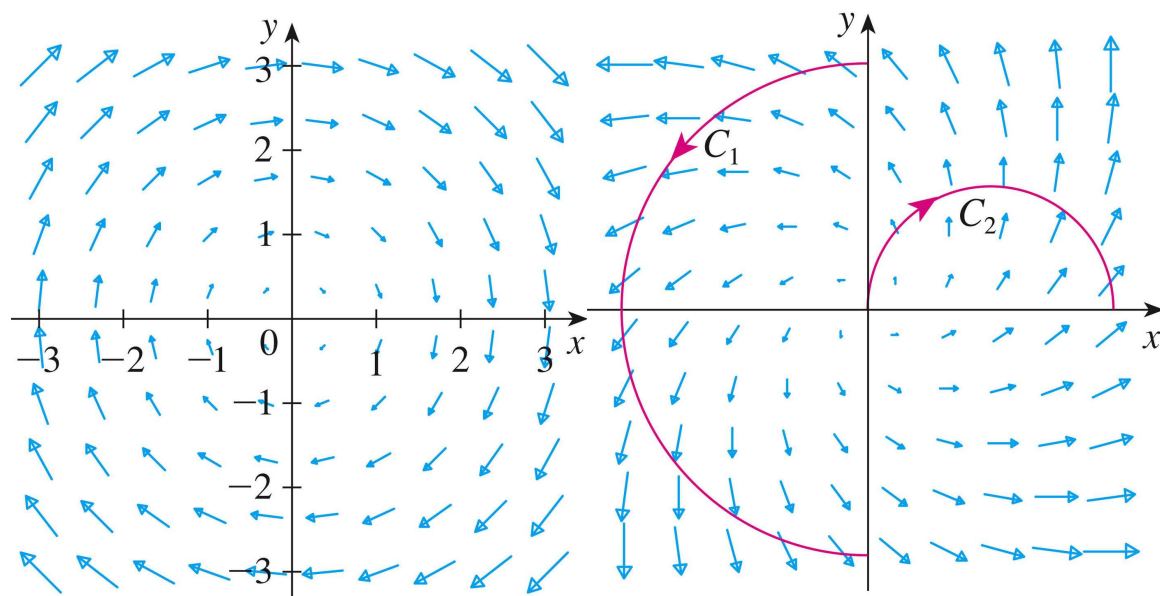


- a. Can you determine whether the vector fields below are conservative? Give reasons.



- b. For the figure on the left, what is the sign of the line integral along the top of the circle of radius 3 as it goes from $(3,0)$ to $(-3,0)$? Parameterize the circle.
- c. For the figure on the right, are the line integrals over C_1 and C_2 positive, negative, or zero? Give reasons for your answers.