



LUND
UNIVERSITY

Linear Algebra 2
Tuesday, 22 August 2017
Duration: 08:00–13:00

Centre for Mathematical Sciences
Mathematics, Faculty of Science

Answers

1. $x = \left(\frac{3}{5}, -\frac{7}{5}, \frac{33}{35}\right)$.
2. $(a_n, b_n, c_n) = (-6)^n(1, -3, 1) - 2(-1)^n(1, 0, -1) + 3 \cdot 5^n(3, 2, 3)$.
3. Hyperbolic cylinder. $\pm \frac{\sqrt{3}}{9}(1, -1, -1)$.
4. Only F is an orthogonal projection. U is the plane whose equation is $2x_1 + 2x_2 + x_3 = 0$.