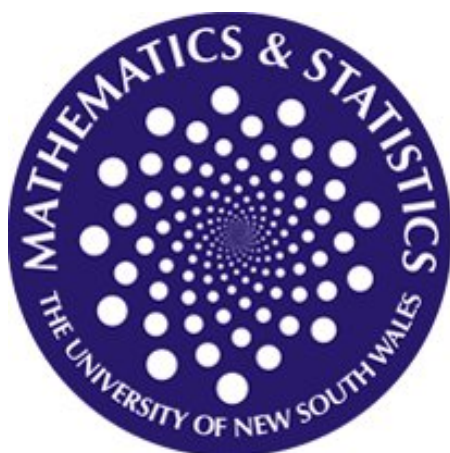




UNSW
A U S T R A L I A



UNIVERSITY OF NEW SOUTH WALES

SCHOOL OF MATHEMATICS AND STATISTICS

Assignment

Functional Analysis

Author:
Adam J. Gray

Student Number:
3329798

Question 1

$$0 \leq \langle Tx, x \rangle = \overline{\langle x, Tx \rangle} = \langle x, Tx \rangle \quad \forall x \in \mathcal{H}$$