

April 12th

Due Today: 11.1

Due Next: 11.2

Unit 11: Function Operations

Lesson 11.2: Domain and Range

Review your notes from yesterday's class!

Interval Notation:

$(3, 10]$

$[0, 5]$

$[0, \infty)$

4, 5, 6, 7, 8, 9, 10

0, 1, 2, 3, 4, 5

0, 1, 2, 3, ...

Soft Brackets = exclusive

Hard Brackets = inclusive

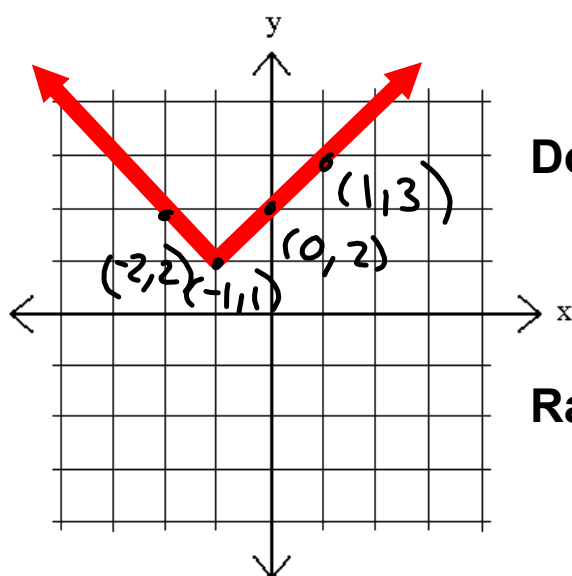
*Infinity always gets SOFT BRACKETS

Domain & Range



Domain is all of the possible x-values the function can have [inputs]

Range is all of the possible y-values the function can have [outputs]



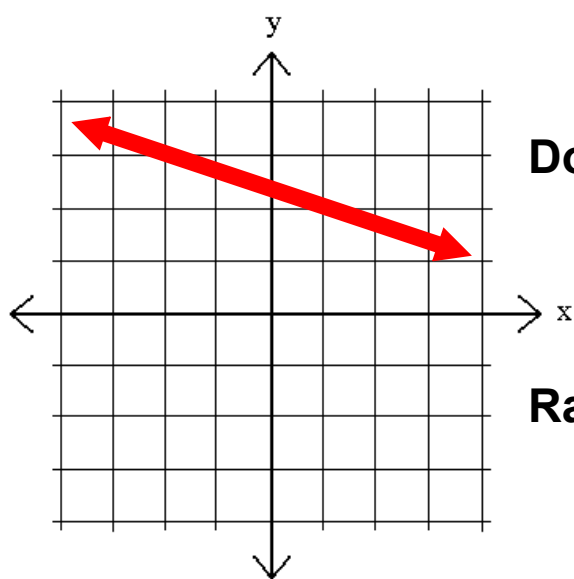
Domain (all possible X values):

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

all real #s, \mathbb{R}

Range (all possible Y values:)

$$[1, \infty)$$

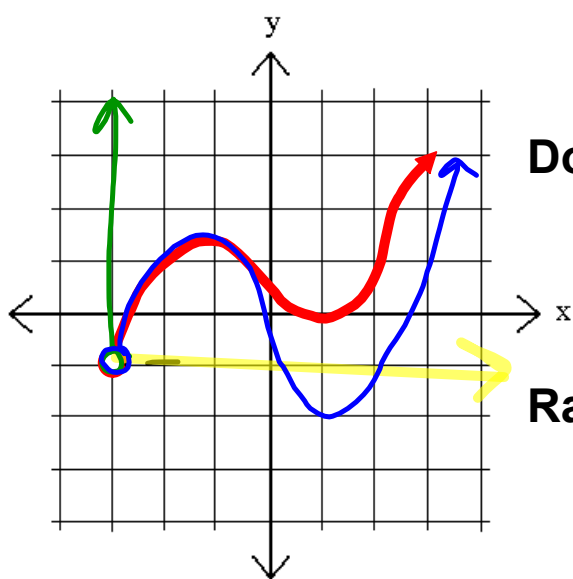


Domain (all possible X values):

