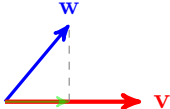




$$\mathbf{v} \cdot \mathbf{w} = \|\mathbf{v}\| \|\mathbf{w}\|$$



$$\mathbf{v} \cdot \mathbf{w} = 0$$



$$\mathbf{v} \cdot \mathbf{w} = \|\mathbf{v}\| \text{comp}_{\mathbf{v}} \mathbf{w}$$