

Quiz 5

Name:

Let U, V, W be vector spaces. Let $S : U \rightarrow V$ and $T : V \rightarrow W$ be linear transformations.

(a) Prove that $N(S) \subseteq N(T \circ S)$.

(b) Give an example where $N(S) \neq N(T \circ S)$.

(c) Suppose T is injective. Prove that $N(S) = N(T \circ S)$.