

Let \mathfrak{g} be a Lie algebra. Then the nilradical \mathfrak{n} of \mathfrak{g} is defined to be the intersection of the kernels of all the irreducible representations of \mathfrak{g} . Equivalently, $\mathfrak{n} = [\mathfrak{g}, \mathfrak{g}] \cap \text{rad } \mathfrak{g}$, the intersection of the derived ideal and radical of \mathfrak{g} .