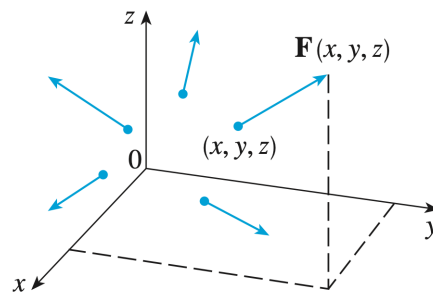
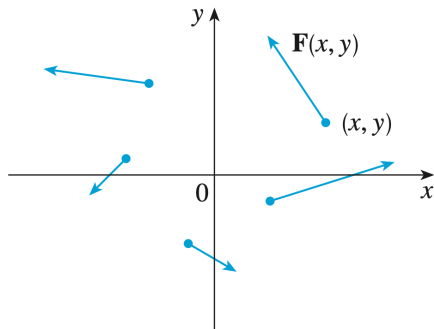
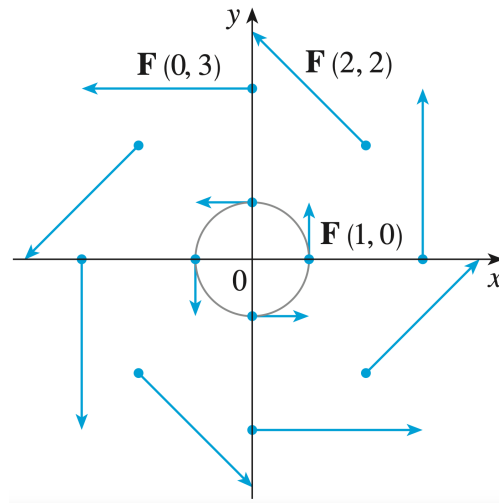


13.1 Vector Fields

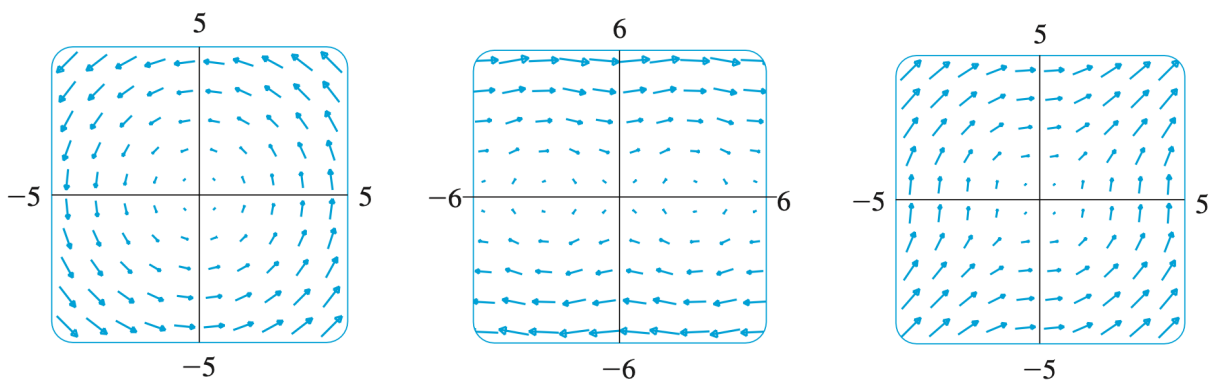
Definition. What is a vector field?



Example. A vector field on $\mathbb{R}^2$ is defined by $\vec{F}(x, y) = \langle -y, x \rangle$. Describe $\vec{F}$ by sketching some of the vectors $\vec{F}(x, y)$.



Example. Examine the vector fields below.



Definition. What is a gradient vector field? What is a conservative vector field?