

Name:

427L Quiz (3/31/22)

1. Find the divergence and curl of the vector field

$$F(x, y, z) = \langle e^{xz}, \sin(xy), x^5 y^3 z^2 \rangle.$$

2. Find the volume of the solid region bounded by: the surface $z = x^2 + y^4$, the xy -plane, the xz -plane, the yz -plane, and the planes $x = 1$ and $y = 2$.