MATH102, Section 1
Spring 2018, Term 172
Instructions: Show Your Work!

Quiz 3
Version A

1. (5 pts) Use the method of cylindrical shells to write (*DO NOT EVALUATE*) an integral for the volume of the solid generated by rotating the region bounded by the curves

$$y = -x^2 - x \quad \text{and } y = 0$$

about the line $x = 1$.

2. (5 pts) Find the average value of the function

$$f(x) = \sin^{-1} x$$

on the interval $[0, 1]$.