

**Partial Differentiation**  
***Limits***

**Question**

Evaluate the given limit. If the limit does not exist, explain why.

$$\lim_{(x,y) \rightarrow (0,0)} \sqrt{x^2 + y^2}$$

**Answer**

$$\lim_{(x,y) \rightarrow (0,0)} \sqrt{x^2 + y^2} = 0$$