

The majority of the credit you receive will be based on the completeness and the clarity of your responses. **Show all of your work and justify your solutions as much as possible.**
This is a 15 minute quiz and has 2 questions, for a total of 10 points

(5 points) 1. Find the arc length of the function $f(x) = \frac{1}{2}(e^x + e^{-x})$ on the interval $0 \leq x \leq 2$.

(5 points) 2. Find the surface area of the object obtained by rotating the region bounded by the curve $y = \sqrt{4 - x^2}$ and the x -axis on the interval $[-1, 1]$ about the x -axis.