

Semester II (2025-2026) January 18, 2026 – June 18, 2026 Exercises

Math 107(Vectors and Matrices)

Books: Elementary Linear Algebra by H. Anton and C. Rorres, 11th Edition (Application Version) and
Calculus by E W Swokowski, M Olinik and D Pence 6th Edition

Chapter 1: System of Linear Equations and Matrices

- 1.1. 1,14,16,21,26
- 1.2. 5,6,8,17,18,26,28
- 1.3. 2,6,16,24
- 1.4. 16,17,22,28
- 1.5. 12,15,18,22
- 1.6. 5,8,16,18,20
- 1.7. 8,25,26,28,42

Chapter 2: Determinants

- 2.1. 2,4,10,14,16,18
- 2.2. 2,11,16,18,20,23,30
- 2.3. 4,5,10,18,23,26,29

Chapter 10: Vectors and Surfaces

- 10.1. 8, 10, 11,20,24,26,30,32,34
- 10.2. 6,9,10,14,18,20,24,26,28
- 10.3. 5,10,12,14,16,18,23,24,26,27,28,35,36,37,38
- 10.4. 8,10,12,14,18,20,23
- 10.5. 6,9,10,12,16,18,20,23,25,26,28,31,34,42,44,48,51,54,56,58,60,62.
- 10.6. 9-20, 23,25,28,30,32,34,36

Chapter 11: Vector-Valued Functions

- 11.1. 3, 11,21,23,24
- 11.2. 1-8, 18, 20, 22, 30, 33, 36
- 11.3. 9, 13, 16
- 11.4. 2,6,8,11,18,20,42,46
- 11.5. 4, 7, 9

Chapter 12: Partial Differentiation

- 12.1. 1-6
- 12.2. 5,8,11,14,15,20,22,26,32
- 12.3. 6, 7,10,16,24,34,37,42,44,51,58
- 12.4. 7,20,22,24
- 12.5. 1, 6, 9,12,16,19,23,34,37,40,41,42
- 12.6. 4,8,12,14,29,32
- 12.7. 2,5,10
- 12.8. 1-16
- 12.9. 1-11