**APPM 1360** **Name:** _____
**Spring 2022**
**Quiz 8**
**4/5/2022**
**Time Limit: 10 Minutes** Recitation Section: _____

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

$$\int_{-1}^{0} \frac{\sin x}{x}\, dx$$

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