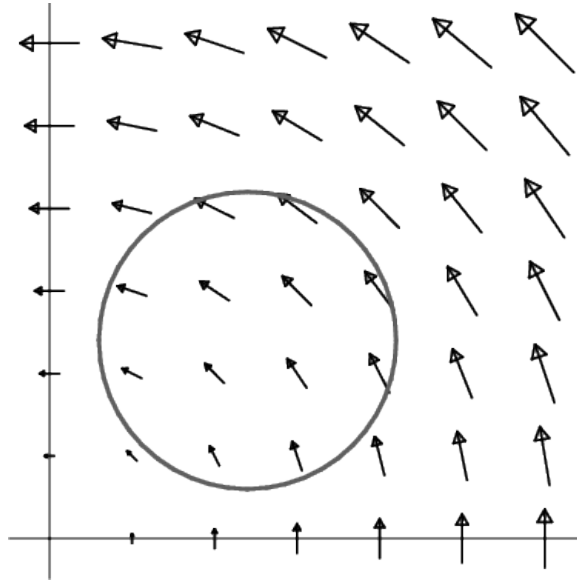




1 Vector Field Fit

None

Consider the vector field $\vec{F}$ shown. Which of the following formulas best fits $\vec{F}$? Why?

- (a) $\vec{F}_1 = \frac{x}{x^2 + y^2} \hat{x} + \frac{y}{x^2 + y^2} \hat{y}$
- (b) $\vec{F}_2 = -y \hat{x} + x \hat{y}$
- (c) $\vec{F}_3 = \frac{-y}{(x^2 + y^2)^2} \hat{x} + \frac{x}{(x^2 + y^2)^2} \hat{y}$