## **Assignment 4**

## DUE: Monday, April 8th, 2024

## **Fundamentals of Matrix Computations, Third Edition**

**Question 1** Exercise 3.4.22 page 231 Let v\_1 ...

**Question 2** Exercise 3.4.27 page 234 Count the flops ...

**Question 3** Exercise 3.4.28 page 235 Use several different ...

**Question 4** Exercise 4.1.14 and 4.1.15, page 261 Show that the equations

Question 5 Exercise 4.2.20, page 271

Use MATLAB to generate ...

**Question 6** Exercise 4.3.4 and Exercise 4.3.8 pages 277-278

Show that if ...

**Question 7** Exercise 4.3.9 page 278

Work this exercise using ...

$$N(A) = \{v_{r+1}, v_{r+2}, ..., v_{m}\}, r=rank(A)$$

**Question 8** Exercise 4.3.10 page 278

MATLAB's pinv command ...

**Question 9** see Document Q9!