

## SUBSPACE CODIMENSIONS

## Definition

Suppose W is a subspace of a vector space V. The *codimension* of W in V is the difference of the dimension of V and the dimension of W. In this context, V is called the *ambient space* of W.

## Notation

As usual, let  $\dim W$  and  $\dim V$  denote the dimensions of W and V, respectively We denote the codomension of W in V by  $\operatorname{codim}(W)$ 

