

WRITE YOUR NAME:

MAC 2312 WRITTEN HOMEWORK #12

Due Tuesday April 16th, in Canvas

Question 1. Find the degree 3 Taylor polynomial centered at 0 for the function $\arcsin(x)$. Use this to estimate $\arcsin(0.1)$, and compare this with the answer given by a calculator or computer.

Question 2. Evaluate the limit using Taylor series.

$$\lim_{x \rightarrow 0} \frac{3 \arcsin x - 3x}{x^3}$$