Vector Projection

$E_x \rightarrow \quad U = (5, 5)$

$$v = (7, 0)$$

$$Proj_{\vec{v}} \vec{U} = \frac{\vec{U} \cdot \vec{v}}{|\vec{v}|^2} \times \vec{v}$$

$$= \frac{35}{49} (7, 0)$$

$$= (5, 0)$$