

Name: _____

This quiz covers: 5.1, 5.2, and 5.3.

Directions: Complete all questions and **show all applicable work.** Partial credit will be given. All questions are equally weighted.

1.) Find the area under the curve of $f(x) = |x|$ on the interval $[-1, 2]$. Drawing a sketch and exploiting simple geometry may be useful.

2.) Evaluate the following integral:

$$\int_{-\pi}^{\pi} \sin x \, dx$$

3.) Using right endpoints and 4 boxes, approximate the area under the curve of $f(x) = \sqrt{x}$.