Today's Materials

OBVI

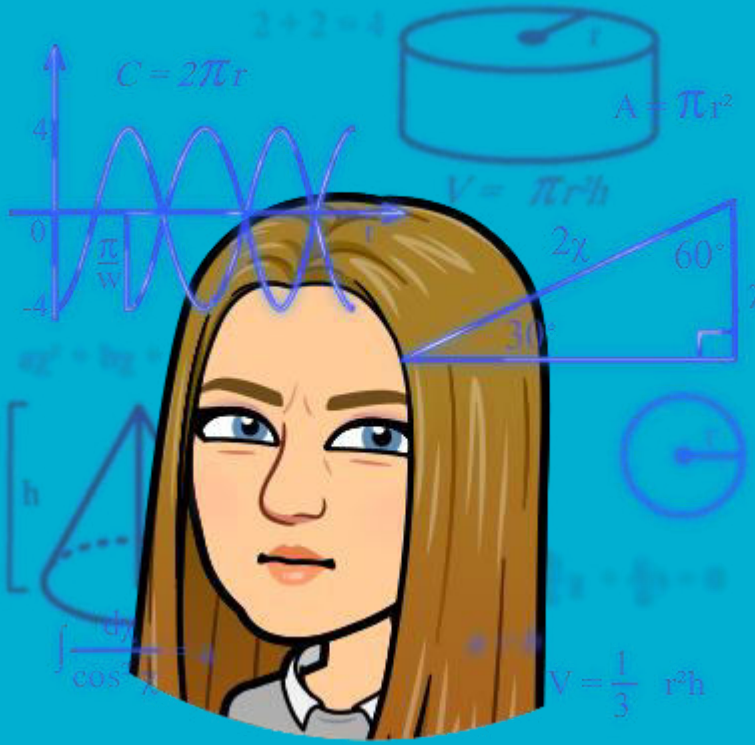
- Chromebook
- pencil
- Packet

via GIPHY

Domain and Range Part II

Lesson 11

Let's analyze graphs of functions to learn about their domain and range.!

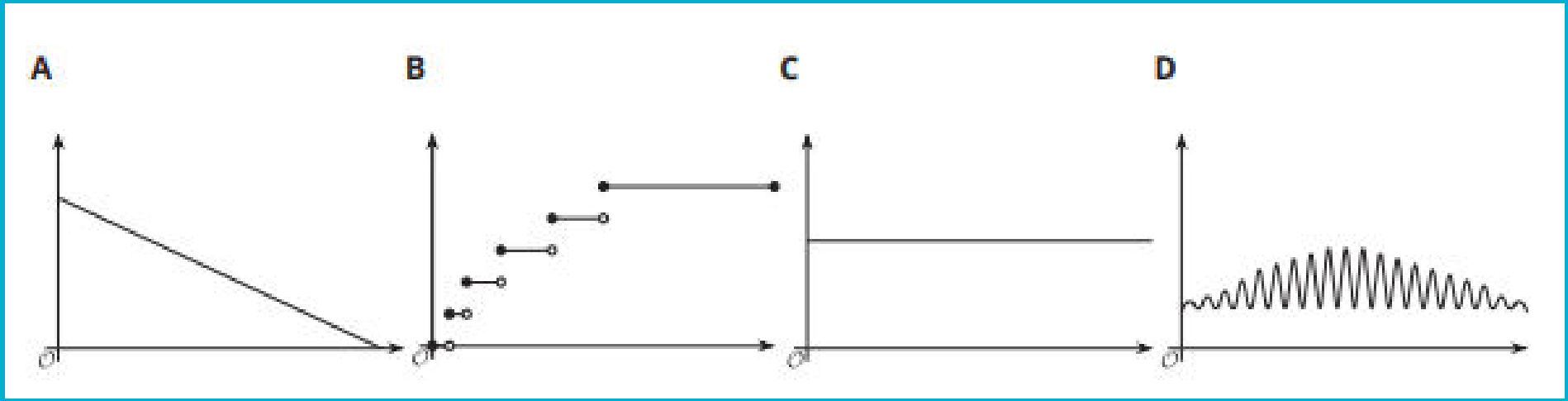


Which one doesn't belong?

Unlabeled Graphs

Warm Up Pg 6 5min

Which one doesn't belong?



