Quiz 3   Calculus 3   11/20/2002

Each problem is worth 5 points. Show complete justification for full credit.

1. Give parametric equations $x(t)$, $y(t)$, and bounds for t that produce a line segment from (2,5) to (3,-7).

2. Give parametric equations $x(t)$, $y(t)$, and bounds for t that produce the bottom half of a circle (centered at the origin) of radius 6 traversed counterclockwise.

3. Plot the vector field $\mathbf{F}(x,y) = y\mathbf{i} + \mathbf{j}$ for the points (0,0), (2,1), (0,2), (1,-1), and (-1,-2) indicated on the coordinate system below.