Math 302
Any answer without justification worths nothing

Quiz 5

2/ 12/ 2014

Name: **ID #**

Problem 1 (5 points): Given the field $F = \langle 2xy^2z, 2x^2yz, 6\sin xy\rangle$. Find the flux $\iint_S F \cdot ndS$ through the closed surface S formed by the cone $z = \sqrt{x^2+y^2}$ and the plane $z = 4$.

Problem 2 (5 points)
Find all the complex numbers z satisfying $z^4 + 16 = 0$