Today's Goals

- When given a description of a function in a situation, I can determine reasonable domain and range for the function.

via Denyse® on GIPHY

Time on the Swing

_Pg 6

Activity 11.2

20 min

Begin with Quiet Work Time. (3 min)

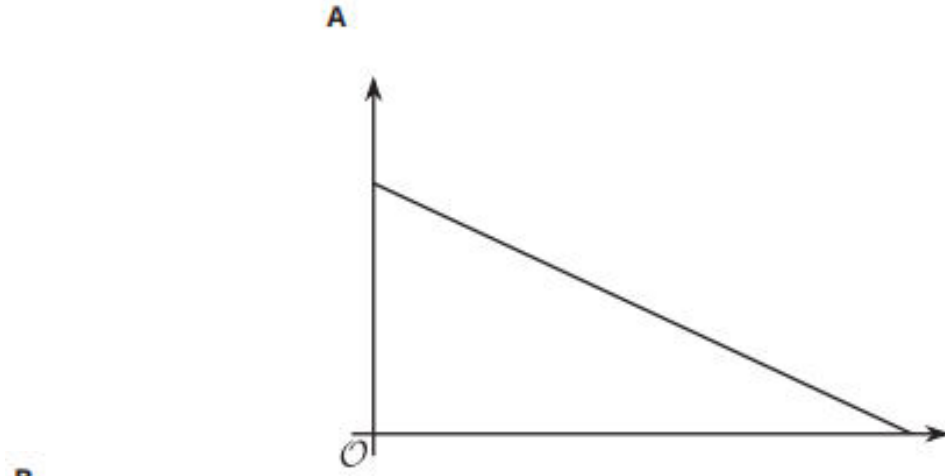
-Read the descriptions and study the graphs.

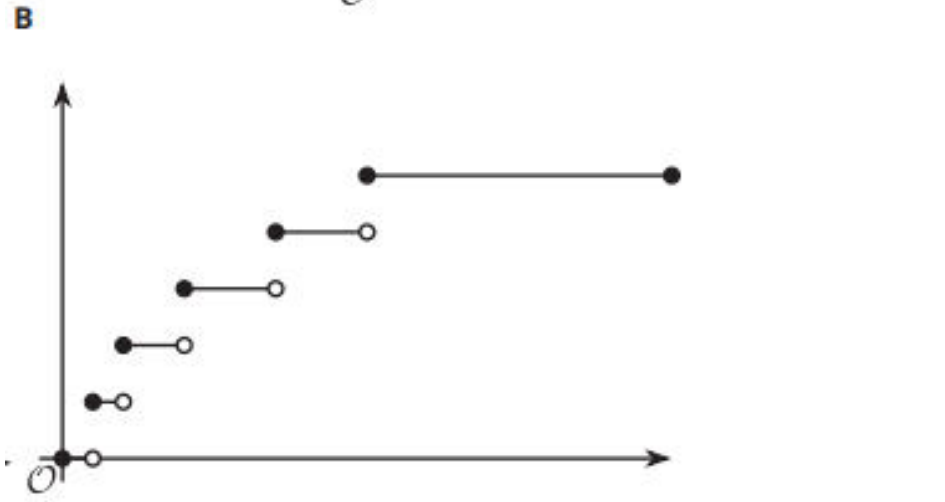
-Which description goes with which graph? Why?

-Compare your answers with your group after 3 minutes. Then *label your axes* with the appropriate variables.

Which Descriptions go with these graphs?

Why?

