

# Math 3B

# Quiz 2

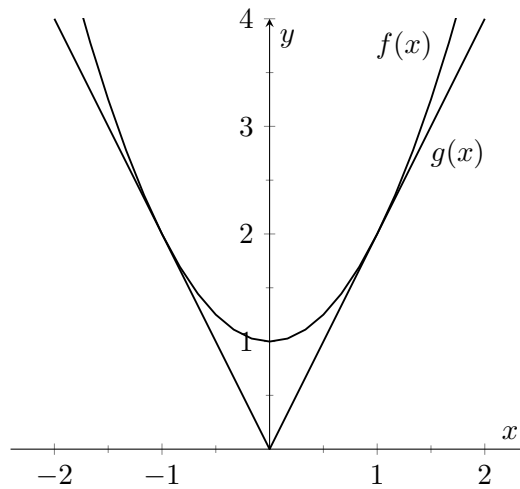
Name: \_\_\_\_\_

Section Time: \_\_\_\_\_

Complete the following problems, making sure to **SHOW ALL WORK**. If you're stuck on something, **CLEARLY EXPLAINING** what you do know or what you would do will get you partial credit!

1. Consider the following functions and their accompanying graphs.

$$f(x) = x^2 + 1, \quad g(x) = |2x|, \quad -\infty < x < \infty$$



- Find the points of intersection of  $f(x)$  and  $g(x)$  algebraically. Express each point of intersection as an ordered pair  $(x, y)$ .
- Find the area bounded by the curves  $f(x)$  and  $g(x)$ .