



1. Give parametric equations  $x(t), y(t), z(t)$ , and bounds for  $t$  that produce a path from  $(-2, 7, 1)$  to  $(a, b, c)$ .
2. Give parametric equations  $x(t), y(t), z(t)$  and bounds for  $t$  that produce an arc of a circle centered at  $(0, 0, 3)$  in the plane  $z = 3$  of radius  $a$  beginning at  $(0, a, 3)$  and continuing counterclockwise through  $n$  quadrants.