

LE 200 Homework #5

Please show all details of your solutions.

1. Kreyszig's 8.1 3-10 (2), 11-16 (2)
2. Kreyszig's 8.4 9-12 (1), 13-16 (2)
3. Use the results from 2. to derive general formulas for finding \mathbf{A}^k of matrices in 2, then find \mathbf{A}^5 , \mathbf{A}^{10}
4. Repeat the population model example with
 - (a) $b_1 = b_2 = d_1 = d_2, m_1 = m_2 = .01$
 - (b) $b_1 = b_2 = .01, d_1 = d_2 = .005, m_1 = m_2 = .01$
 - (c) $b_1 = b_2 = .01, d_1 = d_2 = .005, m_1 = .02, m_2 = .01$
5. Kreyszig's 8.4 17-23 (2)