MATH 114 Quiz 1

January 30, 2011

Notice: You should show your work to justify your answer. Each correct step will be rewarded. Problems are on **BOTH** sides of this paper.

Problem 1

Let P be the plane that contains the points (1,0,0), (0,2,0), and (0,0,3). What is the distance from P to the origin?

Problem 2

A helix has parametric equation $\mathbf{r}(t) = (\cos t, \sin t, t)$. Find the arc length from $\mathbf{r}(0)$ to $\mathbf{r}(2\pi)$.