

1 | orthogonal def

Two vectors $u, v \in V$ are called *orthogonal* if $\langle u, v \rangle = 0$

2 | results

2.1 | orthogonal \sim perpendicular

2.2 | **Axler 6.12** orthogonality and zero

2.2.1 | **0** is orthogonal to every vector in V

2.2.2 | **0** is the only vector in V that is orthogonal to itself

2.3 | **Axler 6.13** Pythagorean Theorem