

## Group Work #5

Kerry Ojakian's MTH 30 Class

Names of Group Members (first and last):

### General Instructions:

- You may work in a group of **at most 3 students**.
- Hand in **one** assignment for your group; write each group member's full name on the assignment.

### The Assignment

1. Graph  $f(x) = \sin(x)$  in Desmos. Use Desmos (and your brain!) to do the following:
  - (a) Add an additional plot of  $g(x) = 5 \sin(x)$ . Describe how this transforms  $f(x)$  and make a rough sketch of  $f$  and  $g$  on the same axes.
  - (b) Add an additional plot of  $h(x) = \frac{1}{5} \sin(x)$ . Describe how this transforms  $f(x)$  and make a rough sketch of  $f$  and  $h$  on the same axes.
  - (c) Add an additional plot of  $A(x) = \sin(5x)$ . Describe how this transforms  $f(x)$  and make a rough sketch of  $f$  and  $A$  on the same axes.
  - (d) Add an additional plot of  $B(x) = \sin(\frac{1}{5}x)$ . Describe how this transforms  $f(x)$  and make a rough sketch of  $f$  and  $B$  on the same axes.