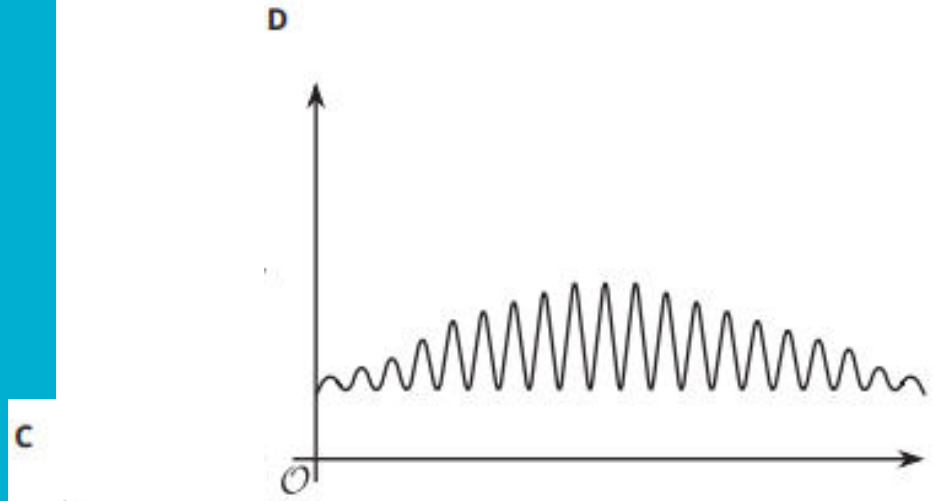


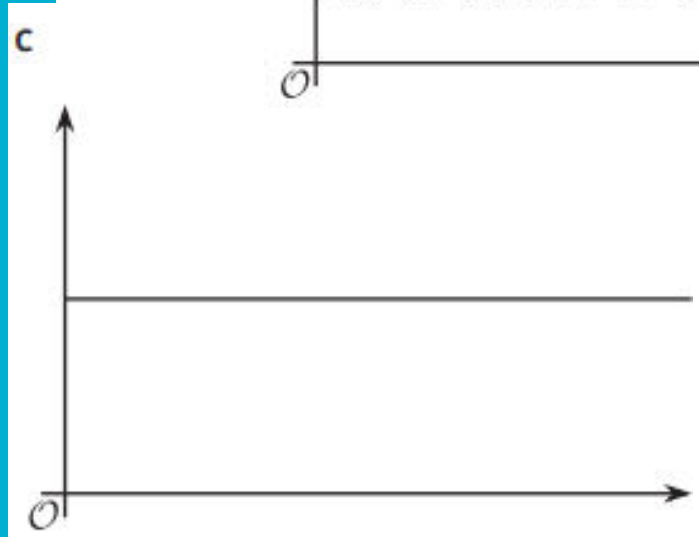


Students, write your response!

Which Descriptions go with these graphs?

Why?





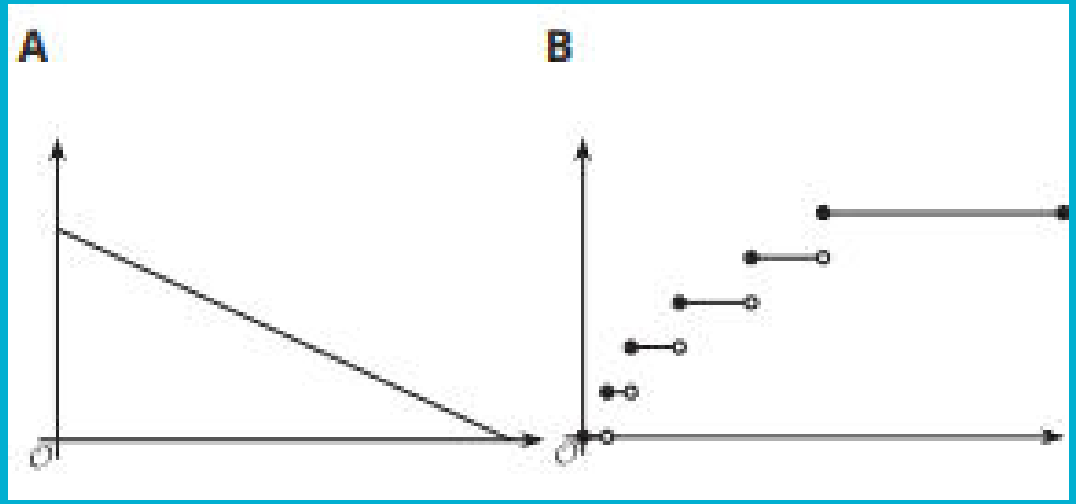
Students, write your response!

