

# QUIZ 10 - MATH 152

Friday, November 22

YOUR NAME: \_\_\_\_\_

George Voutsadakis

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 area under the curve

$$\begin{cases} x &= t^3 \\ y &= t^2 - 2t + 4 \end{cases}, \quad 0 \leq t \leq 2.$$

2. [6 points] Find the length of the path described by

$$\begin{cases} x &= t^3 + 1 \\ y &= t^2 - 3 \end{cases}, \quad 0 \leq t \leq 1.$$