

# MAT 21A, Fall 2021

## Homework 1

**Due before 2:10 on Wednesday, September 29**

*Please write the homework solutions in connected sentences and explain your work. Mark the answers to each question. Scan or take pictures of your homework and upload it to Gradescope before due time.*

In all problems, find the domains and sketch the graphs of the following functions. Explain how you get these graphs using shifting and scaling operations.

1.  $y = |1 - x| - 1$ .
2.  $y = \frac{1}{(x-1)^2} + 5$ .
3.  $y = 5 \sin(x) - 1$ .
4.  $y = \sqrt{1 - \frac{x}{2}}$ .