Quiz 1: Is $V = \{(x, y, z) \in R^3 : \sqrt{2}x - \pi y + e^2 z = 0\}$ a subspace of R^3? Prove!

Quiz 2: Find an eigenvector of

$A = \begin{pmatrix} 3 & -1 & 2 \\ 3 & -1 & 6 \\ & -22 & -2 \end{pmatrix}$ that is orthogonal to $(1, 2, 3)$

Quiz 3: Convert the point $(4, \pi/4, \pi/6)$ to rectangular coordinates

Quiz 4: Find the directional derivative of $f(x.y.z) = (x^2 + y^2 - z^2)e^{xy}$ at $(1, 0, 1)$ in the direction $(2, 1, 3)$

Quiz 5: Find $(3i)^{-i}$

Quiz 6: Find the circulation atound and the net flux accross $|z| = 2$ for $f(z) = 1/z$.