

## Honors Linear Algebra (Spring 2011) — Homework 7

- DL-LAA stands for the text (David Lay – Linear Algebra and its Applications).
- The points for each problem is given in parentheses. The total points add up to 75. You will be graded for 70 points, with the possibility of getting up to 5 points as extra credit.
- **This homework is due in class on Thursday, March 10.**

1. (10) DL-LAA Problem 4 from page 116.
2. (12) DL-LAA Problem 12 from page 116.
3. (15) DL-LAA Problem 16 from page 117.
4. (12) DL-LAA Problem 22 from page 117.
5. (12) DL-LAA Problem 26 from page 117.
6. (14) Let  $A \in \mathbb{R}^{m \times n}$  and  $B \in \mathbb{R}^{n \times p}$ . Prove that  $(AB)^T = B^T A^T$ .