

MATH 101: GRADUATE LINEAR ALGEBRA
DAILY HOMEWORK #5

Problem 5.1. Let V be a finite-dimensional vector space over F , and let $\text{ev}: V \xrightarrow{\sim} V^{**}$ be the evaluation isomorphism. Let $W \subseteq V$ be a subspace. Show that $\text{ann}(\text{ann}(W)) = \text{ev}(W) \subseteq V^{**}$.