



## 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)  $\vec{F}_3 = \frac{-y}{(x^2 + y^2)^2} \hat{x} + \frac{x}{(x^2 + y^2)^2} \hat{y}$