QUIZ 3 - MATH 152

Friday, September 13

YOUR NAME:_____

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Read each problem **very carefully** before starting to solve it and do only what is asked. Each problem is worth around 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. [6 points] Use the washer method to compute the volume of the solid resulting by revolving the region under $f(x) = \sqrt{x}$, from $x = 0$ to $x = 4$, around the y-axis.

2. [6 points] The figure shows the region under $f(x) = x^4 - 2x^2 + 1$ over $[0, 1]$. Find the volume of the solid resulting from rotating the region around $x = -2$.