1. (10 points) Let \( F = (z \sin x, z, y - \cos x + e^{\arctan z}) \).

Let \( S \) be the surface \( x^2 + y^2 + z^2 = 1 \).

State and verify Stokes' Theorem, i.e., compute both ways.

Bonus: Is your TA right-handed or left-handed?