

KFUPM

Semester 122

Dept. Math. &Stat.

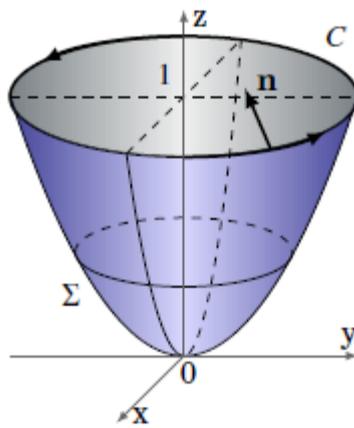
A.Y:2012/2013

Name:

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Exercise 1

Verify Stokes' Theorem for $\mathbf{f}(x,y,z) = z\mathbf{i} + x\mathbf{j} + y\mathbf{k}$ when Σ is the paraboloid $z = x^2 + y^2$ such that $z \leq 1$



Quiz N°4 Math 302_122 (April 3, 2013)

Exercise 2

Evaluate the surface integral

$$\iint_S (1 + z) \, dS,$$

where S is that part of the plane $x + y + 2z = 2$ in the first octant.

Quiz N°4 Math 302_122 (April 3, 2013)