

MATH 2300: Honors Calc 2

Oct 3, 2014

Quiz 3

I have neither given nor received unauthorized assistance on this exam.

Name (print): _____

Signature: _____

DO NOT WRITE IN THIS BOX!

Problem	Points	Score
1	25 pts	
2	25 pts	
3	25 pts	
4	25 pts	
TOTAL	100 pts	

1. Find the volume of the solid formed by revolving the region bounded by x-axis and the function $y = x^3 - 3x^2 + 2x$ around the y-axis.

2. Find the volume of the solid formed by revolving the region bounded by $y = \sin[x]$ and the x-axis over the interval $[0, 2\pi]$ around the line $y = -2$.

3. What is the length of the curve $y = \ln[\cos[x]]$ over $0 < x < \frac{\pi}{3}$?

4. Set up the integral to find the volume of the solid whose base is a disk of radius 2 and whose cross-sections are equilateral triangles. You do NOT need to evaluate the integral.