

MATH 101: GRADUATE LINEAR ALGEBRA
DAILY HOMEWORK #6

Problem 6.1. Show that $\mathbb{C} \otimes_{\mathbb{R}} \mathbb{C}$ and $\mathbb{C} \otimes_{\mathbb{C}} \mathbb{C}$ are \mathbb{R} -vector spaces and \mathbb{C} -vector spaces, find bases and compute their dimensions as \mathbb{R} - and \mathbb{C} -vector spaces.