

VECTOR SPACES WORKSHEET

SEPTEMBER 10, 2024

(1) Prove that every element of a vector space has a unique additive inverse.

(2) Let V be an \mathbb{F} -vector space.

(a) Show that $0v = 0$ for all $v \in V$.

(b) Show that $a0 = 0$ for all $a \in \mathbb{F}$.