

Date: _____

4.3 Set & Interval Notation

Set Notation: A formal mathematical notation used to express a large group of numbers

Ex. $\{x|x \leq 10, x \in \mathbb{R}\}$

The set of x such that x is less than or equal to 10, where x is an element of the real numbers.

Ex. $\{y|y > 20, y \in I\}$

Ex. Write each given group of numbers in set notation:

a) All numbers equal to at least -3 .



c) All integers from -7 to 12 exclusive



Interval Notation:

- Only used for continuous number data (ie. when included values are an element of the Reals)
- uses different brackets to indicate if an interval of values is inclusive or exclusive at the ends
[or] – End values are included
(or) – End values are excluded

Ex. Express each given interval as number lines:

a) $(-4, 10)$

c) $(-7, 8]$

e) $(-\infty, -2)$

b) $[1, 15]$

d) $[0, \infty)$

Ex. Write each given group of numbers in interval notation:

a) All numbers equal to at least -3 .



c) All integers from -7 to 12 exclusive



Assignment: WS4.3 – work on sheet or separate