In your packet……

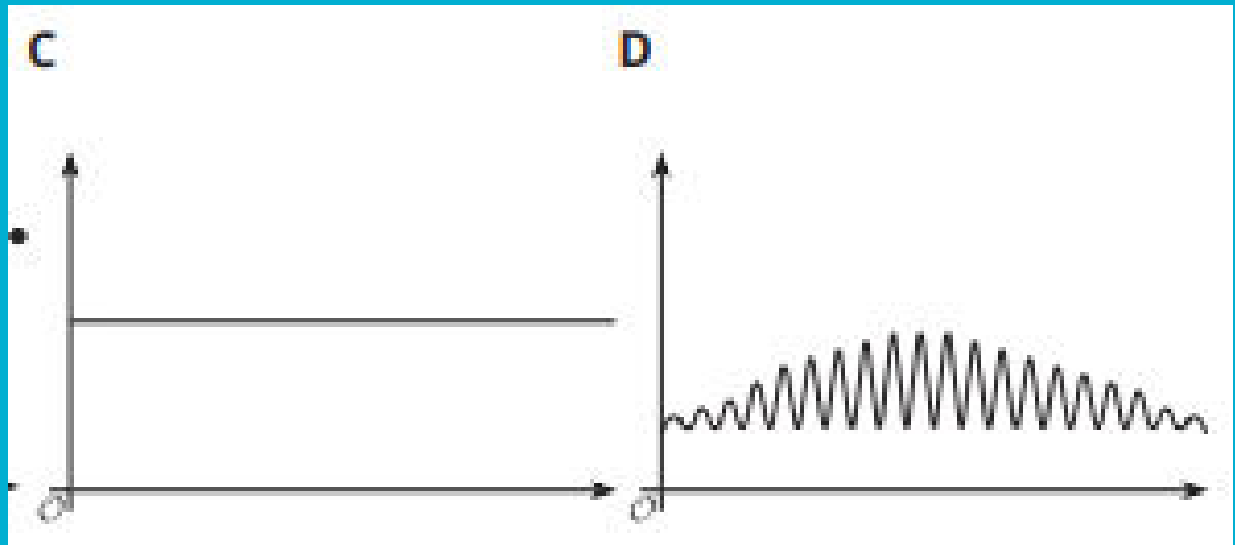
2. On each graph, mark one or two points that—if you have the coordinates—could help you determine the domain and range of the function. Be prepared to explain why you chose those points.

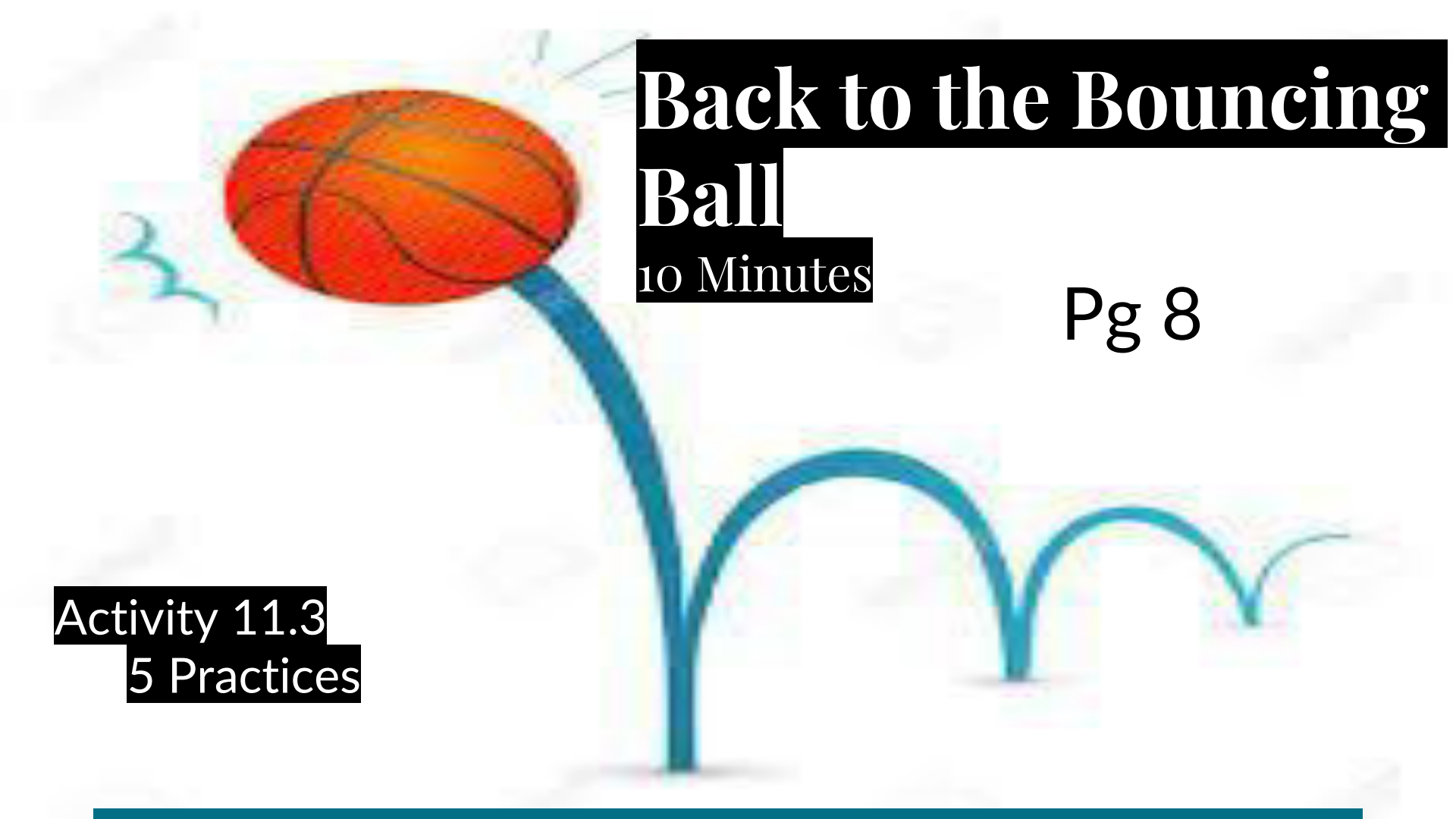
Use this information to describe the domain and range that would be reasonable for each function in this situation.

