Dot Product Insight

$$Ex \rightarrow \quad \vec{u} = (5,1)$$
$$\vec{v} = (-3,3)$$

$$\vec{u} \cdot \vec{v} = ?$$

$$\Rightarrow (5,1) \cdot (-3,3)$$

$$\Rightarrow -15 + 3$$

$$\vec{u} \cdot \vec{v} \qquad \Rightarrow -12$$