[12pt]article amsmath, amssymb, xcolor [margin=1in]geometry

## **Vector Space Proof Demonstration**

Generated by the Khwarizmi Symbolic System

Goal: Prove that  $1 \cdot (u + v) = (u + v)$ 

Start: 
$$1 \cdot (u+v)$$
  
(1)  $1 \cdot (u+v) = (u+v)$  [VS\_Scalar\_Id]

Final Result: (u+v)

Q.E.D.