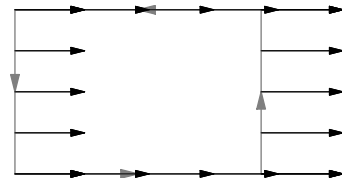
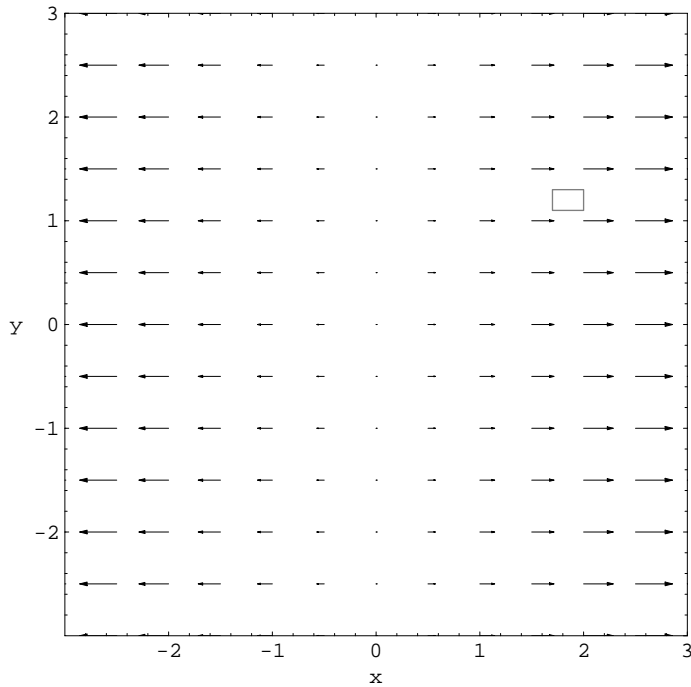


## Curl examples

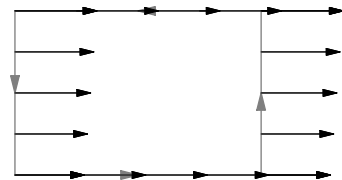
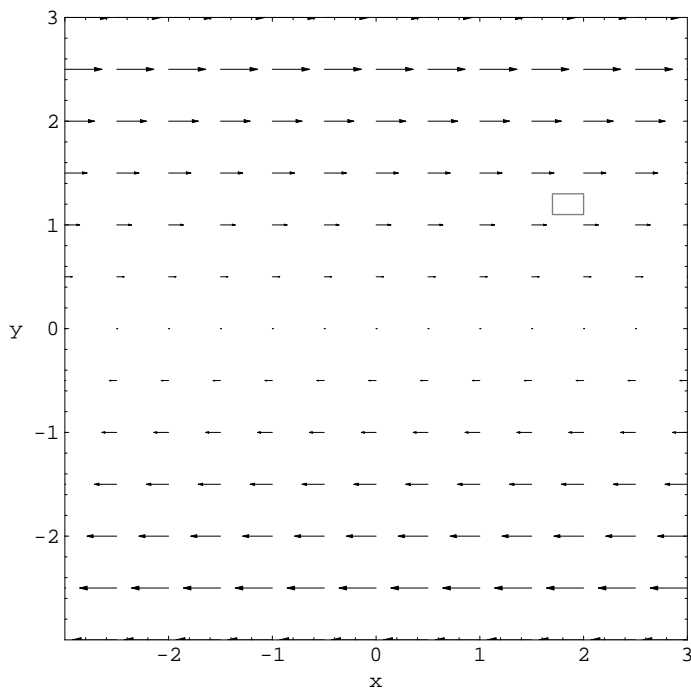
For each of the following:

1. Look at the small “rectangular” curve in the given vector field. Compute the curl as a circulation density.
2. Compute the curl using the cartesian expression in terms of partial derivatives.
3. Compare your results from 1 and 2.

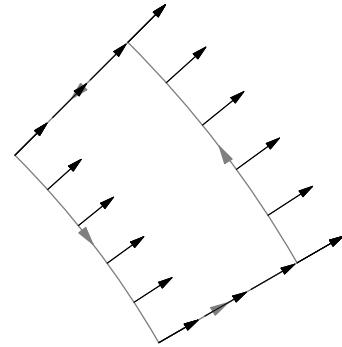
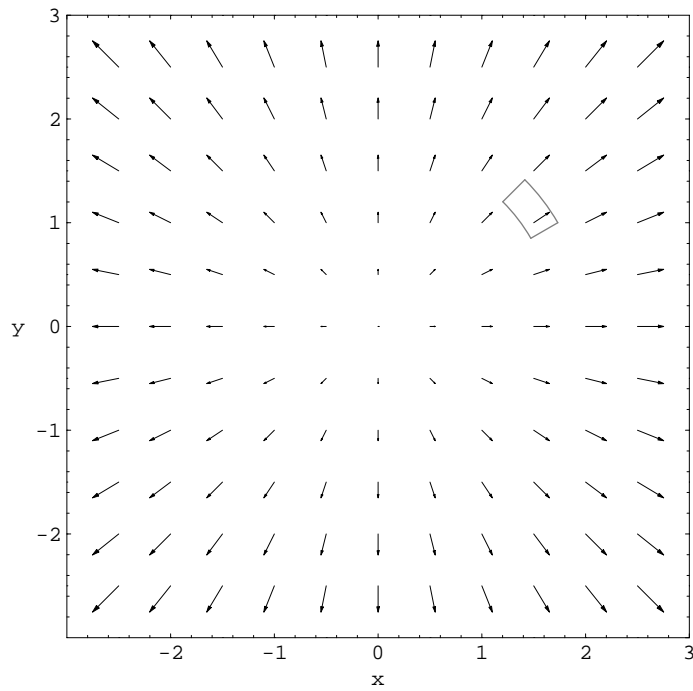
**Example 1:**  $\vec{F} = x \hat{i}$



**Example 2:**  $\vec{F} = y \hat{i}$



**Example 3:**  $\vec{F} = x\hat{i} + y\hat{j}$



**Example 4:**  $\vec{F} = -y\hat{i} + x\hat{j}$

