Domain and Range

Date:

Standards

- F.IF.2 - Use function notation, evaluate functions for inputs and outputs in their domains,
- F.IF.5 - Relate the domain of a function to its graph and, where applicable, to the real life situation it describes.

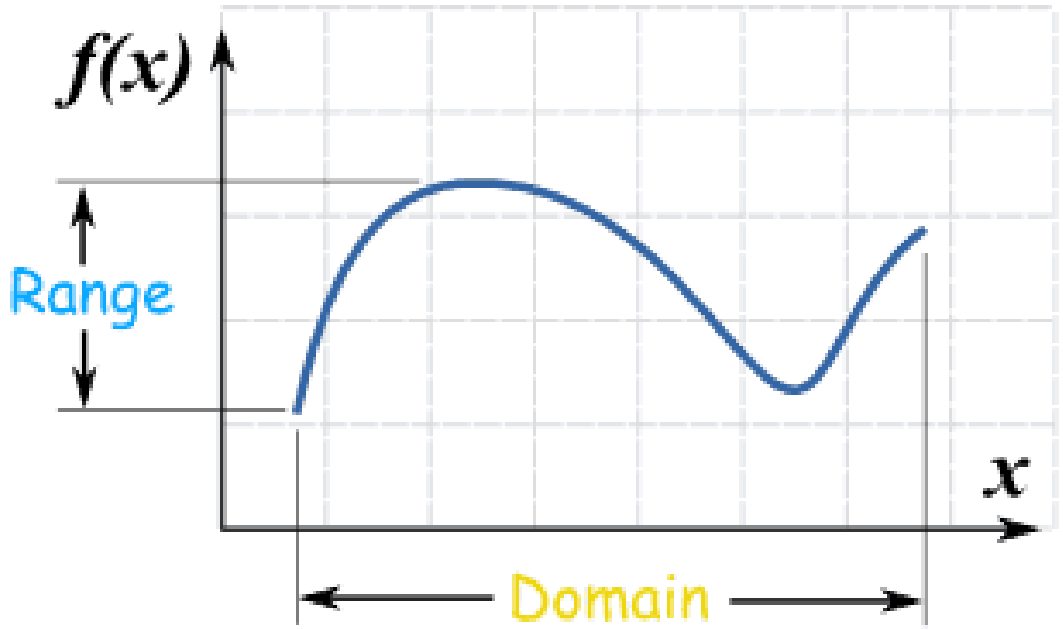
Essential Questions

- What is the Domain and Range of a function?
- How can I identify the domain/ range of a closed function?
- How can I identify the domain/range of a open function?
- How can I identify the domain/range of an infinite function?

What is the Domain and Range of a function?

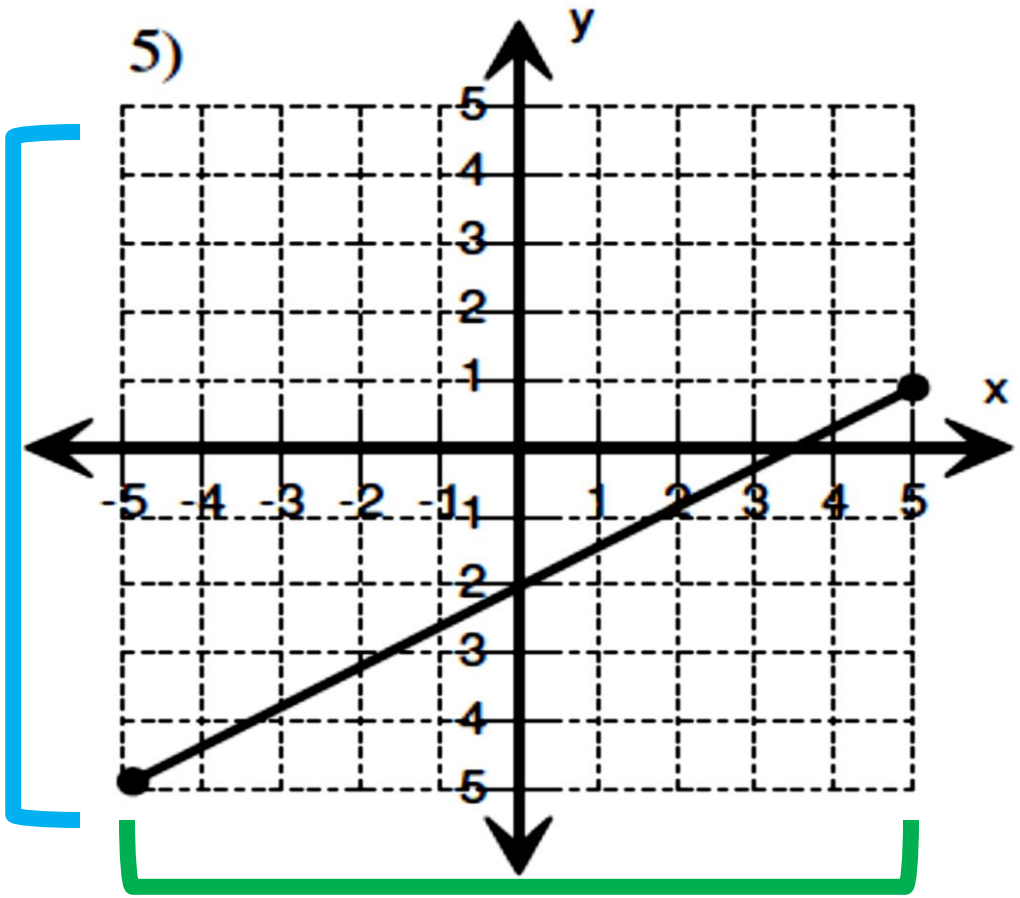
Domain: the set of all inputs or x – coordinates of a function

