



LUND
UNIVERSITY

Linear Algebra 2
Monday, 22 August 2016
Duration: 08:00–13:00

Centre for Mathematical Sciences
Mathematics, Faculty of Science

Answers

1. $(a_n, b_n) = 5^n(1, 1) + (-2)^n(-4, 3)$.
2. The orthogonal projection is $(1, 2, 1, 2, -1)$ and the minimum distance is $\sqrt{2}$.
3. The minimum and maximum values are -12 and 10 , respectively.
4. U' is the plane defined by $6x_1 - 5x_2 + 2x_3 = 0$ and U'' is the line through the origin spanned by the vector $(1, 1, -1)$.