

Quiz #6, 2/29

Math 157 (Calculus II), Spring 2024

Problem 1 is worth 5 points, and Problem 2 is worth 5 points, for a total of 10 points. Remember to *show your work* on all problems!

1. Compute the arc length of the curve $y = \frac{2}{3}x^{3/2}$ from $x = 0$ to $x = 1$.

2. Compute the surface area of the surface obtained by rotating the curve $y = \frac{1}{3}x^3$ from $x = 0$ to $x = 1$ about the x -axis.