

APPM 1360

Spring 2022

Quiz 8

4/5/2022

Time Limit: 10 Minutes

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

Recitation Section: \_\_\_\_\_

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1. (10 points) The power series for  $\sin x$  is  $\sum_{n=0}^{\infty} \frac{(-1)^n}{(2n+1)!} x^{2n+1}$ . Evaluate the definite integral as a power series

$$\int_0^2 \frac{\sin x}{x} dx$$

Your solution should be a series, but you need not evaluate the series.