Range: the set of all outputs or y – coordinates of a function



How can I identify the domain/ range of a closed function?

Closed circles → [



DOMAIN

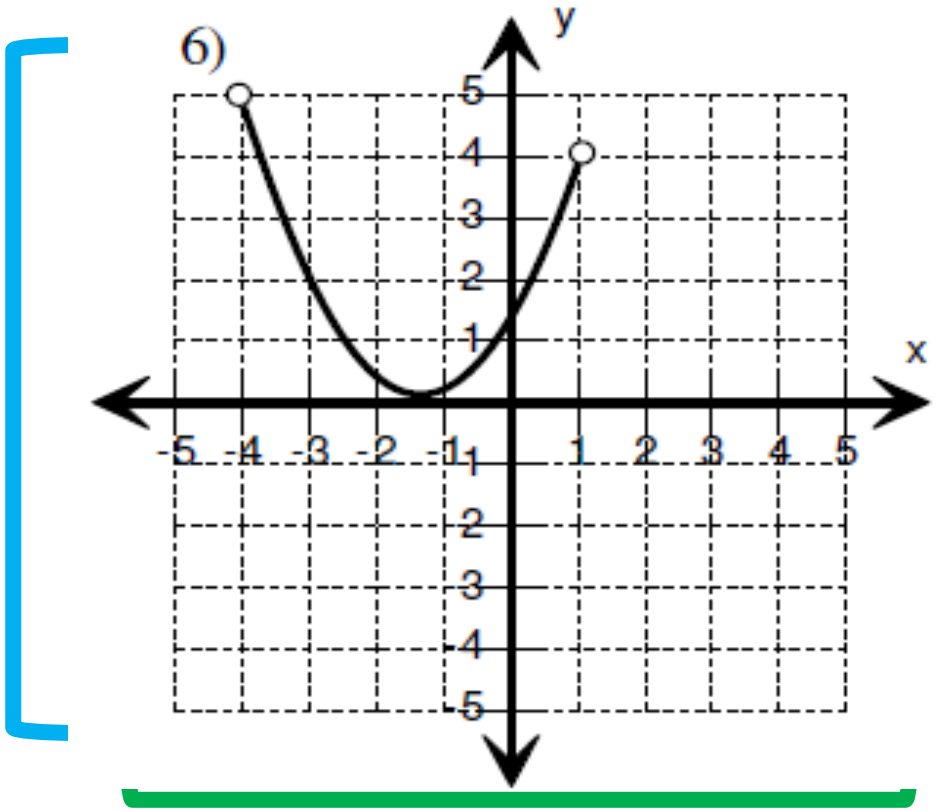
[-5 , 5]

RANGE

[-5 , 1]

How can I identify the domain/ range of a open function?

