Quiz #2

Student Name: Student ID:

1. Determine the real root of f (x) = 4x³ − 6x² + 7x − 2.3. Using bisection to locate the root. Employ initial guesses of x_l = 0 and x_u = 1 and iterate until the estimated error ε_a falls below a level of ε_s = 10%.

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2. Determine the highest real root of $f(x) = 2x^3 - 11.7x^2 + 17.7x - 5$. Using Newton-Raphson method (three iterations, $x_0 = 3$).