

Let $\vec{F} : \mathbb{R} \rightarrow \mathbb{R}^3$ be given by $f(t) = (\cos(t), \sin(t), t)$. The range of $\vec{F} \subseteq \mathbb{R}^3$ is a helix. Find the tangent line to this helix at the point $(1, 0, 0)$.