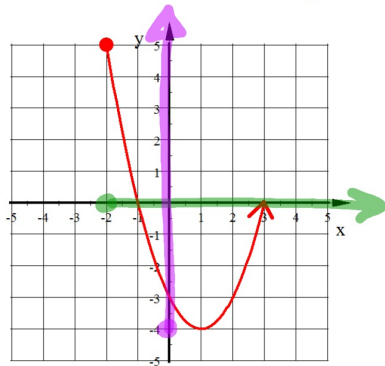
Symbol:

\mathbb{R}
 \mathcal{R}

Interval Notation:

$$(-\infty, \infty)$$

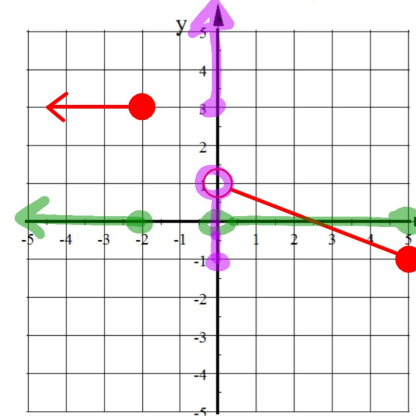
State the Domain and Range of this relation using interval notation.



Domain:
 $[-2, \infty)$

Range:
 $[-4, \infty)$

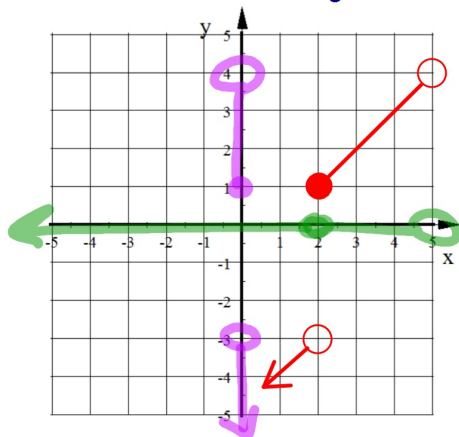
State the Domain and Range of this relation using interval notation.



Domain:
 $(-\infty, -2] \cup (0, 5]$

Range:
 $[-1, 1) \cup [3, \infty)$

State the Domain and Range of this relation using interval notation.



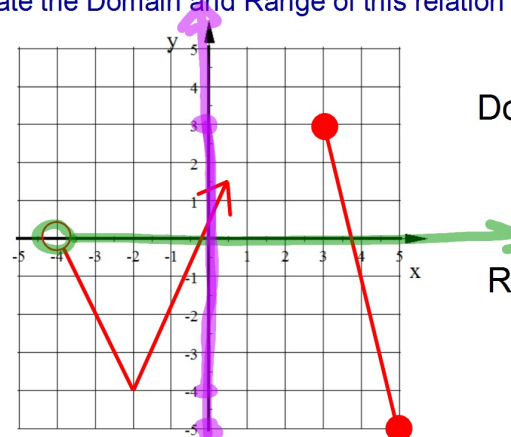
Domain:

$$(-\infty, 5)$$

Range:

$$(-\infty, -3) \cup [1, 4)$$

State the Domain and Range of this relation using interval notation.



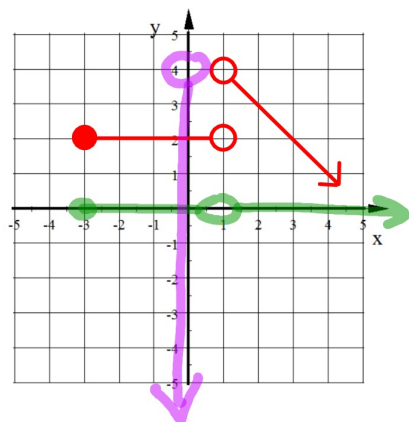
Domain:

$$(-4, \infty)$$

Range:

$$[-5, \infty)$$

State the Domain and Range of this relation using interval notation.



Domain:

$$[-3, 1) \cup (1, \infty)$$

Range:

$$(-\infty, 4)$$

You can now finish Hwk #3: Practice Sheet.

Due tomorrow