Math 241 X8 **Name:** Solutions

Quiz # 1

September 10, 2013 No electronic devices or interpersonal communication allowed. Show work to get credit.

1) [5pts.] Parametrize the curve $\left(\frac{x}{3}\right)^2 + \left(\frac{y}{2}\right)^2 = 1$. (Make sure to specify a range for t.)

$x = 3\cos t$

$y = 2\sin t$

$t \in [0, 2\pi]$

2) [5pts.] Parametrize the line segment joining $(3, 1, 4)$ to $(6, -1, 8)$. (Make sure to specify a range for t.)

$t\langle 3,1,4\rangle + (1-t)\langle 6,-1,8\rangle \quad , \quad t \in [0,1]$

or

$\vec{v} = \langle 3,1,4\rangle - \langle 6,-1,8\rangle = \langle -3,2,-4\rangle$

$\langle 6,-1,8\rangle + t\langle -3,2,-4\rangle$

or $\langle 3,1,4\rangle + t\langle 3,-2,4\rangle \qquad t \in [0,1]$