

---

# Linear Systems

Math 214 Spring 2007  
©2007 Ron Buckmire

Fowler 307 MWF 2:30pm - 3:25pm  
<http://faculty.oxy.edu/ron/math/214/07/>

---

## Week 3

**Monday February 6** *Class 6:*

Direct Methods of Solution of Linear Systems. Introduction to Gaussian Elimination.

Reading:

Poole, Section 2.1

Homework #6: (due in *Class 7*)

Poole, Section 2.1 # 1, 3, **10, 11**, 13, 15, 17, 20, 23, 28, 29, 32, 34, **35, 44**

**QUIZ #2 DUE**

**Wednesday February 8** *Class 7:*

**Reduced Row Echelon Form and Rank.** We will discuss the reduced row echelon form of a matrix, sometimes denoted  $\text{rref}(A)$ , and introduce the important concept of rank of a matrix.

Reading:

Poole, Section 2.2

Homework #7: (due in *Class 8*)

Poole, Section 2.2: 1, 2, 3, 4, 5, 6, 7, 8, **22, 23, 26**, 27, 28, 29, 36, **43**. EXTRA CREDIT # 47.

**Friday February 10** *Class 8:*

Linear Independence, linear dependence and span.

Reading:

Poole, Section 2.3

Homework #8: (due in *Class 9*)

Poole, Section 2.3: # 1, **2, 3**, 4, 13, 14, **25, 26**. EXTRA CREDIT: 43.

Quiz # 3