

Name:

Show all your work to get credit!

1. Show that the following limit does not exist:

$$\lim_{(x,y) \rightarrow (0,0)} \frac{x^2 - 4y^2}{x^2 + 2y^2}$$

Reading Question:

Explain how to find the gradient vector for a function $f(x, y)$, a formula will suffice.