

# Lab 02

## Calculus I

12 September 2022, College of the Atlantic

- Please work in groups of two or three
- Please write your answers on this sheet, make a scan of it as a pdf, and upload it google classroom at the end of lab. Use “genius scan” or some similar scanning app. This assignment is not graded.

Names: \_\_\_\_\_

### Part I: Some Graphing Puzzles

Find a formula for each of the functions shown in the graphs below. Check your answers by plotting on wolframalpha.com. Do your best to match the vertical and horizontal scales.

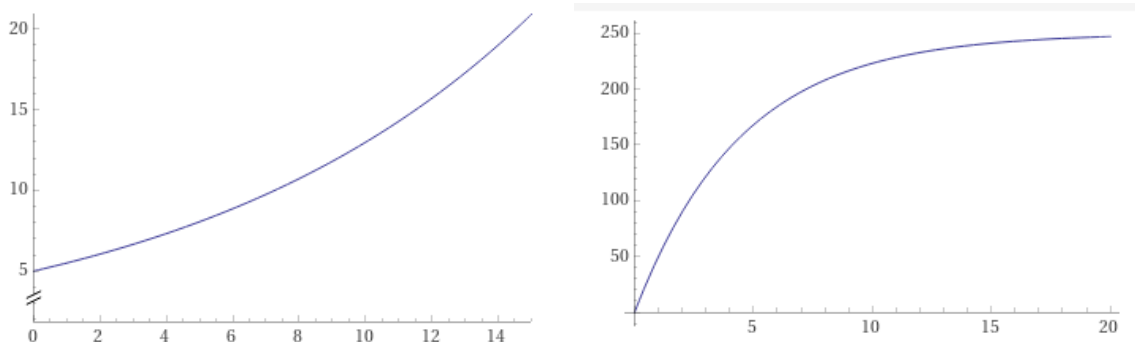


Figure 1: Two unknown functions.

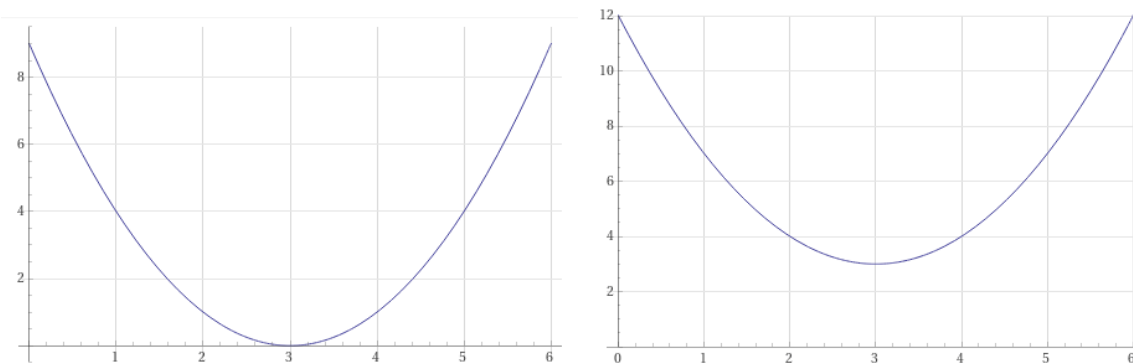


Figure 2: Two more unknown functions.

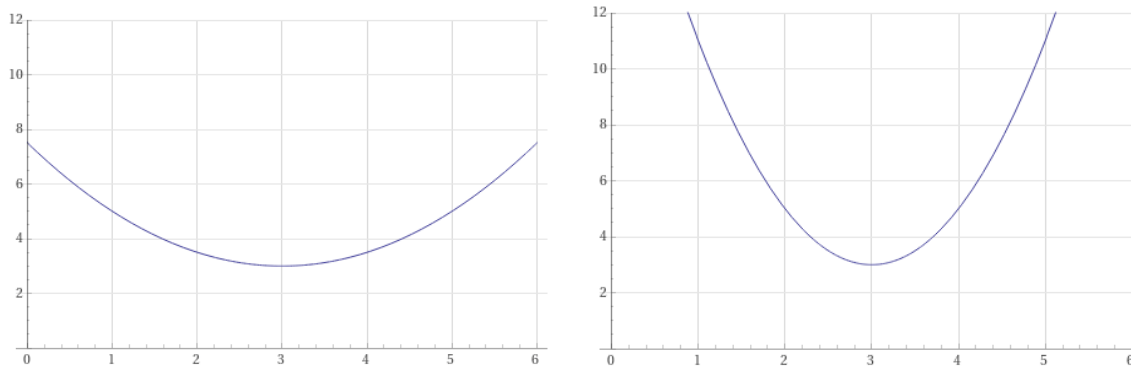


Figure 3: And two more unknown functions.

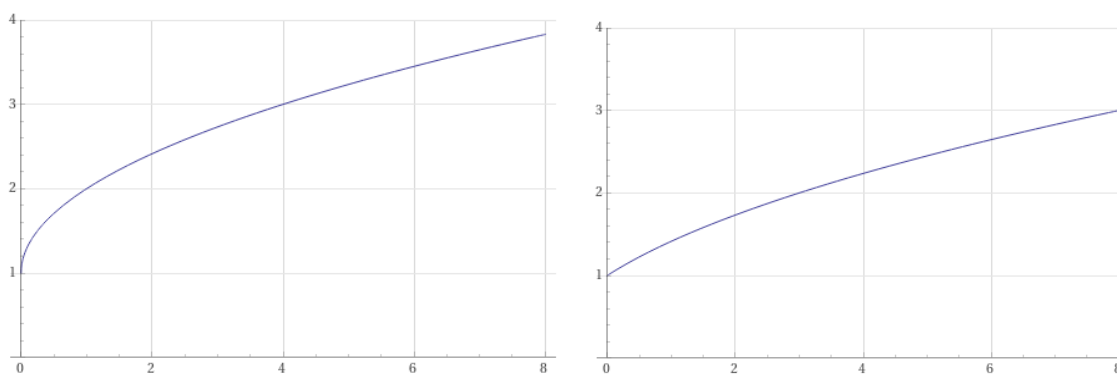


Figure 4: And the last two unknown functions.

## Part II: Do some work on your Field Guide

- Target date for field guide completion: **Friday, October 7.**
- At this point you're in a position to make the field guide for linear, exponential, and power functions. Be sure to discuss how to distinguish between functions that look similar.
- For each type of function, include one or two scientific uses for that function. I.e., an equation from physics, chemistry, biology, etc., that's an exponential, a power function, and so on.
- Spend a chunk of time working today, and also aim to spend around an hour outside of class this week working on the field guide.

A few questions:

1. How is your field guide going? Do you have any questions or concerns?
2. Do you need any more supplies?