

NUMERICAL ANALYSIS EXERCISE SETS

M. AUTH

All problems from sections in "A First Course in Numerical Methods" SIAM, by Uri M. Ascher and Chen Greif, unless otherwise indicated ("Computational Physics" and "Calculus in Context"). Read all assigned sections and Chapters.

There is a link for a reduced price link of the text "First Course in Numerical Analysis" on our course webpage. This reduced price is for CCNY students only. There are free links to other two texts, "Computational Physics" and "Calculus in Context", on our webpage.

There is a link to Gilbert Strang's linear algebra videos from MIT on our coursepage.

- Ch. 2 (Computational Physics) Read all do exercises: 2.2, 2.7, 2.8, 2.9, 2.11.
- Ch. 3 (Computational Physics) Read p.88 – 98 do exercise 3.2a
- 1.1 (Calculus in Context) Exercises: 15 – 19
- 1.3 (Calculus in Context) Exercises: 3 – 24
- 2.1 (Calculus in Context) Exercises: 1 – 9
- 2.2 (Calculus in Context) Exercises: 1, 2, 11
- Ch. 1 Exercises: 2 – 5.
- 2.1 Exercises: 1, 2.
- 3.1 – 3.4 Exercises: 0 – –5.
- 4.1 Exercises: 2, Videos: (6, 9, 21, 22).
- 4.2 Exercises: 4, 6.
- 4.3 Exercises: 8 – –11, Videos: (14, 15, 25).
- 4.4 Exercises: 14, 16(a), Videos: (29).
- 5.1 Exercises: 1, 2, Videos: (1 – 3).
- 5.2 Exercises: 3, 4, Videos: (4).
- 5.3 Exercises: 5, 6, 7, Videos: (5).
- 5.5, 5.8
- 6.1 Exercises: 1, 2, 4, Videos: (16).
- 6.2 Exercises: 6, 7, Videos: (17).
- 7.1, 7.2 Exercises: 3, 6 – 8.
- 8.1 Exercises: 1 – 3, 5, Videos: (21).
- 8.2 Exercises: 8, 10, Videos: (29).