HW 6

Problem 1 Sec 4.1 #13(a), (b), and (c) prove the following theorem:
Let T be a diagonalizable linear mapping from a n-dimensional vector space V to V. Then T^m is also diagonalizable.

Problem 2 Sec4.3: #6

Problem 3 Sec4.1 #14

Problem 4 Sec4.1 #15 (a), (b), (c), and (d) Show that T is diagonalizable.