

QUIZ 4 - MATH 152

Friday, October 4

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] Compute the improper integral

$$\int_0^{\infty} \frac{x}{\sqrt{1+x^2}} dx.$$

2. [6 points] Compute the the length of the arc on

$$f(x) = x^{3/2}$$

over the interval  $[1, 2]$ .