- The child is given 30 seconds on the swing.
- While the child is on the swing, an adult pushes the swing a total of 5 times.
- The swing is 1.5 feet (18 inches) above ground. The chains that hold the seat and suspend it from the top beam are 7 feet long.
- The highest point that the child swings up to is 4 feet above the ground



How'd you do???





Back to the Bouncing Ball

10 Minutes

Pg 8

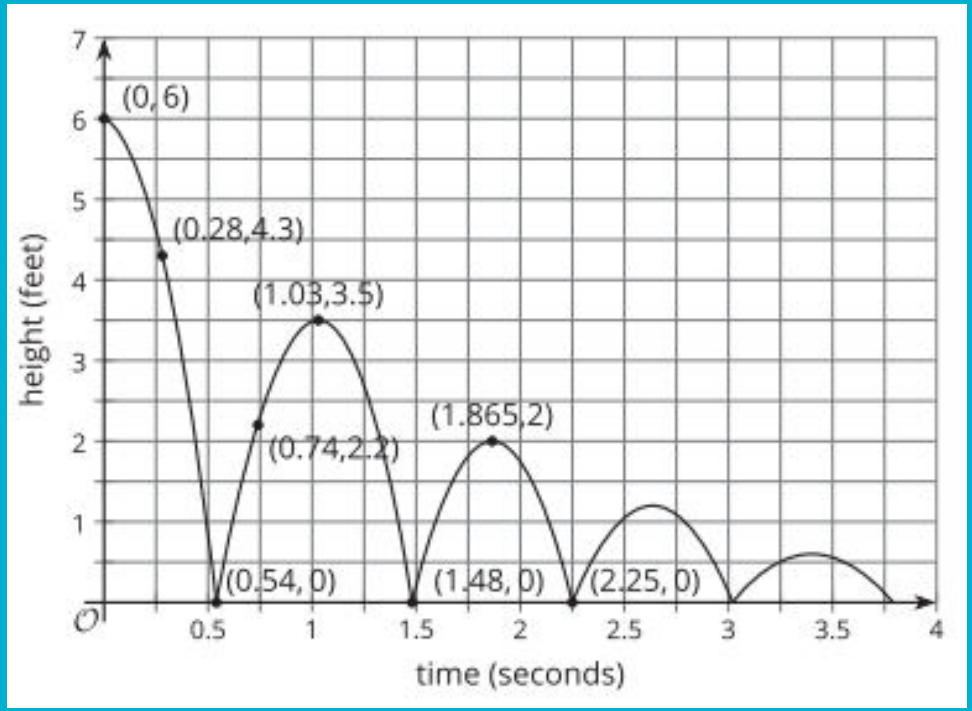
Activity 11.3
5 Practices

A tennis ball was dropped from a certain height. It bounced several times, rolled along for a short period, and then stopped. Function *H* gives its height over time

Here is a partial graph of *H*.