\mathbb{R}

Range (all possible Y values:)

\mathbb{R}



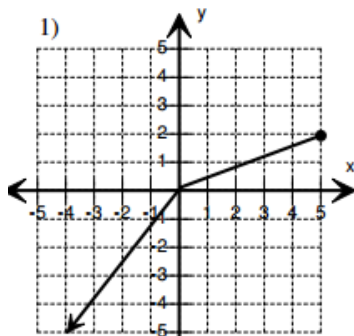
Domain (all possible X values):

$$(-3, \infty)$$

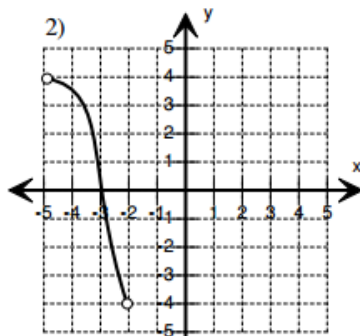
Range (all possible Y values:)

$$(-1, \infty)$$

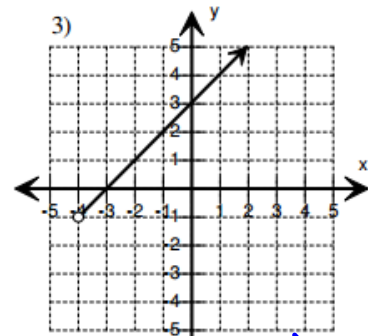
$$[-2, \infty)$$



1) Domain: $(-\infty, 5]$
 Range: $(-\infty, 2]$



2) Domain: $(-5, -1]$
 Range: $(-4, 4)$

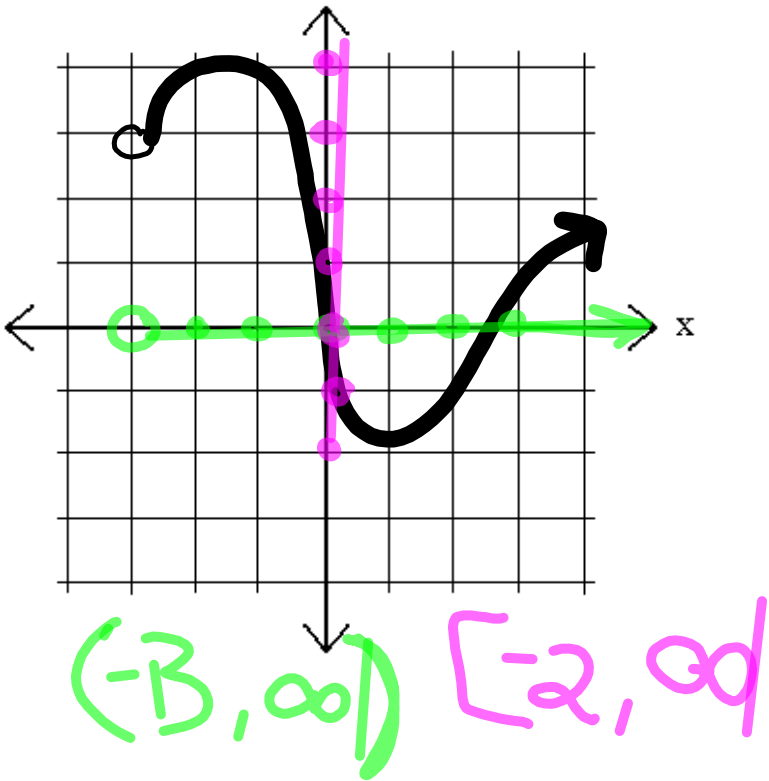


3) Domain: $(-4, \infty)$
 Range: $(-1, \infty)$

4. D: $(-\infty, 3]$
 R: $[-2, \infty)$

5. D: $(-4, 3]$
 R: $(-5, 2]$

6. D: $[-4, \infty)$
 R: $[0, \infty)$



Unit 11: Function Operations

Lesson #	Name	Recap	HW
11.1	<i>Families of Functions</i>		<i>HW 11.1</i>
11.2	<i>Domain and Range of Functions</i>		<i>HW 11.2</i>