Open circles → (



DOMAIN

(-4 , 1)

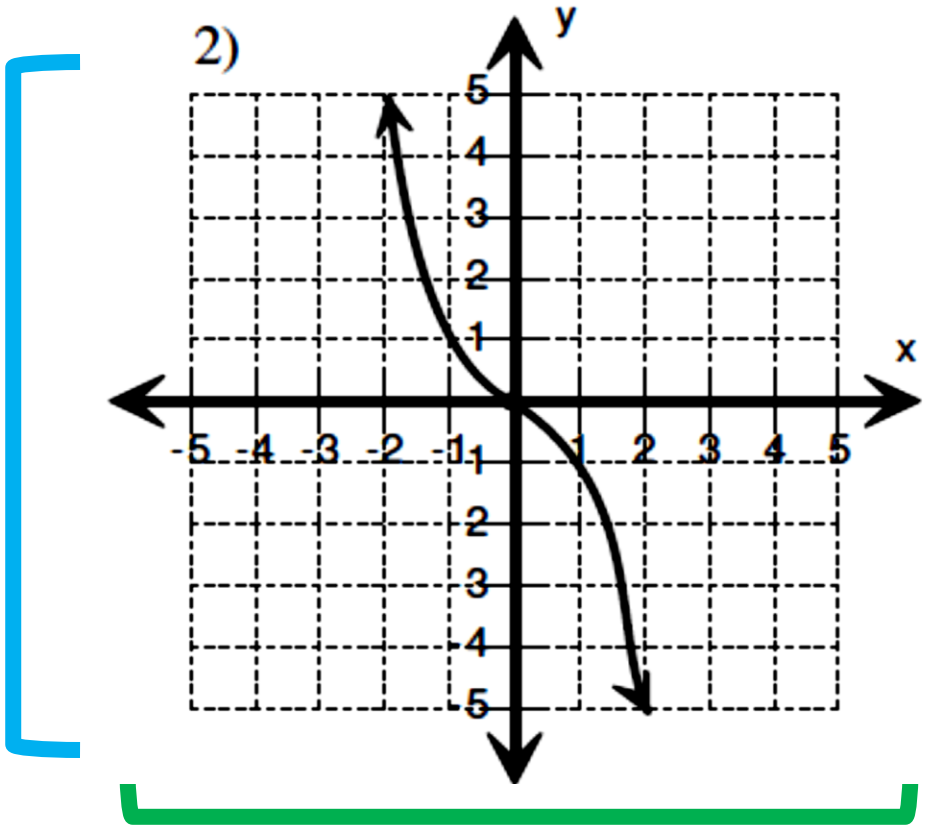
RANGE

[0 , 5)

How can I identify the domain/ range of an Infinite function?

$-\infty$: decrease without bound

∞: increase without bound



DOMAIN

$(-\infty , \infty)$

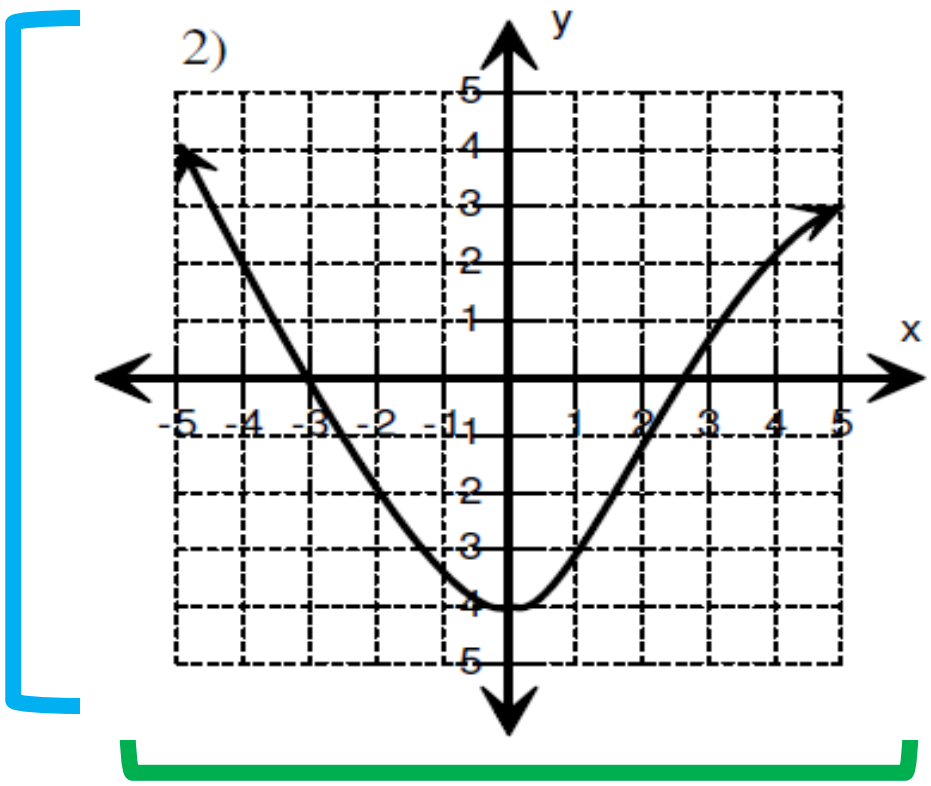
RANGE

$(-\infty , \infty)$

How can I identify the domain/ range of an Infinite function?

