

Problem 11.7

$|\vec{A} \times \vec{B}| = \vec{A} \cdot \vec{B}$ implies that:

$$\begin{aligned} |\vec{A}| |\vec{B}| \sin \theta &= |\vec{A}| |\vec{B}| \cos \theta \\ \Rightarrow \frac{\sin \theta}{\cos \theta} &= 1 \quad (= \tan \theta) \\ \Rightarrow \theta &= 45^\circ \end{aligned}$$