

Numerical Analysis

EIGHTH EDITION

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CHAPTER

7

Iterative Techniques in Matrix Algebra



Figure 7.1

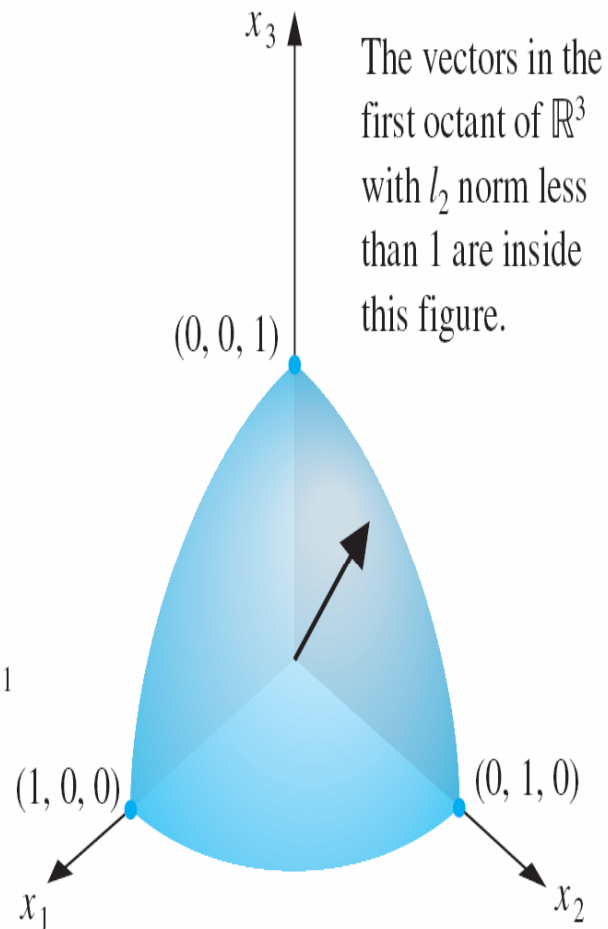
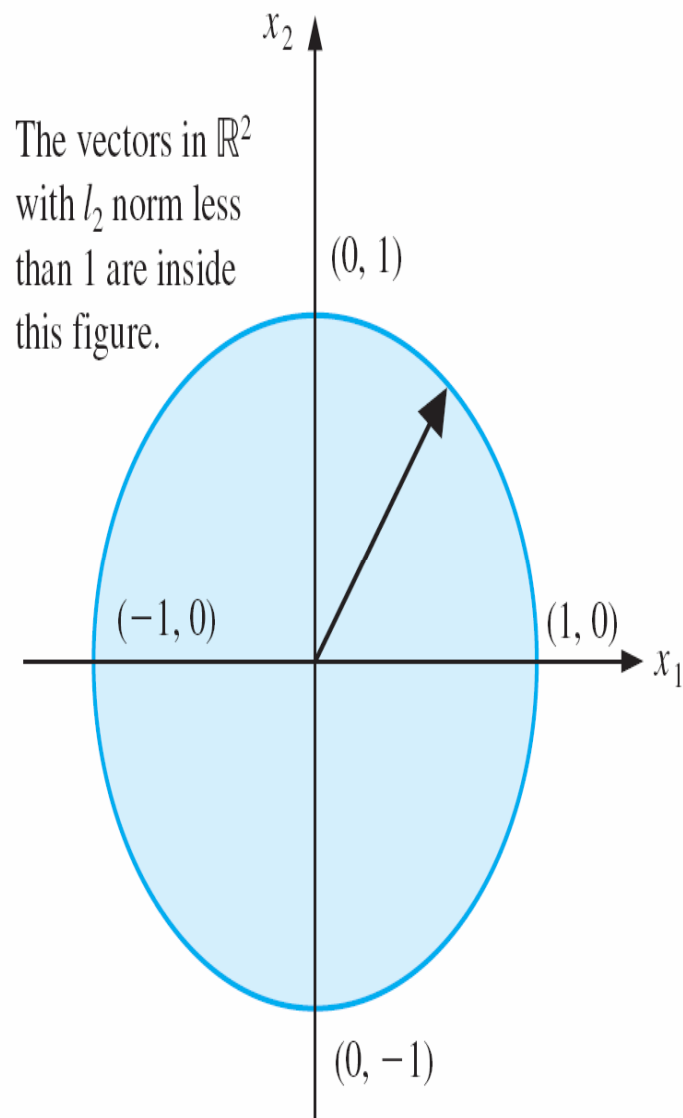
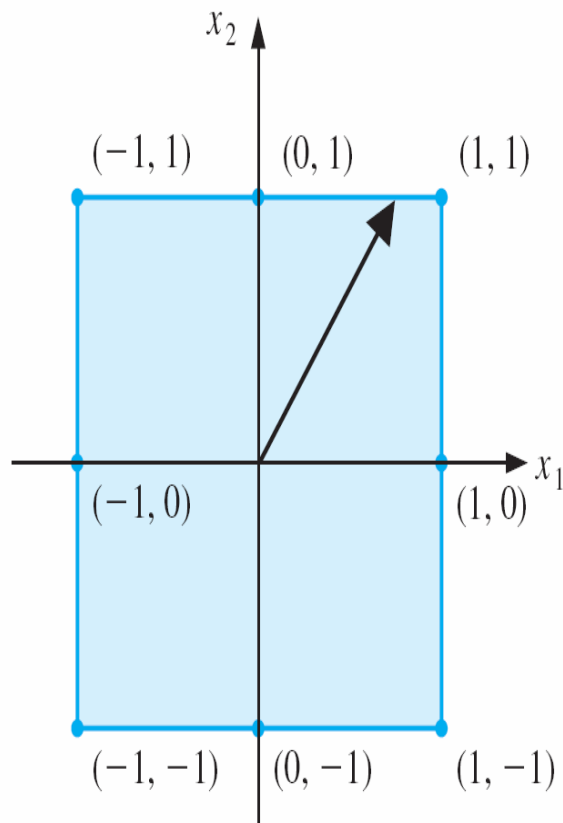
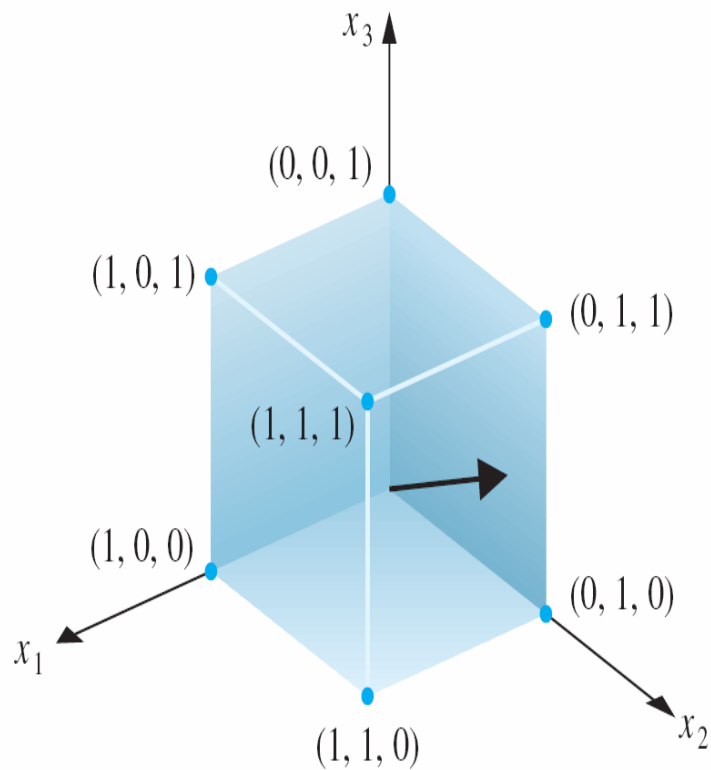