$-\infty$: decrease without bound

∞: increase without bound

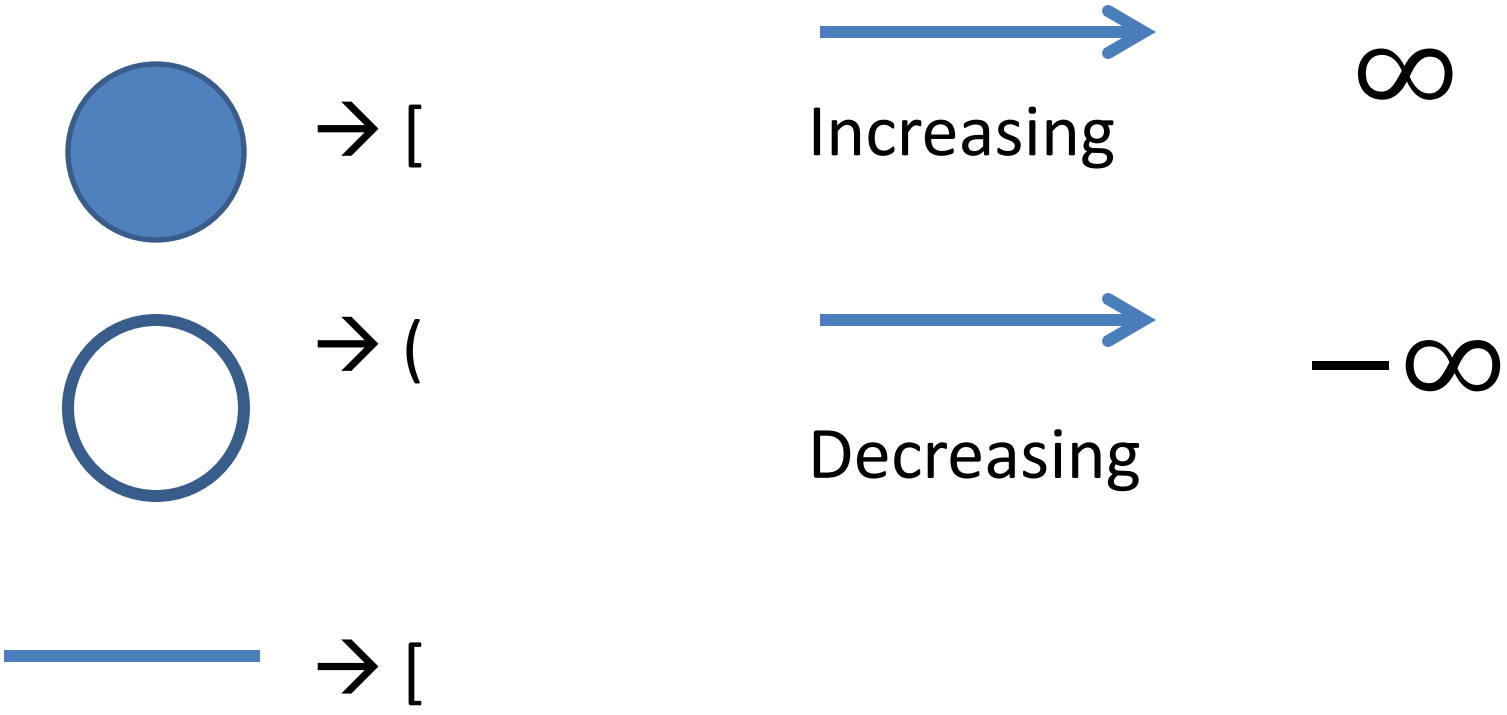


DOMAIN

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

RANGE

$$[-4\ ,\ \infty)$$


→ [
→ (
→ [
Increasing
Decreasing
∞
−∞

REFLECTION:

1) Answer one essential question.
2) How have previous lessons helped or connect with this lesson?
3) What are you still confused on or what new info did you learn?

Homework

- Handout- Domain and Range