

Math 132 - Quiz 2 (IC)

January 30, 2020

Name _____

Score _____

Show all work to receive full credit. Supply explanations when necessary.

1. (3 points) The 1st quadrant region bounded by the graphs of $y = x^3 + 1$, $x = 0$, $x = 1$, and $y = 0$ is rotated about the x -axis to form a solid. Sketch the region. Then find the volume of the solid.

Math 132 - Quiz 2 (TH)

January 30, 2020

Name _____

Score _____

Show all work to receive full credit. Supply explanations when necessary. This quiz is due no later than 3:15pm on February 4.

1. (2 points) The base of a solid is the 1st quadrant region bounded by the graphs of $y = x$, $x = 1$, and $y = 0$. The cross sections perpendicular to the x -axis are squares. Find the volume of the solid.

Turn over.

2. (5 points) The bounded region between the graphs of $f(x) = 9 - x^2$ and $g(x) = x + 3$ is rotated about the line $y = -1$ to form a solid. Find the volume of the solid.