Math 1451, Honor Calculus Practice3, Spring 2016.

February 5, 2016

PSID:	Name:
1. Sketch the	curve whose vector equation is $\mathbf{r}(t) = \cos(t)\mathbf{i} + \sin(t)\mathbf{j} + t\mathbf{k}$.

2. Find a vector function that represents the curve of intersection of $x^2 + y^2 = 1$ and y + z = 2. What does this look like in space?

3. At what points does the curve $\mathbf{r}(t) = t\mathbf{i} + (8t - t^2)\mathbf{k}$ intersect the paraboloid $z = x^2 + y^2$?