

Math 2673

Special Assignment 6
(10 points)

Name:

Let $h : \mathbf{R} \rightarrow \mathbf{R}$ be a function with a continuous derivative, and let \vec{F} be the vector field $\langle 3x^2h(x^3 + y^2), 2yh(x^3 + y^2) \rangle$. Show that \vec{F} is conservative.