

Numerical Methods - HW6

Q1: Gaussian Elimination with Pivoting Result

$$x_1 = -0.901637$$

$$x_2 = 0.052399$$

$$x_3 = 0.065248$$

$$x_4 = -4.073574$$

Q2: Inverse of Matrix A

$$0.279693 \quad -0.080460 \quad -0.038314 \quad 0.015326$$

$$-0.080460 \quad 0.379310 \quad -0.057471 \quad 0.022989$$

$$-0.038314 \quad -0.057471 \quad 0.210728 \quad -0.084291$$

$$0.015326 \quad 0.022989 \quad -0.084291 \quad 0.233716$$

Q3: Crout Factorization Result

$$x_1 = 0.527265$$

$$x_2 = 0.418205$$

$$x_3 = 1.218119$$

$$x_4 = -0.072562$$