

Exercise 3

Sketch the vector field \mathbf{F} by drawing a diagram like Figure 5 or Figure 9.

$$\mathbf{F}(x, y) = -\frac{1}{2}\mathbf{i} + (y - x)\mathbf{j}$$

Solution

Below is a plot of the vector field in the xy -plane. The length and hue of each vector indicate its magnitude.

