

**Quiz 6      Calculus 3      10/28/2009**

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

1. Give parametric equations  $x(t)$ ,  $y(t)$ ,  $z(t)$  and bounds for  $t$  that produce a path from  $(3, 0, 1)$  to  $(3, 7, -5)$ .

2. Give parametric equations  $x(t)$ ,  $y(t)$ ,  $z(t)$  and bounds for  $t$  that produce a quarter of a circle with radius 3 in the plane  $z = 5$  beginning at  $(3, 0, 5)$  and ending at  $(0, 3, 5)$ .