- Height is measured in feet.
- Time is measured in seconds.

Use the graph to help you answer questions 1-4. Be prepared to explain what each value or set of values means in this situation.



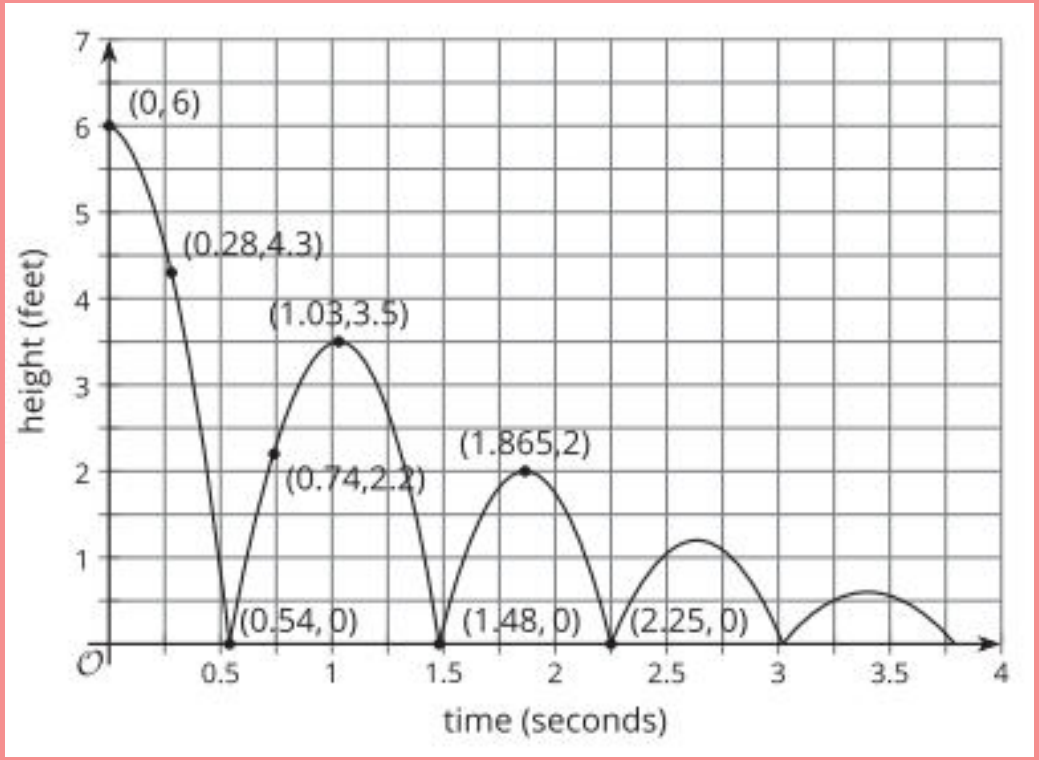
How'd it go?

1. Find $H(0)$

2. Solve $H(x) = 0$

3. Describe the domain.

4. Describe the range.



What does the domain and range tell us about the tennis ball?

The domain tells us.....

The range tells us.....

Students, write your response!

Explain

Which points on the graph would be particularly useful to help you identify the domain and range of the function?

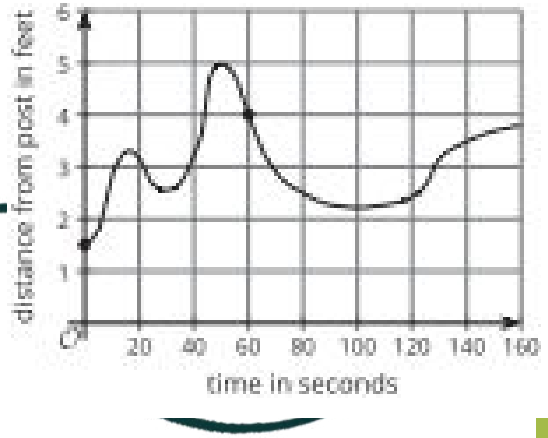
Paste image or passage here

Make connections

How are these two things connected?

Domain and Range

What connects these concepts?



Students, draw anywhere on this slide!

A Pot of Water

Cool Down
11.4
5 Min

via GIPHY