Each problem is worth 5 points. For full credit indicate clearly how you reached your answer.

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

2. Give parametric equations x(t), y(t), and bounds for t that produce the third-quadrant portion of a circle (centered at the origin) of radius 5, traversed counterclockwise.

3. Plot the vector field $\mathbf{F}(x,y) = \langle -x,2y \rangle$ for the points (0,1), (3,0), (1,1) and (-2,2).