

QUIZ 4 - MATH 152

Friday, September 29

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] Use the trig substitution method to evaluate the integral

$$\int \frac{\sqrt{x^2 + 16}}{x^4} dx.$$

2. [6 points] Use the method of partial fractions to evaluate the integral

$$\int \frac{x^2 + x + 7}{(x - 1)(x + 2)^2} dx.$$