

**MATH 313: LINEAR ALGEBRA
HOMEWORK, FALL 2018**

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Chapter 1: Linear Equations in Linear Algebra

- **Sect. 1.1:** 1, 3, 5, 9, 11, 13, 15, 29, 31.
- **Sect. 1.2:** 1, 3, 5, 9, 11, 15, 17, 21, 23, 25.
- **Sect. 1.3:** 1, 5, 7, 9, 11, 13, 15, 21, 29.
- **Sect. 1.4:** 1, 3, 5, 7, 9, 11, 13, 15, 17, 26, 39.
- **Sect. 1.5:** 1, 3, 7, 11, 13, 15, 17, 19, 21, 23, 27, 33.
- **Sect. 1.7:** 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 27, 29, 33, 37.
- **Sect. 1.8:** 1, 3, 7, 11, 15, 21, 27, 31, 33.
- **Sect. 1.9:** 1, 3, 5, 7, 13, 15, 19, 21, 25, 27, 33, 35.

Chapter 2: Matrix Algebra

- **Sect. 2.1:** 1, 3, 5, 7, 11, 13, 15, 25, 29.
- **Sect. 2.2:** 1, 3, 7, 13, 15, 19, 29, 31, 35.
- **Sect. 2.3:** 3, 5, 7, 11, 13, 19, 21, 23, 33.

Chapter 3: Determinants

- **Sect. 3.1:** 1, 3, 9, 13, 15, 19, 21, 23, 33, 34, 35, 37.
- **Sect. 3.2:** 5, 7, 11, 13, 15, 17, 19, 21, 25, 27, 33, 39.

Chapter 4: Vector Spaces

- **Sect. 4.1:** 1, 3, 5, 7, 11, 13, 15, 17, 21.
- **Sect. 4.2:** 1, 3, 5, 7, 9, 11, 15, 17, 23, 31, 33.
- **Sect. 4.3:** 1, 3, 5, 7, 9, 13, 15, 19, 21, 23, 24.
- **Sect. 4.4:** 1, 3, 5, 7, 9, 11, 13, 17, 27.
- **Sect. 4.5:** 1, 5, 11, 13, 15, 19, 21, 29.

Chapter 5: Eigenvalues and Eigenvectors

- **Sect. 5.1:** 1, 3, 5, 7, 9, 11, 15, 17, 19, 21, 23, 25, 27.
- **Sect. 5.2:** 1, 3, 9, 11, 15, 17, 19, 21
- **Sect. 5.3:** 1, 3, 5, 11, 13, 17, 21, 23, 25, 27.

- **Sect. 5.5:** 1, 3, 5, 6, 13.

Chapter 6: Orthogonality and Least Squares

- **Sect. 6.1:** 1, 3, 5, 7, 9, 13, 15, 17, 19, 25, 27, 29, 31.
- **Sect. 6.2:** 1, 3, 5, 9, 13, 15, 21, 27, 29.
- **Sect. 6.3:** 1, 3, 5, 7, 11, 13, 15, 17, 21.
- **Sect. 6.4:** 1, 3, 5, 7, 9, 11, 17.
- **Sect. 6.5:** 1, 3, 5, 7, 9, 11, 17.