Figure 7.2



The vectors in \mathbb{R}^2 with l_∞ norm less than 1 are inside this figure.



The vectors in the first octant of \mathbb{R}^3 with l_∞ norm less than 1 are inside this figure.

Figure 7.3

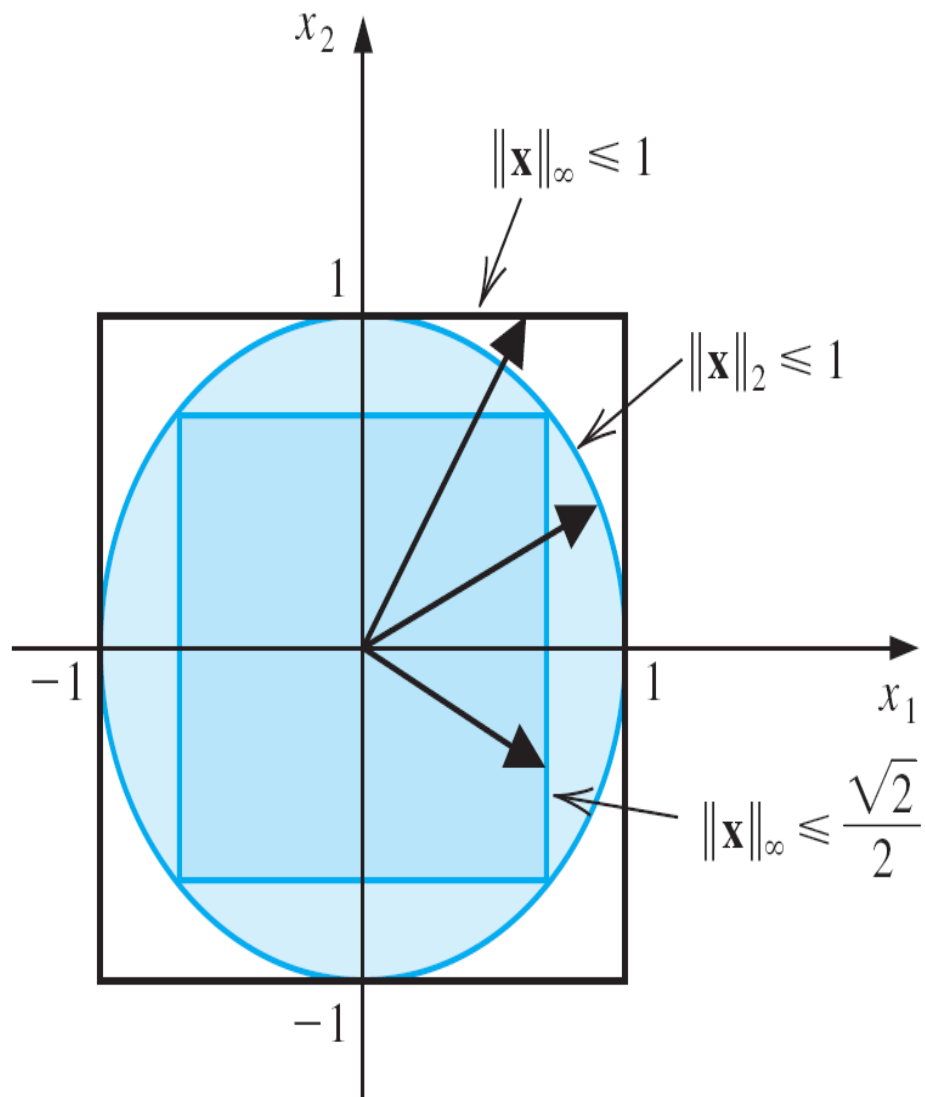


Figure 7.4

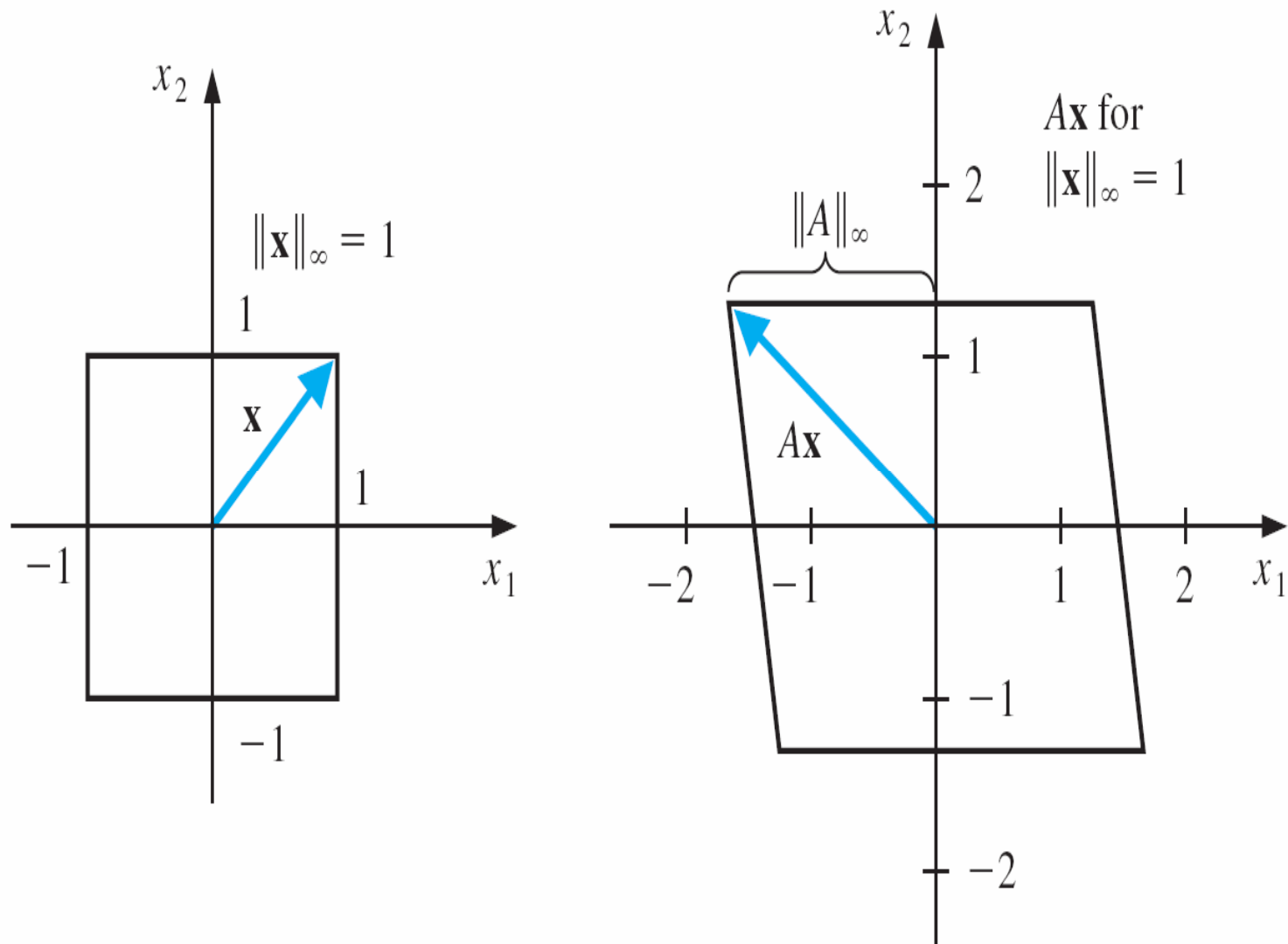


Figure 7.5

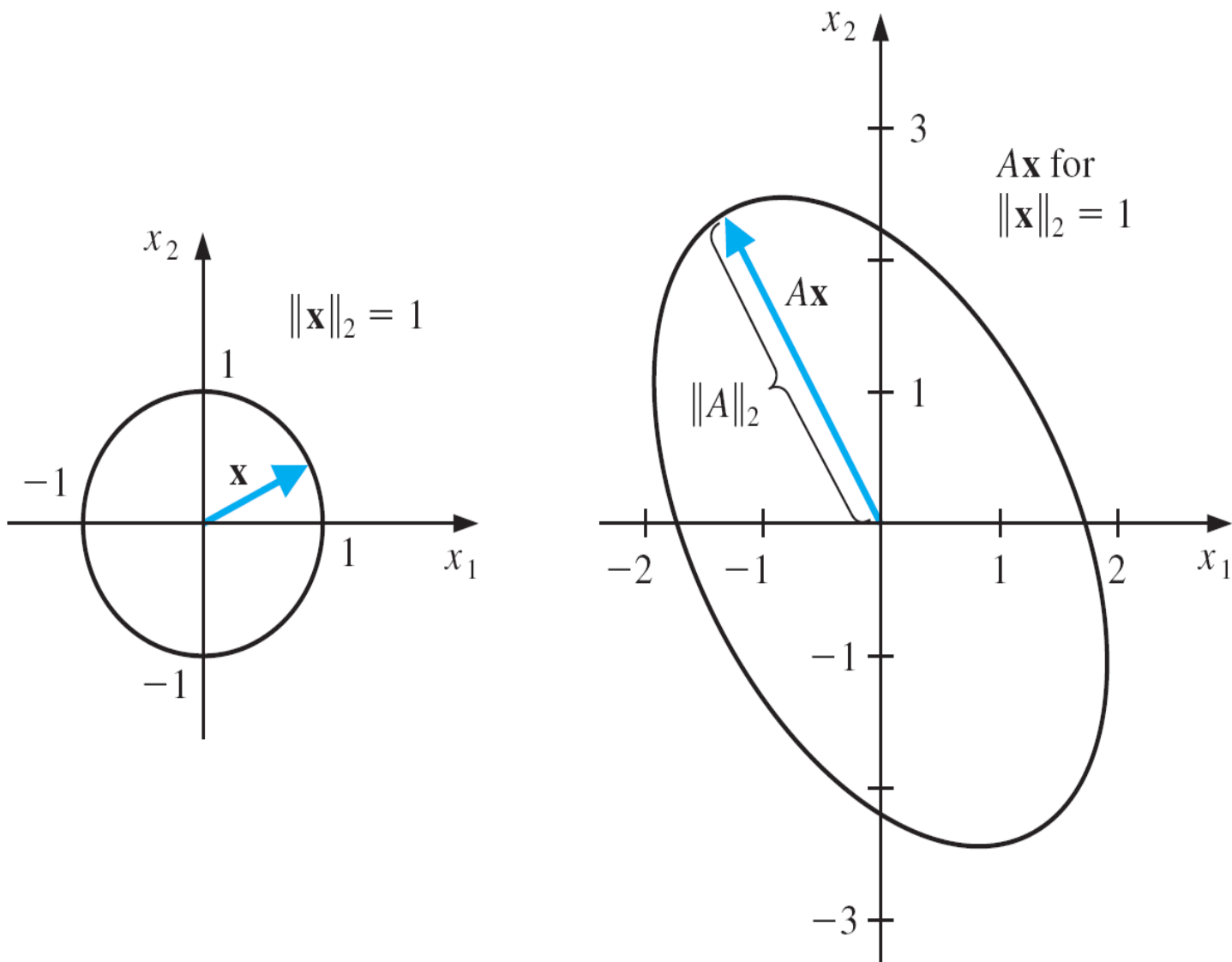


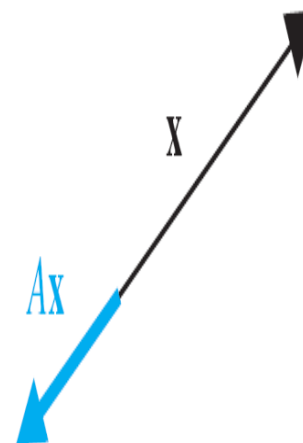
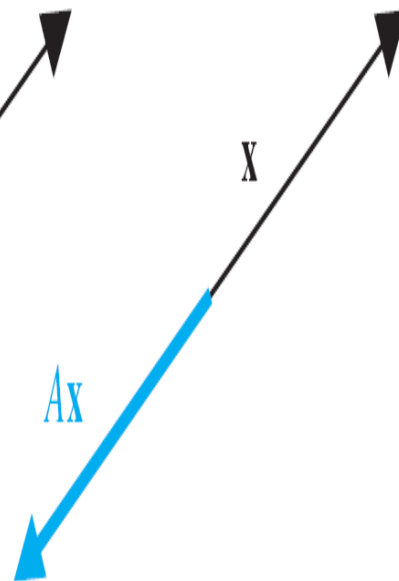
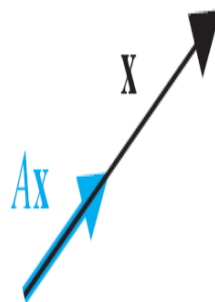
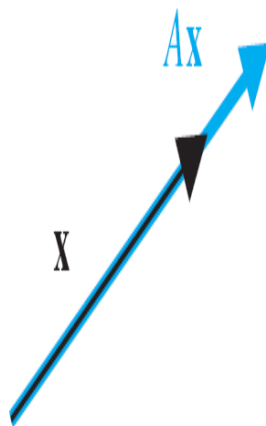
Figure 7.6

(a) $\lambda > 1$

(b) $1 > \lambda > 0$

(c) $\lambda < -1$

(d) $-1 < \lambda < 0$



$$A\mathbf{x} = \lambda\mathbf{x}$$

Figure 7.7

