

Honors Linear Algebra (Spring 2011) — Homework 12

- 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, April 28.**

1. (9) DL-LAA Problem 30 from Page 262.
2. (10) Let $A \in \mathbb{R}^{m \times n}$. What are the *smallest* and *largest* possible values of $\text{rank}(A)$ and $\dim \text{Nul } A$?
3. (10) DL-LAA Problem 16 from Page 308.
4. (9) DL-LAA Problem 22 **a, b, e** from Page 309.
5. (12) DL-LAA Problem 30 from Page 309.
6. (10) DL-LAA Problem 14 from Page 317.
7. (15) DL-LAA Problem 27 from Page 318.