Problem statement It is certainly possible for the set of critical points of a function defined in \( \mathbb{R}^3 \) to be a point (e.g., \( x^2 + y^2 + z^2 \)) or a line (e.g., \( x^2 + y^2 \)) or a plane (e.g., \( x^2 \)). Can you create a function \( F : \mathbb{R}^3 \to \mathbb{R} \) whose set of critical points is all of the twisted cubic, \( c(t) = (t, t^2, t^3) \)?