

1 | **Axler6.27 orthonormal basis def**

An *orthonormal basis* of V is an orthonormal list of vectors in V that is also a basis of V .

Pretty self explanatory.

2 | **results**

2.1 | **Axler6.28 orthonormal list of the right length is a basis**

Because it's linearly independent, and linearly independent lists of the right length are bases (Axler2.39).

2.2 | **Axler6.30 vector as a linear combo of orthonormal basis**

3 | **see also**

3.1 | **orthonormal**