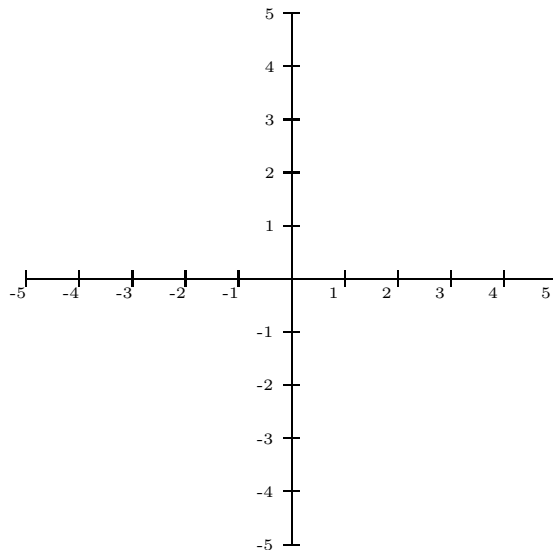


QUIZ 11

Name _____

1. Find the gradient field for $f(x, y) = xe^{-y}$. Sketch a few vectors from that gradient field on the axes below.



2. Determine whether or not the vector field $\vec{F}(x, y) = \langle x - 2xy, y^2 - x^2 \rangle$ is conservative.

3. Find equations for the flow lines created by the field $\langle x^2, 2 \rangle$.