

Exercise 11

Match the vector fields \mathbf{F} with the plots labeled I–IV. Give reasons for your choices.

$$\mathbf{F}(x, y) = \langle x, -y \rangle$$

[TYPO: This should be in bold.]

Solution

This vector field corresponds with plot IV. As $|x|$ gets larger, so should the vector magnitude. In addition, the vectors point up when y is negative and point down when y is positive.

