## Quiz $4 \quad$ Calculus $3 \quad$ 11/2/11

Each problem is worth 5 points. Clear and complete justification is required for full credit.

1. Give parametric equations $\mathrm{x}(t), \mathrm{y}(t), \mathrm{z}(t)$ and bounds for $t$ that produce a path from $(-2,4,1)$ to $(5,2,1)$.
2. Give parametric equations $\mathrm{x}(t), \mathrm{y}(t), \mathrm{z}(t)$ and bounds for $t$ that produce the top half of a circle with radius 2 centered at the origin in the plane $z=0$ beginning at $(2,0,0)$.
