

Honors Linear Algebra (Spring 2011) — Homework 11

- 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 48. You will be graded for 45 points, with the possibility of getting up to 3 points as extra credit.
- **This homework is due in class on Thursday, April 14.**

1. (12)

Let $W = \left\{ \begin{bmatrix} 3c - 2a \\ b + c - d \\ 2d + b \\ a - 4c \end{bmatrix} \mid a, b, c, d \in \mathbb{R} \right\}$. Is W a vector space? Justify.

2. (12) DL-LAA Problem 26 Parts **a, b,c, and e** from page 235.
3. (8) DL-LAA Problem 28 from page 235.
4. (8) DL-LAA problem 16 from Page 243.
5. (8) DL-LAA problem 20 from Page 244.