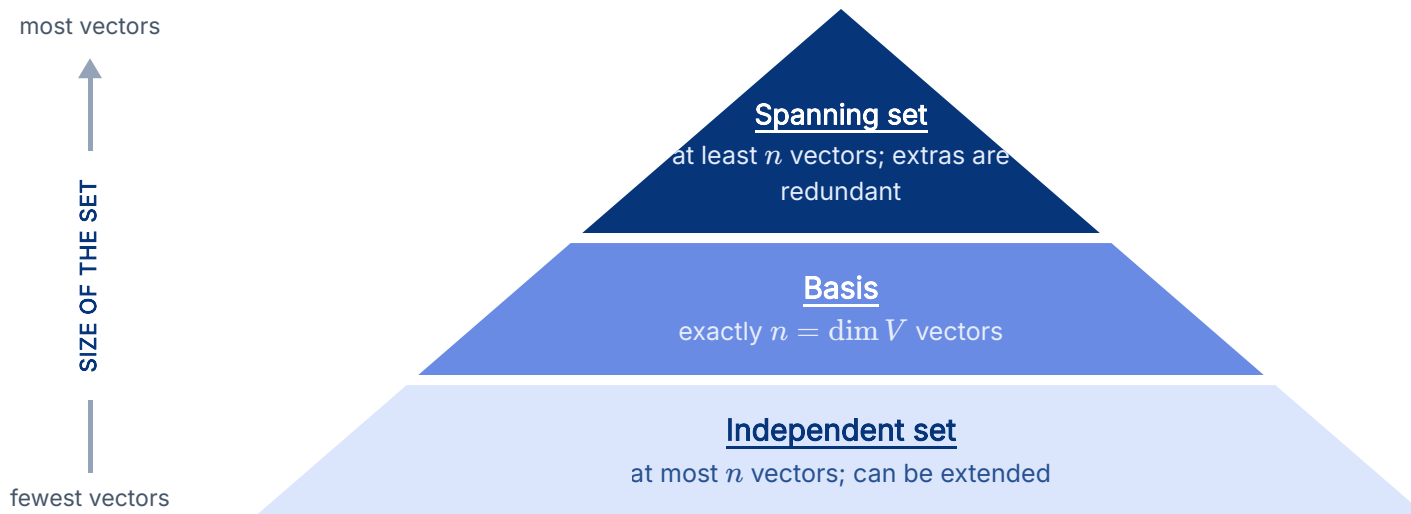


BEFORE YOU READ

Dimension fixes the counts

In an n -dimensional space, dimension caps independent sets from above and spanning sets from below. A basis sits exactly at n .



TAKEAWAY

The two shortcuts

n independent vectors in an n -dimensional space form a basis, and so do n spanning vectors: once the count reaches the dimension, the other property comes for free.