# QUIZ 3 - MATH 152

YOUR NAME:⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯

George Voutsadakis

Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. Factor completely the polynomial $x^3 - 3x^2 + x - 3$.

2. Decompose the fraction $\frac{4x^2 - 7x + 5}{x^3 - 3x^2 + x - 3}$ into partial fractions.

3. Compute the integral $\int \frac{4x^2 - 7x + 5}{x^3 - 3x^2 + x - 3} dx$.